

DESCARTES' THEORY OF PASSIONS

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Descartes not only had a theory of passions, but one that deserves a place among contemporary debates on emotions. The structure of this dissertation attempts to make explicit the unity of that theory. The study of the passions by the *physicien* (who not only studies matter and motion but also *human* nature) [Chapter 2] appears to be the “foundations” (as he tells Chanut) of morals [Chapters 1 and 4] insofar as their main function [Chapter 3] is to dispose us to act in ways which directly affect our natural happiness. In other words, Descartes is in the *Passions of the Soul* (1649) climbing the very tree of philosophy he presented two years earlier in the Preface to French Edition of the *Principles of Philosophy*: the trunk (in this case a section of it: our nature) leads us to the highest of the three branches (morals) when we study human passions.

Human passions constitute the only *function* of the mind-body union that can guide us in the pursuit of our (natural) happiness. They do this (1) by *informing* the soul about the current *state of perfection* both of the body and, most importantly, *of the mind-body union*; (2) by *discriminating* what is relevant in the world regarding our perfection; and (3) by *proposing* (to the will) possible ways of action (i.e. by disposing us to act). The *virtuous* (the generous) are those who have achieved “contentment” not by impeding the arousal of their passions but by living them *according to reason*, that is, by following *freely* the dispositions to act (brought about by them) which can increase our perfection—i.e. the disposition to join true goods and to avoid true evils.

Regarding current debates on emotions [Chapter 5], Descartes' *perceptual* model not only provides a satisfactory answer to the major challenges faced today both by feeling theories (intentionality) and judgment theories (feelings and the passivity of emotions) but it can also help advance those debates by, on one hand, bringing into them new or neglected ideas, and, on the other, providing a solid overall framework to think about passions.

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INTRODUCTION

The goals of this dissertation are to study which theory of passions Descartes put forth his *Passions of the Soul* (1649), to evaluate that theory and its components, and to discuss how it could fare in contemporary debates on emotions.

Those who have so far researched on the treatise have, in most cases, either commented only on a few of its articles, or used them selectively to elaborate or support aspects of Descartes' thought already established in what are taken to be his *main* works.¹ This has not only resulted in a very fragmentary view of the theory—if, in fact, such a theory can be discerned at all—but it has also contributed to perceive the *Passions* as an appendix to previous works, i.e. as a further confirmation or elaboration of ideas that *should be expected* from a thinker like Descartes. This--searching for the consistency of the treatise mainly within the *accepted* interpretations of Descartes' corpus--has not only led to focus excessively on specific sections of interest for other purposes, but it has also diffused the possibility of seeing an overall theory emerge or of observing any novelty in the *Passions*.

The way the treatise is composed—more than two hundred articles which at times do not seem to follow any apparent order and of which an important number occupy themselves only with physiological details--may indeed have fed the temptation to see its utility primarily as a series of footnotes to previous writings. The fact that it was published as a result of the direct request of Elizabeth and as a development of questions discussed in the 1641-1649 correspondence, may also have reinforced this perception.

To search first for internal textual consistency in the treatise--rather than consistency within Descartes' main works—seems to be, furthermore, a demand imposed on the reader by the treatise itself. As such, i.e. insofar as it is a “little treatise” (To Chanut, 15 June 1646, AT IV 441-42 : CSMK 289),² we should probably assume that, whether it achieves it or not, (1) it intends to be some sort of unity, and (2) it is, primarily, *about* issues the treatise explicitly claims to be about, namely, human passions—and not

¹ A good example is Paul Hoffman, “Cartesian Passions and Cartesian Dualism” (*Pacific Journal Quarterly* 71 [1990], pp. 310-333) which, on passions, uses only a few lines from the beginning of the treatise to support his conclusion that “Descartes’s account of causation leads him to the view that sensations, appetites, and emotions, which he groups together as passions, as well as the ideas of the imagination, and volitions terminating in the body are the mind’s side of modes which straddle mind and body” (pp. 330-31). But particularly striking is the absence of careful attention in recent works devoted mainly to Descartes’ theory of mind, such as Lilli Alanen’s *Descartes’s Concept of Mind* (Cambridge, Mass. And London: Harvard University Press, 2003) or Desmond Clarke’s *Descartes’ Theory of Mind* (Oxford: Clarendon Press, 2003).

² I use AT to refer to the standard Franco-Latin edition of Descartes’ works by C. Adam and P. Tannery, *Oeuvres de Descartes* (12 vols., rev. ed., Paris: Vrin/CNRS, 1964-76); CSM refers to the English translation by J. Cottingham, R. Stoothoff and D. Murdoch, *The Philosophical Writings of Descartes*, vols. I and II (Cambridge: Cambridge University Press, 1985); and CSMK refers to *The Philosophical Writings of Descartes*, vol. III (The Correspondence), by the same translators plus A. Kenny (Cambridge : Cambridge University Press, 1991).

about those Descartes has dealt with before (although he might partially also be doing this). And the fact that this was the last major work published in Descartes' life should probably encourage also a disposition to observe new insights and revisions.

By writing *The Passions of the Soul* (1649), "my intention," Descartes says, "was to explain the passions only as a natural philosopher [*physicien*], and not as a rhetorician or even a moral philosopher" (*Passions*, Prefatory letters, AT XI 326 : CSM I 327).³ Descartes does not, however, seem to stay true to this intention. Once he has completed the physiological study (or rather the physiologico-mental account), the relationship between passions, virtue and happiness becomes the main theme of the treatise (specially from art.144 on). The closing articles of each of the three parts in which the treatise is divided are also a recurrent reminder that the physiological details are worth knowing in order to learn how to properly *use* the passions if we want to achieve "tranquility of the soul" (*Passions* II, art. 148, AT XI 442 : CSM I 382).⁴

Understanding the passions, Descartes believes, should, first of all, eliminate certain "reason for anxiety about them [the passions]" (*Passions* III, art. 211, AT XI 485 : CSM I 403), that is, anxiety about the *power* they may have to determine our behaviour. In this sense, the study of their nature should teach us that "they [the passions] are all by nature good, and we have nothing to avoid but their misuse or their excesses" (*Passions* III, art. 211, AT XI 486 : CSM I 403). If properly *used*, "persons whom the passions can move most deeply are capable of enjoying the sweetest pleasures of this life" (*Passions* III, art.212, AT XI 488 : CSM I 404). And since "it is on the passions alone that all the good and evil of this life depends" (*Passions* III, AT XI 488 : CSM I 404), knowledge should primarily serve this goal, that is, help us obtain "the good of this life": "[T]he chief use of wisdom lies in its teaching us to be masters of our passions and to control them with such skill that the evils which they cause are quite bearable, and even become a source of joy" (*Passions* III, art.212, AT XI 488 : CSM I 404). Knowledge acquires thus its ultimate justification, our happiness. And since only our passions can show us the "good of this life," knowledge should be at their service. How to use knowledge to benefit of our passions is the main goal of the treatise.

³ "[M]on dessein n'a pas été d'expliquer les Passions en Orateur, ny mesme en Philosophe moral, mais seulement en Physicien" (AT XI 326).

⁴ Part I, which is mainly about physiology, closes with an article (art. 50) titled "There is no soul so weak that it cannot, if well-directed, acquire an absolute power over its passions" (see also the preceding arts. 45-49), Part II with (art. 148) "The exercise of virtue is a supreme remedy against the passions", and Part III with "A general remedy against the passions" (art. 211) and "It is on the passions alone that all the good and evil of this life depends" (art. 212).

Why then does Descartes say he is writing as a *physicien*? It is true that the articles we can consider, broadly speaking, *moral* in content are a clear minority in the treatise—they are maybe not more than fifteen (out of more than two hundred). The rest are, if we had to organize them around themes, mainly on the physiology and the function of the passions. In this sense Descartes is writing *more* (pages) as a natural philosopher than as a moralist. At first sight he seems, in fact, to be writing as a natural philosopher *with a moral purpose*; or, probably better, as a natural philosopher willing to draw moral conclusions. But there is a sense in which we can straightforwardly read Descartes’ “only as a natural philosopher [*physicien*]” without having to add footnotes.

Descartes had completed a first draft of the *Passions of the Soul* during the winter of 1645-46 at the request of the princess Elizabeth. A few weeks later, in June 1646, he informed Chanut that he had reached “satisfactory conclusions” in establishing “sure foundations in moral philosophy” precisely while working on that draft.⁵ He also noticed in that letter that the “detailed knowledge of the nature of man” which this discovery had required had not been accomplished in the *Principles*--implying that it was crucial to find those foundations.⁶ One year later, in 1647, the French edition of the *Principles* was published with a new preface where Descartes expressed the unity of knowledge in his well-known analogy of philosophy as a tree (where metaphysics is the roots, physics the trunk, and morals one of its three main branches—being medicine and mechanics the other two).⁷ “Physics” [*physique*], far from being equivalent to the Aristotelian study of natural change, is taken by Descartes to include, the whole “nature of man”:

⁵ “I must say in confidence that what little knowledge of physics I have tried to acquire has been a great help to me in establishing sure foundations in moral philosophy. Indeed I have found it easier to reach satisfactory conclusions on this topic than on many others concerning medicine, on which I have spent much more time. So instead of finding ways to preserve life, I have found another, much easier and surer way, which is not to fear death. [...] I will say, moreover, that while I am waiting for the plants to grow in my garden which I need for some experiments to continue my physics, I am spending some time also in thinking about particular problems in ethics. Last winter, for instance, I sketched a little treatise on the nature of the passions of the soul, without any idea of publication; and I would now feel inclined to write something more on the topic, if it were not made indolent by seeing how depressingly few people condescend to read what I write.” (To Chanut, 15 June 1646, AT IV 441-42 : CSMK 289)

⁶ “I only fear that you will soon grow tired of reading the book [i.e. the *Principles*], since what I have written is only distantly connected with moral philosophy, which you have chosen as your principal study. / Of course, I agree with you entirely that the safest way to find out how we should live is to discover first what we are, what kind of world we live in, and who is the creator of this world, or the master of the house we live in. But I cannot at all claim or promise that all I have written is true, and besides there is a very great distance between the general notion of heaven and earth, which I have tried to convey in my *Principles*, and the detailed knowledge of the nature of man, which I have not yet discussed.” (To Chanut, 15 June 1646, AT IV 441 : CSMK 289)

⁷ “[T]he whole of philosophy is like a tree. The roots are metaphysics, the trunk is physics, and the branches emerging from the trunk and all the other sciences, which may be reduced to three principal ones, namely medicine, mechanics and morals.” (*Principles of Philosophy*, Preface to the French edition, AT IX B 14 : CSM I 186)

The second part is physics, where, after discovering the true principles of material things, we examine the general composition of the entire universe and then, in particular, the nature of this earth and all the bodies which are most commonly found upon it, such as air, water, fire, magnetic ore and other minerals. Next we need to examine individually the nature of plants, of animals and, above all, of man, so that we may be capable later on of discovering the other sciences which are beneficial to man. (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186)

Thus, when Descartes says that he is writing as a *physicien* he means as someone who is primarily studying our human nature. The study of passions is, in fact, presented by Descartes as a study of the “the whole nature of man” (and thus as part of “physics” in the sense above) in the treatise itself, as the title of the first part indicates: “On the passions in general: and incidentally on the whole nature of man” [*Des Passions en General: Et par occasion, de toute la nature de l’homme*] (AT 327). And the whole treatise leaves little doubt that by “nature of man” Descartes does not simply mean the study of human physiology but also, and primarily, the study of the nature of the mind-body union, without which we cannot understand the passions.

Notice also that the three main branches of the tree—mechanics, medicine and morals--have in common that they are “beneficial to man” (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186).⁸ Philosophy appears, thus, not just as a tree of *knowledge* but as a tree of the *knowledge that benefits man*. This partially explains why, among the three main branches, morals seem to “presuppose” not only the trunk and the roots but also the other branches, the sciences. The sciences are in the service of our happiness: “By ‘morals’ I understand the highest and most perfect moral system, which presupposes a complete knowledge of the other sciences and is the ultimate level of wisdom” (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186). Unlike the other branches—mechanics and medicine—morals teaches, not what is useful or beneficial for humans *insofar as we are part of the natural world*, but insofar as we are a part of a section of the natural world which is *infused with mind*, the world of mind-body unions. This is why the most relevant feature of this mind in the treatise is primarily, not being a thinking thing, but a *free acting* thing. This is in the *Passions* what

⁸ “The first part of philosophy is metaphysics, which contains the principles of knowledge, including the explanation of the principal attributes of God, the non-material nature of our souls and all the clear and distinct notions which are in us. The second part is physics, where, after discovering the true principles of material things, we examine the general composition of the entire universe and then, in particular, the nature of this earth and all the bodies which are most commonly found upon it, such as air, water, fire, magnetic ore and other minerals. Next we need to examine individually the nature of plants, of animals and, above all, of man, so that we may be capable later on of discovering the other sciences which are beneficial to man.” (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186)

truly distinguishes mind-body unions from the rest of nature: “the exercise of free will” can render us “in a certain way like God”.⁹

This also means that morals in the *Passions* should not be perceived as an appendix to the physiology, or as a set of principles that constitute by themselves a stand-alone detachable theory. They are an integral part of the study of the nature of the passions or, more precisely, of the study of our human nature as revealed by our passions. The *only* moral question Descartes faces in the treatise is whether we should *follow* or not our passions—that is the dispositions they bring about--and under which conditions. “[B]ecause these passions cannot lead us to perform any action except by means of the desire they produce, it is this desire which we should take particular care to control; and here lies the chief utility of morality” (Passions II, art. 144, AT XI 436 : CSM I 379). Descartes is thus, against certain contemporary readings of the *ethics* in the treatise, perfectly aware of the limits of his moral conclusions.

As we will see, according to the physiologico-mental and functional accounts, passions discriminate, and dispose us towards or against, objects according to their relevance regarding our (natural) perfection, which we increase by joining goods. They are in this sense our only *natural* guides towards our (natural) happiness: they present us with the “important” (*Passions* II, art. 52) opportunities (objects to join/avoid) by *forcing* us into (relevant) interactions with the world (disposing us to act), from which we can benefit. It is in this sense that morals have a place, and a fundamental one, in the treatise. It is revealed by their function. Had he decided to start studying (as a natural philosopher) happiness instead of passions, he should have ended up studying the passions too. All he can say about our happiness is revealed by our passions, and what our passions reveal about our happiness is all we can say about the latter. And unlike Seneca who, according to Descartes, did not provide us with the tools to achieve “natural happiness,” Descartes thinks he is providing those tools by teaching how to *control* our passions, that is, teaching how to *use* them for our happiness.¹⁰

This fundamental unity of the treatise is also the overall idea that unifies this dissertation. Its structure intends to reflect both the answer Descartes provides to each of the three main questions about

⁹ “I see only one thing in us which could give us good reason for esteeming ourselves, namely, the exercise of our free will and the control we have over our volitions. For we can reasonably be praised or blamed only for actions that depend upon this free will. It renders us in a certain way like God by making us masters of ourselves, provided we do not lose the rights it gives us through timidity.” (*Passions* III, art. 152; AT XI 445 : CSM I 384)

¹⁰ “Seneca should have taught us all the principal truths whose knowledge is necessary to facilitate the practice of virtue and to regulate our desires and passions, and thus to enjoy natural happiness. That would have made his book the finest and most useful that a pagan philosopher could have written.” (To Princess Elizabeth, 4 August 1645; AT IV 267 : CSMK 258)

passions he is facing in the treatise, and the sense in which each of those answers constitute a step towards his argument about the role passions play in the pursuit of happiness. Those questions are: (1) what are our passions, i.e. which type of physiologico-mental (mind-body) event are they?; (2) which good do they do for us, that is which function(s) do they perform for our human nature?; and (3) how should we act (when we experience them) if we want to benefit from them, that is gain in natural happiness? Chapters 2 (“The Causal Account”), Chapter 3 (“The Function of the Passions”) and Chapter 4 (“Ethics”), respectively, deal with each of these questions. Chapter 1 is an overview of the correspondence related to passions maintained by Descartes during the eight years before the publication of the treatise (1641-49). It is of interest, particularly in relation to the overall ethical purpose of the treatise. Reading first the correspondence not only offers a better window into the ethical conclusions of the treatise, but allows to read the treatise as the “trunk” of those ideas. Chapter 5 is a discussion of the interest Descartes’ theory could have for contemporary debates on emotions.

I will attempt to show that the central conclusion Descartes is supporting throughout the treatise is that human passions, if not impaired and properly guided by reason, constitute the only *function* [*fonction*] of the mind-body union that can guide us in the pursuit of our (natural) happiness. Passions do this (1) by *informing* the soul about the current *state of perfection* of the body and, most importantly, *of the mind-body union*; (2) by *discriminating* what is and is not relevant in the world regarding our natural perfection—which they do by pointing out a *deficiency* (or a damaging excess) whose satisfaction will increase that perfection; and (3) *proposing* (to the will) possible ways of action—i.e. by *disposing* us to act—in order to overcome that deficiency (or excess).

This means that objects become *emotional objects* only insofar as they appear to us (are represented by our passions) as relevant for our perfection. And since our *state of perfection* is the result of joining or losing goods, and joining goods means forming unities with them, the set of unities we have established in the world also defines our state of perfection. It also means that our passions do not necessarily have to be about external objects, or about our own body. They can also be about the *state of perfection of the mind-body union*; and about the *state of perfection of the union we (mind-body unions) have established with the world*. Our (objectless) joy, for example, may simply be the soul’s perception of the current state of health of the body (state of perfection of the mind-body union), but it can also be the soul’s overall perception of the state of perfection of the union we have formed with the world (i.e. the perception of the set of unities we have established with the world).

The role of reason (of our free will as it evaluates) is to help determine whether we should follow or not the disposition to join, or not to join, the objects represented by the passions. All reason does is help evaluate whether the goods and evils passions *select* are *true* goods and *true* evils. If we are disposed to join them *and* they are true, then we should follow that disposition (that is, we should join the objects passions represent) since, we can assume, that action should increase our natural perfection; similarly, if our passions dispose us to avoid certain objects *and* reason shows they are true evils, then we should follow that disposition (i.e. we should avoid them). In this sense the Stoic “live according to nature” acquires in Descartes a new meaning: live according to *your human* nature, which means: follow your passions, but do so after making sure the object they dispose you towards (or away from) is truly good or truly evil. “I do not think that they [passions] should be altogether despised, or even that one should free oneself altogether from the passions. It is enough to subject one’s passions to reason; and once they are thus tamed they are sometimes the more useful the more they tend to excess” (To Princess Elizabeth, 1 September 1645, AT IV 287 : CSMK 265). This means that knowledge is, in an important sense, secondary in Descartes’ account. Not only reason evaluates those objects which our passions *select*, and *hand down* to it but it seems that all it can do is to help avoid the possible harm passions may cause (rather than actually bring a *standard* of happiness to determine evaluate the positive value of a particular object).

The centrality of the study of the function of the passions is explicit from the very beginning of the treatise (*Passions* I, art. 2). And although it is clear since that moment that a mere physiologico-mental outline of *what occurs in the mind-body union when we experience passions* is not going to yield the answer as to what passions are, that part of the study (i.e. the physiologico-mental account) is of great value for the theory. (a) It leads Descartes to provide a more complete view of the Cartesian theory of perception, specially by clarifying the distinction between passions, sensations and appetites; (b) it develops Descartes’ theory of the mind, specially his understanding of the faculties of the mind and their distinction according to the opposition between *passions* and *actions* of the soul; (c) it forces Descartes to further refine his understanding of the *relationship* between mind and body; and, (d) it helps focus the study of the function of the passions on the relevant stages of the physiologico-mental process—which are mainly three: the representation in the soul, the bodily motions that accompany each passion (preparation of the body), and the disposition of the soul. The physiologico-mental account shows that passions *represent, prepare our body* to acquire, and *dispose the soul to want*, that *which is worth considering in order to constitute, by joining it, unities of greater perfection*.

The physiologico-mental and functional accounts are the grounds to extract ethical conclusions. Insofar as passions *incline* our will to act, our passions—i.e. each passionate interaction we maintain with the world—become *moral* questions, whether to follow our passion or not. Following our passions *reasonably*, as we have seen, leads to happiness. Happiness (“contentment of the mind”) is defined by Descartes as “our inner awareness of possessing some perfection” (“all our contentment consists simply in our inner awareness of possessing some perfection” [To Princess Elizabeth, 1 September 1645, AT IV 283-84 : CSMK 263]). Therefore those actions aimed at “acquiring some perfection” are virtuous actions (“all the actions of our soul that enable us to acquire some perfection are virtuous” [To Princess Elizabeth, 1 September 1645, AT IV 283 : CSMK 263]).

“Contentment” expresses the *satisfaction* of those who have acquired the habit of leading their lives according to virtue. Those who, in particular, have acquired the habit of following passions according to reason, have acquired the highest virtue, generosity.. The generous person happens to be precisely *the one that knows best how to benefit from his passions* and has developed the habit of doing so. The generous is, one hand, *free* insofar as his judgment is independent from, undisturbed by, any passion. On the other, the generous is the one who has best understood his human nature and thus is *living* it (his nature) beneficially. And rather than being isolated from the world he is *socially engaged*. By taking advantage of the opportunities life presents to increase his happiness--opportunities which are presented to us by our passions—he is constantly constituting unities of greater perfection, thus creating communities. Thus our contentment, like our perfection, is always *in progress*.

I. THE CORRESPONDENCE ON PASSIONS (1641-1649)

INTRODUCTION

Traces of Descartes' thought on passions can already be found in his 1619-22 *Early Writings*.¹¹ He also expressed some of his ideas on the issue--although in general quite briefly and usually in the context of broader epistemological discussions--in several of his major works, in passages which are today among the best known, and most frequently quoted, on the topic.¹² But passions only received

¹¹ Some of the passages in those writings which somehow refer to ideas related to his later treatment of the passions are:

I use the term 'vices' to refer to the diseases of the mind, which are not so easy to recognize as disease of the body. This is because we have frequently experienced sound bodily health, but have never known true health of the mind.

I notice that if I am sad or in danger and preoccupied by some serious undertaking, I sleep deeply and eat voraciously. But if I am full of joy, I do not eat or sleep. (AT X 215 : CSM I 3)

In the minds of all of us there are certain elements which once aroused, however slightly, produce strong emotions. Thus, if a high-spirited child is scolded, he will not weep but get angry, whereas another child will weep. If we are told that some disaster has occurred we are sad; but if we are afterwards told that some wicked man was responsible, we become angry. In moving from one passion to another, we pass through intermediate related passions. But often there will be a more violent transition from one passion to its opposite, as when in the course of a lively banquet we suddenly hear news of some misfortune. (AT X 217 : CSM I 4)

There is a single active power in things: love, charity, harmony. (AT X 218 : CSM I 5)

Descartes talks very rarely about "vice" in the *Passions of the Soul*, and does not refer to it as a "disease of the mind". The term does not appear for the first time until *Passions* III, art. 157 (in the discussion of vanity). In *Passions* III, art. 160, AT XI 451 : CSM I 386, it is implicitly defined as a "thought which has bad foundations" meaning that "vice usually proceeds from ignorance" (AT XI 452 : CSM I 387). The influence certain passions have on other normal physiological functions and their relationship to our health in general is addressed by Descartes, mainly, in *Passions* II (see e.g. arts. 97-101). How certain thoughts are causally relevant to arouse our passions is a common theme in the 1649 treatise. As to "love," it does not appear in the treatise as the "single active power in things," but it does appear as the most useful passion insofar as it can join as "perfectly" to "goods" (*Passions* II, art. 139; AT XI 432 : CSM I 377). If anything in the treatise is the "single active power" in things (i.e. in the world), that is the mind itself, and "volitions" are its actions (*Passions* I, art.17, AT XI 342 : CSM I 335).

¹² See, e.g., *Principles of Philosophy* I, art. 48 ["All the objects of our perception may be regarded either as things or affections of things, or as eternal truths. The former are listed here"] (AT VIII A 23 : CSM I 208); *Principles* I, art. 66 ["How sensations, emotions and appetites may be clearly known, despite the fact that we are frequently wrong in our judgements concerning them"] (AT VIII A 32 : CSM I 216); *Principles* IV, art. 190 ["Various kinds of sensation. First, internal sensations, i.e. emotional states of the mind and natural appetites"] and IV, art. 197 ["The nature of the mind is such that various sensations can be produced in it simply by motions of the body"]. Mentions without specific discussion on their

independent and extended attention in Descartes' last published work in his lifetime, the *Passions of the Soul* (1649). The second major source of ideas on passions is probably the correspondence he maintained during the eight years before the publication of the treatise.

There are several reasons to pay careful attention to the references to passions in the 1641-49 correspondence.¹³ (1) It reveals some of Descartes' first motivations to undertake the task of writing an independent study on the passions, and how his interests developed throughout the years; (2) it shows how Descartes' thought on passions was acquiring shape, very specifically, in the context of the evolution of his views on happiness (on which the correspondence reveals much more than the treatise) and on the control of the passions (which is the main explicit goal of the treatise); and (3) it allows us to see how other important issues in Descartes' thought acquire new relevance as he thinks about the passions—among which the mind-body relationship stands out.

The correspondence helps also clarify other *minor* but important questions. It, for example, contributes to make explicit one important sense in which Descartes could have understood that a *physicien* must deal with ethical questions as he studies the passions, i.e. one sense in which ethics can be understood as part of the *natural* study of the passions. In the correspondence, and not the treatise (where the “teachings of the ancients” are to be avoided [*Passions* I, art. 1, AT XI 327 : CSM I 327]), we also see Descartes defining his views on happiness in direct dialogue with Seneca (*ca.* 4 B.C.-65 AD). His *explanation* to Elizabeth of the differences between his own view of happiness and Seneca's is the best first-hand account of the distance Descartes saw between himself and the Stoics. And unlike the treatise, the letters include a number of very specific practical pieces of advice about the control of the passions

nature appear in *Meditations on First Philosophy* III (AT VII 37 : CSM II 26), and VI (esp. AT VII 74-75 : CSM II 52); and in *Treatise on Man* (esp. AT XI 176: CSM I 106; and AT XI 202 : CSM I 108).

¹³ Among the most significant letters--and the ones worth discussing--during 1641-49 are, chronologically, one (possibly to Pollot) of mid-January 1641, one to Regius of May 1641, two letters to Elizabeth in 1643 (21 May, and 28 June), a series of letters to Elizabeth in 1645-46 (letters of May or June, June, July 21, 4 August, 18 August, 1 September, 15 September, 6 October, and 3 November 1645; and letters of January, May and October/November 1646), and two letters to Chanut in 1647 (spec. 1 February and 6 June 1647), and one letter to Elizabeth in 1649 (22 February).

Other letters of this period only marginally related to passions are the ones to Chanut dated on 15 June 1646, 1 November 1646, and 20 November 1647, where some minor aspects—such as passing references to the state of the manuscript Descartes is working on--are touched upon. One letter to Queen Christina (20 November 1647)—in which Descartes talks about the supreme good and virtue, a central issue in the *Passions of the Soul*--and one to Clerselier on 23 April 1649--in which Descartes simply acknowledges having received Clerselier's numerous comments on the draft but not having addressed them yet—are of some relevance to appreciate the intellectual context in which Descartes was preparing his treatise.

(mainly addressed to Elizabeth) which are of value to confirm, or to place new emphasis on, some of the views Descartes will put forth in the 1649 treatise.¹⁴

Among the letters, the ones exchanged with Elizabeth in 1645-46 constitute not only the most substantive set on the issue but also a turning point in Descartes' study of the passions. That exchange was both the occasion for him to start writing in much more detail on the nature of the passions in the correspondence, as well as his immediate motivation to write the *Passions of the Soul* itself. The first draft of the treatise (completed in 1646) seems to have been Descartes' direct answer to Elizabeth's request, in September 1645, to "define the passions in order to know them well."¹⁵ That the draft addressed most of Elizabeth's questions could explain why the passions, although present in some letters to the princess for about another year (in particular in To Princess Elizabeth, January 1646, May 1646 [AT IV 407]; and October/November 1646), vanish as the central topic of discussion between them in future letters--it reappears one and last time a few months before the publication of the treatise (To Princess Elizabeth, 22 February 1649).¹⁶ At the same time, however, the issue emerges with force in the second most relevant exchange of letters on the issue, the one with Chanut between June 1646 and November 1647.

From the correspondence we know that Descartes prepared the first version of the treatise during the winter of 1645-46. ("Last winter [...] I sketched a little treatise on the nature of the passions of the soul [...]") [To Chanut 15 June 1646, AT IV 442 : CSMK 289]; "I discover by experience that I was right to include pride among the passions; for when I see the favourable judgement which Your Highness has made of my little treatise about them, I cannot prevent myself from feeling proud. It is a topic that I have never before studied . . ." [To Princess Elizabeth, May 1646, AT IV 407 : CSMK 285]). More precisely, the draft was probably written between the beginning of November 1645 and the beginning of March

¹⁴ For an extensive list of the letters from and to Descartes which may of interest regarding his views, specifically, on morals, see John J. Blom, *Descartes, His Moral Philosophy and Psychology* (New York: New York University Press, 1978), pp. ix-xii.

¹⁵ "Je vous voudrois encore voir definir les passions, pour les bien connoistre; car ceux qui les nomment perturbations de l'ame, me persuaderoient que leur force ne consiste qu'a eblouir & soumettre la raison, si l'experience ne me monroit qu'il y en a qui nous portent aux actions raisonnables. Mais ie m'asseure que vous m'y donnerez plus de lumiere, quand vous expliquerez comment la force des passions les rend d'autant plus utiles, lorsqu'elles sont suiettes a la raison." (Elisabeth à Descartes, 13 septembre 1645, AT III 289-90) ["I would still like to see how you define the passions, in order to know them well, since those who call them perturbations of the mind would persuade me that their force only consists in confusing and submitting reason, if my experience would not show me that there are some which lead us to reasonable actions. But I am sure you would provide more light on this when you will explain to me how the force of the passions makes them more useful when they are subjected to reason."]

¹⁶ According to the fourth of the letters that constitute the Preface to the treatise, Descartes sent the manuscript to the publisher on August 14, 1649 (AT XI 326 : CSM I 327). According to Adam and Tannery, he left for Sweden on September 1st or 2nd without probably having a chance to review the proofs (see AT XI 294).

1646. On November 3, 1645, Descartes was still working on it. That day he wrote to Elizabeth that he had “not yet sufficiently digested [his] opinions on this topic [i.e. the number and order of all the passions]” (To Princess Elizabeth, 3 November 1645, AT IV 332 : CSMK 277).¹⁷ And Elizabeth, the first recipient of the draft, had read it by April 25, 1646, when she refers directly to its content before asking Descartes for some clarifications (Elisabeth à Descartes, 25 avril 1646, AT IV 404).¹⁸

Besides to Elizabeth (see To Princess Elizabeth, May 1646, AT IV 407 : CSMK 285), Descartes sent the treatise to Chanut (see To Chanut, 20 November 1647), to Queen Christina—through Chanut (see To Queen Christina, 20 November 1647, AT V 86 : CSMK 326)--and to Clerselier (see To Clerselier, 23 April 1649, AT V 354 : CSMK 376). Chanut did not apparently know about the existence of the draft until June 1646 (To Chanut, 15 June 1646, AT IV 442 : CSMK 289), two months after Elizabeth had already commented on it. Christina did not receive it probably until the end of 1647, and showed very limited interest in it (Christine de Suède à Descartes, 12 décembre 1648, AT V 251).¹⁹ Clerselier’s comments were probably the last substantive set of remarks Descartes took seriously into account, in the spring of 1649, before completing the final version of the manuscript.²⁰ By the time Brasset received a

¹⁷ “These last few days I have been thinking about the number and order of all the passions, in order to examine their nature in detail. But I have not yet sufficiently digested my opinions on this topic to dare to tell them to Your Highness. I shall not fail to do so as soon as I can.” (To Princess Elizabeth, 3 November 1645, AT IV 332 : CSMK 277).

¹⁸ According to Adam and Tannery “Descartes avait sans doute laissé en manuscrit à la princesse Elisabeth une première ébauche de son *Traité des Passions de l’âme*” during his trip to The Hague on March 7, 1646 (AT IV 404, note a). They, however, do not provide more reference than the letter from Descartes to Chanut of 6 March 1646, and Descartes à Elisabeth, 3 novembre 1645. In the first Descartes does, in fact, announce to Chanut that he would be in The Hague the following day (“ie me propose d’aller demain à la Haye” [Descartes à Chanut, 6 mars 1646, AT IV 376] but does not mention the treatise. In the letter to Elizabeth dated on 3 November 1645, Descartes says he still has “not yet sufficiently digested my opinions on this topic [i.e. the number and order of all the passions]” (To Princess Elizabeth, 3 November 1645, AT IV 332 : CSMK 277) meaning at most that by then Descartes had probably not yet completed a first draft of the treatise.

¹⁹ Christina thanked Descartes for the treatise on letter of 12 December 1648, one year after she received it, but without commenting on any specific ideas (Christine de Suède à Descartes, 12 décembre 1648, AT V 251). On 22 February 1649 Descartes tells Elizabeth that, of two letters he had just received, “[o]ne of the letters was from the person to whom I sent the treatise on the passions a year ago: she wrote on her own hand to thank me for it [the treatise] [...] She thanks me in very express terms, for the treatise on the passions, but she makes no mention of the letters which accompanied it” (To Princess Elizabeth, 22 February 1649, AT V 283 : CSMK 368). The year that elapsed seems to be the one since Descartes announced that he was sending her a number of letters, together with the treatise, *via* Chanut: “I am sending you a collection of some other letters in which I have explained these matters [i.e. different topics on passions] at greater length. And I have included also a little treatise on the passions, which forms the larger part of the collection” (To Chanut, 20 November 1647, AT V 87 : CSMK 327). Those letters Descartes says he also sent to Christina were apparently the letters to Elizabeth on passions, the ones dated on 21 July, 4 August, 18 August, 1 September and 15 September 1645, and the first half of the letter dated 6 October 1645 (CSMK 327, note 1; CSM do not provide any reference to confirm this though).

²⁰ The letter to Clerselier in 1649--in which Descartes does not even comment on any of those “things you [Clerselier] thought lacking” in the treatise (To Clerselier, 23 April 1649, AT V 354 : CSMK 376)--shows that Clerselier’s comments were numerous and that Descartes took them quite seriously--to judge from Descartes’s own admission that the corresponding revisions “will increase its length [i.e. the length of the manuscript] by a third” (To Clerselier, 23 April 1649, AT V 354 : CSMK 376). We do not have those comments though. That letter also indicates that the final version of the treatise was not ready yet (i.e. in April 1649).

copy of the final version in the fall of 1649, the manuscript was already in the hands of the publisher, and Descartes was in Sweden.²¹

In order to observe the development of Descartes' most relevant views on passions in the 1641-49 correspondence, I will provide in the following pages an overview, in chronological order, along three specific thematic lines: (1) control and happiness; (2) the nature of passions; and (3) the relationship between mind and body.

1.1. CONTROL AND HAPPINESS

How to make “good use” of (*bien employer*) our passions to lead a happy life is Descartes' most explicit goal in the *Passions of the Soul* (see e.g. *Passions* III, art. 212, AT XI 488 : CSM I 404). A letter (possibly to Pollot) indicates that he had already in 1641 considered to some extent the importance of being able to control one's passions, specially some of them.²² Having learned of Pollot's grief for the death of his brother, Descartes shares with him his own recent experience attempting, in similar circumstances, to control excessive sadness and grief.²³ Descartes himself had not long ago lost his daughter Francine (who died on 7 September 1640), and his father Joachim (who died on 17 October 1640).²⁴

Not long ago I suffered the loss of two people who were very close to me, and I found that those who wanted to shield me from sadness only increased it, whereas I was

²¹ Although Brasnet only explicitly thanks Descartes for a “gift”—neither a book nor a title is mentioned—Brasnet's words do not leave much room for doubt: “Vous me faites hier au soyr un present, par les mains de M. Van Berg, qui m'oblige a un tres humble remerciement. Il doit estre renforcé de celuy de ma fille, puisque vous avez voulu qu'elle y participast. Elle n'a point iusques icy de plus forte passion que celle de Rire; s'il luy en vient d'autres elle vous aura l'obligation d'apprendre de vous, M(onsieur), a les connoistre & d'en profiter. (Brasnet à Descartes, 27 novembre 1649, AT V 450).

²² The third maxim of the “provisional moral code” of the *Discourse* calls for the *control* of our desires, a central idea in the treatise, but it is not clear there how that relates to our passions. “My third maxim was to try always to master myself rather than fortune, and change my desires rather than the order of the world.” (*Discourse* III, AT VI 25 : CSM I 123) And this means, in particular, “to prevent me from desiring in future something I could not get, and so to make me content” (*Discourse* III, AT VI 25 : CSM I 123-24).

²³ “I have just learned the sad news of your loss, and though I do not undertake to say anything in this letter which could have any great power to soften your pain, I still cannot refrain from trying, so as to let you know at least that I share what you feel.” (To [Pollot], mid January 1641, AT III 278 : CSMK 167)

²⁴ His elder sister, Jeanne Descartes, three years older than him, also died around this time, “peu de temps après leur père” according to Adam and Tannery (AT IV 373n).

consoled by the kindness of those whom I saw to be touched by my grief. So I am sure that you will listen to me better if I do not try to check your tears than if I tried to steer you away from a feeling which I consider quite justified. Nevertheless, there should be some moderation in your feelings, and while it would be barbaric not to be distressed at all when one has due cause, it would also be dishonourable to abandon oneself completely to grief; we do ourselves no credit if we do not strive with all our might to free ourselves from such a troublesome passion. (To [Pollot], mid January 1641, AT III 278-79 : CSMK 167)

Although a bit ambiguously at this stage, Descartes seems to be expressing here some of the intuitions behind an idea that will be of importance in the treatise, namely, that to *control* the passions means, among other things, to avoid their excesses (i.e. to experience them with “moderation”) (see e.g. *Passions* III, art. 211). This is precisely what Pollot should concern himself with. Rather than trying to “shield” Pollot from sadness, Descartes recommends “moderation in your feelings” and not “to abandon oneself completely to grief”. And even if he compares Pollot’s grief to a sort of slavery—and as such we should combat it with “all our might”—he still finds his passion “justified” (since it has a “due cause”).²⁵ The specific advice he gives Pollot is, accordingly, aimed at achieving that “moderation” in the disturbance his grief is causing, not so much at teaching him how not to feel grief (“we do ourselves no credit if we do not strive with all our might to free ourselves from such a troublesome passion”).

Descartes’ advice reveals some of his views at this moment on how our passions can be controlled. First, he gives Pollot a negative advice: finding the causes of our afflictions does *not* result in a reduction of the “disturbance”. This is so because the roots of most of our “afflictions” are not in the “reasons to which we attribute them” but in the “emotion and internal disturbance which nature arouses within us”:

In short, Sir, all our afflictions, whatever they may be, depend only to a very small extent on the reasons to which we attribute them; their sole cause is the emotion and internal disturbance which nature arouses within us. For when this emotion is quelled, even though all the reasons which we had earlier remain the same, we no longer feel upset. (To [Pollot], mid January 1641, AT III 280 : CSMK 168)

²⁵ Descartes retakes the slavery image in the treatise to refer, in particular, to describe “vain people” who are “slaves of their desires” (*Passions* III, art. 158; AT XI 449 : CSM I 386). Descartes does undertake also a discussion of “just” and “unjust” (or “justified” and “unjustified”) passions in the third part of the treatise (see e.g. on just and unjust envy *Passions* III, art. 183; AT XI 467-68 : CSM I 394; or on unjust indignation *Passions* III, art. 198). A related distinction is the one between “proper” and “blameworthy” passions (see e.g. *Passions* III, arts. 168-69).

Their “sole cause” is “the emotion and internal disturbance”. Not yet explicit here, “internal disturbance” is recurrently referred to in the treatise as a defining feature of passions in two main senses: (1) the cause of our passions is an “agitation” of the spirits (passions are “caused chiefly by the spirits” in *Passions* I, art. 37; and “the ultimate and most proximate cause of the passions” in *Passions* II, art. 51); and (2) that agitation, in turn, brings about a “disturbance” in the soul, i.e. a disposition to act (*Passions* II, art.52). In the treatise Descartes also explains that he prefers the term *emotion* to *passion* precisely because, “of all the kinds of thought which the soul may have, there are none that agitate and disturb it so strongly as the passions” (*Passions* I, art. 28; AT XI 350 : CSM I 339).

But what does it mean to say that the “sole cause” is that “disturbance”? Why are the “reasons” not also causes? In the treatise, the idea that *the* cause of the passions is the “agitation of the spirits” seems to mean that those agitations are the only cause which is *common* to all passions. The “reasons,” Descartes says to Pollot, are causes but “to a very small extent”. We can understand this as meaning—if we fill the gap with the treatise—that they can trigger the changes that result in passions but the later directly depend on the agitations of the spirits, which also strengthen and maintain them (*Passions* I, art. 27). This could also help understand why Descartes says that this disturbance is aroused by “nature” (“which nature arouses within us”). Simply thinking about the “reasons” may, if anything, maintain, rather than mitigate, the passion because the thoughts that we bring about when we recall the *reasons* would supposedly trigger the same emotion *naturally* every time. In the treatise this will be explained in terms of the natural link (*l’institution de la Nature*) between certain thoughts and certain bodily changes (see e.g. *Passions* II, art.107, and II, art. 136 where this idea is referred to as “the principle underlying everything I have written about them [passions]” [AT XI 428 : CSM I 375]).

Hence Descartes’ positive advice to Pollot: “tak[e] your mind off it as much as you can by other activities”:

Now I certainly do not want to advise you to use all your powers of determination and steadfastness to check the internal agitation you feel straight away—for this would perhaps be a cure more troublesome than the original sickness. But equally I do not advise you to wait until time alone heals you, still less to sustain and prolong your suffering by your own thoughts. I ask you merely to try to alleviate the pain little by little, by looking at what has happened to you from whatever perspective can make it appear more bearable, while at the same time taking your mind off it as much as you can by other activities. (To [Pollot], mid January 1641, AT III 280 : CSMK 168)

But Descartes does not seem yet able to justify his advice. He does not tell Pollot how the control can and should be exerted, or which type of *peace* it would bring about. He does not even explain to Pollot why the specific *remedies* he is offering should work—i.e. in which sense this disturbance is aroused by “nature” and why thinking about the supposed cause may not reduce the disturbance but thinking about something else instead might. A convincing defense of his own advice will require the task he undertakes in the treatise: first, a detailed study of the type of *disturbance* that so fundamentally defines the passions and how that disturbance relates to our thoughts; and, second, the study of their function in order to determine to which extent, and for which benefits, they should be controlled.

The issue of controlling the passions reappears again, and is discussed in much more detail, in the 1645 correspondence with Elizabeth. Descartes’ general dismissal in the opening pages of the treatise of the thought of the “ancients” on passions would appear, after reading that correspondence, as a recent thought—if we are to take that dismissal seriously.²⁶ In fact, only four years earlier, in 1645, some of the ancients’ contributions to the question of happiness in general—within which Descartes’ main interest in the control of the passions resides—seemed to be of interest to him. In the letter to Elizabeth of July 21, 1645, Descartes not only affirms that there is much we can learn from the ancients, but also that we should make an effort to examine their views on happiness before saying anything about it. He even recommends the princess to read one specific book of “the ancients,” which is also the only one he mentions in the context of the discussion on passions in the 1641-1649 correspondence. That book is Seneca’s *On the Happy Life*:

One of the most useful of these means [“which philosophy provides for acquiring that supreme felicity which common souls vainly expect from fortune”], I think, is to examine what the ancients have written on this question, and try to advance beyond them by adding something to their precepts. For in this way we can make the precepts perfectly our own and become disposed to put them into practice. That is why, in order to make up for the deficiency of my mind, which cannot produce anything on its own that I judge worthy of being read by Your Highness, and to ensure that my letters are not entirely empty and useless, I propose henceforth to fill them with considerations drawn from the reading of a certain book—namely the one that Seneca wrote *On the Happy Life*—unless you prefer to choose another, or this proposal does not please you. (To Princess Elizabeth, 21 July 1645, AT IV 252-53 : CSMK 256)

²⁶ Descartes says that he had somehow given up the hope of finding in others anything of value from which to start thinking on the passions. Thus he felt “obliged to write just as if I [Descartes] were considering a topic that no one had dealt with before me” (*Passions* I, art. 1, AT XI 327-28 : CSM I 328).

Given the topic Descartes is discussing with the princess in this letter—happiness—and the broader context in which it occurs—as a follow-up of a previous exchange on passions, which I will discuss below (see the letters to Elizabeth of May or June 1645 [AT IV 218-222 : CSMK 249-51], and of June 1645 [AT IV 236-238 : CSMK 253-54])—the fact that Seneca’s *On the Happy Life* is the only work Descartes explicitly *recommends* her to read is quite significant, even if Descartes’ enthusiasm about that book appears mitigated only two weeks later, when he tells Elizabeth that the book is not “sufficiently rigorous to deserve to be followed”:

When I chose Seneca’s *On the Happy Life* to suggest to Your Highness as an agreeable topic of discussion I took account only of the reputation of the author and the importance of his topic, without thinking of his manner of treating it. I have since given some thought to this [the recommendation to read Seneca’s *On the Happy Life*] and find it not sufficiently rigorous to deserve to be followed. (To Princess Elizabeth, 4 August 1645; AT IV 263 : CSMK 256-57).

But there is no doubt that Descartes is particularly interested in presenting his views *in reference* to Seneca—by making clear his disagreement with Seneca’s “manner of treating” happiness. He writes no less than five letters in two months (between August 4 and October 6, 1645) devoted mainly to provide reasons for Elizabeth not to confuse his own views with Seneca’s (see To Princess Elizabeth, 4 August 1645; 18 August 1645; 1 September 1645; 15 September 1645; and 6 October 1645). How he differs from Seneca on how “to facilitate the practice of virtue and to regulate our desires and passions” (To Princess Elizabeth, 4 August 1645; AT IV 267 : CSMK 258), a goal which will not fade in the next four years, defines those letters.

Descartes does agree with Seneca on the general need to somehow *control* the passions in order to attain happiness. But whereas Seneca, as Descartes puts it, practically propounds their elimination,²⁷ Descartes simply warns that our passions *can* represent serious obstacles to happiness (if they are not properly mastered), but reason can make of them a valuable *means* to achieve a happy life.²⁸ Their

²⁷ “The best definition [of the supreme good] he [Seneca] has found is, I think, the one given in the fifth chapter, where he says that ‘a happy person is one who, thanks to reason, has neither desires nor fears’, and that ‘a happy life is one that is grounded in right and certain judgment’. But so long as he does not tell us the reasons why we ought to have no fears or desires, all this gives us very little assistance.” (To Princess Elizabeth, 18 August 1645; AT IV 274 : CSMK 260)

²⁸ “I do not think that they [passions] should be altogether despised, or even that one should free oneself altogether from the passions. It is enough to subject one’s passions to reason; and once they are thus tamed they are sometimes the more useful the more they tend to excess.” (To Princess Elizabeth, 1 September 1645; AT IV 287 : CSMK 265)

fundamental disagreement seems to lie, to a large extent, on the disparity between Descartes' view of happiness and Seneca's *tranquillitas*.²⁹

Descartes identifies happiness with a "contentment or satisfaction of the mind" in a good number of occasions in the correspondence with Elizabeth:

[H]appiness (*la béatitude*) consists, it seems to me, in a perfect contentment of mind and inner satisfaction, which is not commonly possessed by those who are most favoured by fortune, and which is acquired by the wise without fortune's favour. So *vivere beate*, to live happily, is just to have a perfectly content and satisfied mind. (To Princess Elizabeth, 4 August 1645, AT IV 264 : CSMK 257)

[H]appiness consists solely in contentment of mind—that is to say, in contentment in general. For although some contentment depends on the body, and some does not, there is none anywhere but in the mind. (To Princess Elizabeth, 18 August 1645, AT IV 277 : CSMK 262)

[T]here is a difference between happiness, the supreme good, and the final end or goal towards which our actions ought to tend. For happiness is not the supreme good, but presupposes it, being the contentment or satisfaction of the mind which results from possessing it. The end of our actions, however, can be understood to be one or the other; for the supreme good is undoubtedly the thing we ought to set ourselves as the goal of all our actions, and the resulting contentment of the mind is also rightly called our end, since it is the attraction which makes us seek the supreme good. (To Princess Elizabeth, 18 August 1645, AT IV 275 : CSMK 261)

Happiness is "to have a perfectly content and satisfied mind"—which results from pursuing the "supreme good". On this both Seneca and Descartes could still agree. But, as Descartes understands it, for Seneca pursuing the *supreme good* would primarily mean "following the order of nature"; for Descartes, it means "living in accordance with true reason":

[H]e [Seneca] says that 'a happy life is one that accords with one's nature'—that is to say, happiness consists in following the order of nature and in accepting in good part all that happens to us. This explains almost nothing, and does not make sufficiently clear the connection with what he adds immediately afterwards—that this happiness cannot come about 'unless the mind is healthy', etc.—unless he means also that 'to live according to nature' is to live in accordance with true reason. (To Princess Elizabeth, 18 August, 1645, AT IV 273-74 : CSMK 260).

²⁹ Descartes himself also uses in the treatise the term "tranquillité" of the soul to refer to the state of happiness (see e.g. *Passions* II, art. 148, AT XI 442), but its meaning is different from Seneca's.

We must “recognize the condition of our nature” (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258), Descartes agrees, but simply *following* that nature does not lead to happiness. For Descartes, to say that the contentment of the mind results from pursuing the “supreme good” is to say that it results from the “firm and constant resolution” to follow reason, which is also what it means for him to be virtuous. “[I]n order to achieve a contentment [of mind] which is solid, we need to pursue virtue—that is to say, to maintain a firm and constant will to bring about everything we judge to be the best, and to use all the power of our intellect in judging well” (To Princess Elizabeth, 18 August 1645; AT IV 277 : CSMK 262); “we cannot ever practise any virtue—that is to say, do what our reason tells us we should do--without [...]” (To Princess Elizabeth, 1 September 1645; AT IV 284 : CSMK 263). This view of virtue is, according to Descartes, a major difference, not only between himself and Seneca, but between himself and anyone else before him. “Virtue, I believe, consists precisely in sticking firmly to this resolution; though I do not know that anyone has ever so described it” (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 258). Virtue is, thus, a habit--a view on which Descartes acknowledges “the scholastics are right”--, a *disposition* to judge well (the “habit of belief”) which can only be acquired “by long and frequent meditation” on the reasons that may have “convinced us of some truth in the past”.³⁰

By “satisfaction” of the mind, then, Descartes seems to mean the satisfaction of having followed reason with “firm and constant resolution”. This means, first of all, that inaction cannot bring satisfaction. “We must take every advantage that Fortune offers, but we must not be unhappy over those she refuses.” (To Princess Elizabeth, September 1646, AT IV 492 : CSMK 295). The mind can only be “satisfied” *after* following reason, that is, after acting. “If [...] fortune opposes our plans and makes them fail, we shall at least have the satisfaction that our loss was not our fault; and we shall still enjoy all the natural happiness whose acquisition was within our power” (To Princess Elizabeth, 1 September 1645, AT IV 285 : CSMK 264). Happiness does not depend on good deliberations, but on our “conduct.”³¹

³⁰ “We cannot continually pay attention to the same thing; and so, however clear and evident the reasons may have been that convinced us of some truth in the past, we can later be turned away from believing it by some false appearances unless we have so imprinted it in our mind by long and frequent meditation that it has become a settled disposition with us. In this sense the scholastics are right when they say that virtues are habits; for in fact our failings are rarely due to lack of theoretical knowledge of what we should do, but to lack of practical knowledge—that is, lack of a firm habit of belief. (To Princess Elizabeth, 15 September 1645; AT IV 295-96 : CSMK 267)

³¹ “I cannot approve of trying to deceive oneself by feeding on false imaginations for the resulting pleasure can touch only the surface of the soul, leaving it to feel inner bitterness when it perceives their falsehood. It could indeed happen that the soul was so continually diverted that it never perceived this; but that would not amount to the enjoyment of the happiness we are discussing, since the latter must depend on our conduct, whereas the former could come only from fortune.” (To Princess Elizabeth, 6 October 1645; AT IV 305-306 : CSMK 268).

And second, since passions (and particularly the “desires” that accompany them) are the strongest *forces* that can act on the mind, being able to maintain a “firm and constant resolution” to follow reason, means primarily to resist the influence of passions on it. Virtue is the “firm and constant resolution to carry out whatever reason recommends without being diverted by his passions or appetites” (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 257). Reason can only guide us if free of deviations. “[N]othing can completely take away our power of making ourselves happy provided it does not trouble our reason” (To Princess Elizabeth, 1 September 1645; AT IV 283 : CSMK 263).

This seems to imply that, for example, in cases of mental disease, or of passions excessive enough to interfere with the use of reason, the contentment of the mind will, presumably, not be at hand. In fact, Elizabeth had asked Descartes about the former cases—about “diseases which take away the power of reasoning and with it the power of enjoying the satisfaction proper to a rational mind”—and Descartes acknowledged that when he says that happiness “depends entirely on our free will” this “should be taken to apply to those who have the free use of their reason and in addition know the way that must be followed to reach such happiness” (To Princess Elizabeth, 1 September 1645; AT IV 281-82 : CSMK 262).

And by “contentment” of the mind Descartes seems to refer to the enjoyment of the benefits of having followed reason. Being virtuous leads to acquire perfections: “all the actions of our soul that enable us to acquire some perfection are virtuous” [To Princess Elizabeth, 1 September 1645; AT IV 283 : CSMK 263]). The awareness of that acquisition is the “contentment” of the mind, i.e. happiness: “all our contentment consists simply in our inner awareness of possessing some perfection” [To Princess Elizabeth, 1 September 1645, AT IV 283-84 : CSMK 263]). That contentment is not very different in kind, Descartes thinks, from the “pleasure of the soul” that accompanies certain actions (such as watching a tragedy or playing tennis) in which the soul becomes aware of possessing a perfection (of the soul or of the body) (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270). And since passions are perfections, “in general the soul is pleased to feel passions arise in itself no matter what they are, provided it remains in control of them.” (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270). The contentment of the mind, however, would be free of those passions that arise from following *wrongly* a desire or not following a *right* one. “[N]othing can impede our contentment except desire and regret or repentance” (To Princess Elizabeth, 4 August 1645, AT IV 266 : CSMK 258).

Thus, according to Descartes, virtue without reason—i.e. “virtue unenlightened by intellect”—cannot lead to happiness. “[T]he greatest felicity of man depends on the right use of reason” (To Princess

Elizabeth, 4 August 1645, AT IV 267 : CSMK 258). That virtue can be “false” and thus “can carry us to evil courses”. “[T]he will and resolution to do well can carry us to evil courses, if we think them good” (To Princess Elizabeth, 4 August 1645; AT IV 267 : CSMK 258).

The right use of reason, on the other hand, by giving a true knowledge of the good, prevents virtue from being false; by accommodating it to licit pleasures, it makes virtue easy to practice and by making us recognize the condition of our nature, it sets bounds to our desires. So we must conclude that the greatest felicity of man depends on the right use of reason; and consequently the study which leads to its acquisition is the most useful occupation one can take u

(To Princess Elizabeth, 4 August 1645; AT IV 267 : CSMK 258).

Notice the double value that Descartes attributes to reason: knowledge (of the good) and freedom (from our desires). Those who think of virtue as “unenlightened by intellect”—that is, the virtue of those who claim to only *follow nature*—must, on the other hand, set it *against* passions to avoid accepting that passions, if understood as part of our nature, should also be followed. That virtue is “commonly set in opposition to pleasure, appetite and passion, and is accordingly very difficult to practice” (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258). Descartes is, thus, implicitly criticizing both an understanding of human nature as devoid of *passions* and the failure to recognize the role of reason to profit from them. Both views lead to view virtue in opposition to our passions. The “right use of reason,” on the other hand, “prevents virtue from being false” without being in conflict with our passions: “by making us recognize the condition of our nature, it sets bounds to our desires” (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258). Setting “bounds to our desires” will appear in the treatise as “the chief utility of morality” (*Passions* II, art. 144, AT XI 436 : CSM I 379).

This also means that the contentment of the mind does not depend on the specific goods we might enjoy, which is why both poor and rich “can be entirely content and satisfied” if their desires are “duly regulated by reason”. Thinking otherwise would be confusing happiness with the passion of joy (which results from the satisfaction of “enjoying good things”).³² The former only results from virtue. Virtue is, thus, in other words, the habit of acquiring “all those goods whose acquisition depends upon our free

³² “[A] small vessel may be just as full as a large one, although it contains less liquid; and similarly if we regard each person’s contentment as the full satisfaction of all his desires duly regulated by reason, I do not doubt that the poorest people, least blest by nature and fortune, can be entirely content and satisfied just as much as everyone else, although they do not enjoy as many good things. It is only this sort of contentment which is here in question; to seek the other sort would be a waste of time, since it is not in our power.” (To Princess Elizabeth, 4 August 1645; AT IV 264-65 : CSMK 257).

will.”³³ For similar reasons, the contentment of the mind does not depend either on specific actions, or their effects, or even on being “free from error” in our decisions.³⁴ It results from having acquired the *habit* “to maintain a firm and constant will” to use our reason in order to “judge what is best”. Only this habit can result in a “solid” contentment, not a provisional one, that is, a contentment we can properly call happiness.³⁵

To “recognize the condition of our nature” is thus necessary for Descartes, not in order to follow nature, but to determine the means and the limits within which the mind can achieve “satisfaction” and “contentment”. Knowing our passions is part of the knowledge of that “condition of our nature” which means that, in principle, we should not assume we should live *without* passions, as Seneca did. “The best definition [of the supreme good] he [Seneca] has found is [...] that ‘a happy person is one who, thanks to reason, has neither desires nor fears’, and that ‘a happy life is one that is grounded in right and certain judgment’. But so long as he does not tell us the reasons why we ought to have no fears or desires, all this gives us very little assistance.” (To Princess Elizabeth, 18 August 1645; AT IV 274 : CSMK 260). We do not have either to choose between passions or reason: “I know [...] that ordinarily the best minds are those in which the passions are most violent and act most strongly on their bodies” (To Princess Elizabeth, June 1645; AT IV 236 : CSMK 253).

According to Descartes, “pleasure” accompanies happiness but it is not equivalent to it, as Epicurus had thought.³⁶ “[W]e cannot ever practise any virtue—that is to say, do what our reason tells us

³³ “I have sometimes asked myself the following question. Is it better to be cheerful and content, imagining the goods one possesses to be greater and more valuable than they are, and not knowing or caring to consider those one lacks; or is it better to have more consideration and knowledge, so as to know the just value of both, and thus grow sad? If I thought joy the supreme good, I should not doubt that one ought to try to make oneself joyful at any price, and I should approve the brutishness of those who drown their sorrows in wine, or dull them with tobacco. But I make a distinction between the supreme good—which consists in the exercise of virtue, or, what comes to the same, the possession of all those goods whose acquisition depends upon our free will—and the satisfaction of mind that results from that acquisition. Consequently, seeing that it is a greater perfection to know the truth than to be ignorant of it, even when it is to our disadvantage, I must conclude that it is better to be less cheerful and possess more knowledge. So it is not always the most cheerful person who has the most satisfied mind; on the contrary great joys are commonly sober and serious, and only slight and passing joys are accompanied by laughter. So I cannot approve of trying to deceive oneself by feeding on false imaginations for the resulting pleasure can touch only the surface of the soul, leaving it to feel inner bitterness when it perceives their falsehood. It could indeed happen that the soul was so continually diverted that it never perceived this; but that would not amount to the enjoyment of the happiness we are discussing, since the latter must depend on our conduct, whereas the former could come only from fortune.” (To Princess Elizabeth, 6 October 1645; AT IV 304-06 : CSMK 268)

³⁴ “It is also not necessary that our reason should be free from error; it is sufficient if our conscience testifies that we have never lacked resolution and virtue to carry out whatever we have judged the best course. So virtue by itself is sufficient to make us content in this life.” (To Princess Elizabeth, 4 August 1645, AT IV 266-67 : CSMK 258)

³⁵ “I agree that it is difficult to determine exactly how far reason ordains that we should devote ourselves to the community. However, it is not a matter on which it is necessary to be very precise; it is enough to satisfy one’s conscience, and in doing so one can leave a lot of room for one’s inclination.” (To Princess Elizabeth, 6 October 1645; AT IV 316 : CSMK 273)

³⁶ “[W]hen Epicurus considered what happiness consists in and to what purpose or end our actions tend, he was not wrong to say that it is pleasure in general—that is to say, contentment of the mind. For although the mere knowledge of our duty might oblige us to do good actions, yet

we should do—without receiving satisfaction and pleasure from so doing” (To Princess Elizabeth, 1 September 1645; AT IV 284 : CSMK 263); “although the mere knowledge of our duty might oblige us to do good actions, yet this would not cause us to enjoy happiness if we got no pleasure from it” (To Princess Elizabeth, 18 August 1645; AT IV 276 : CSMK 261); “[i]t is easy to show that the pleasure of the soul which constitutes happiness is not inseparable from cheerfulness and bodily comfort” (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270).³⁷ But the “pleasure of the mind” (or the pleasure belonging “to the mind in so far as it is united with the body”)—is quite different from the “pleasures of the body” (To Princess Elizabeth, 1 September 1645; AT IV 286 : CSMK 264). The latter are “the source of all the evils and all the errors in life” (To Princess Elizabeth, 1 September 1645; AT IV 284-85 : CSMK 263-64),³⁸ and whereas the pleasures of the body are temporal, the pleasures of the soul “can be as immortal as the soul itself”:

[T]he main difference between the pleasures of the body and those of the mind is the following. The body is subject to perpetual change, and indeed its preservation and well-being depend on change; so all the pleasures proper to it last a very short time, since they arise from the acquisition of something useful to the body at the moment of reception, and cease as soon as it stops being useful. The pleasures of the soul, on the other hand, can be as immortal as the soul itself provided they are so solidly founded that neither the

this would not cause us to enjoy any happiness if we got no pleasure from it. But because we often give the name ‘delight’ to false pleasures, which are accompanied or followed by worry, anxiety and repentance, many have believed that this view of Epicurus inculcates vice. Indeed, it does not inculcate virtue. Suppose there is a prize for hitting a bull’s-eye: you can make people want to hit the bull’s-eye by showing them the prize, but they cannot win the prize if they do not see the bull’s-eye; conversely, those who see the bull’s-eye are not thereby induced to fire at it if they do not know there is a prize to be won. So too virtue, which is the bull’s-eye, does not come to be strongly desired when it is seen all on its own; and contentment, like the prize, cannot be gained unless it is pursued.” (To Princess Elizabeth, 18 August, 1645, AT IV 277 : CSMK 262)

³⁷ “It is easy to show that the pleasure of the soul which constitutes happiness is not inseparable from cheerfulness and bodily comfort. This is proved by tragedies, which please us more the sadder they make us, and by bodily exercises like hunting and tennis which are pleasant in spite of being arduous—indeed we see that often the fatigue and exertion involved increase the pleasure. The soul derives contentment from such exercise because in the process it is made aware of the strength, or skill, or some other perfection of the body to which it is joined; but the contentment which it finds in weeping at some pitiable and tragic episode in the theatre arises chiefly from its impression that it is performing a virtuous action in having compassion for the afflicted. Indeed in general the soul is pleased to feel passions arise in itself no matter what they are, provided it remains in control of them.” (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270)

³⁸ “But pleasures are of two kinds: those that belong to the mind alone, and those that belong to the whole human being, that is to say, to the mind in so far as it is united with the body. These last present themselves in a confused manner to the imagination and often appear much greater than they are, specially before we possess them; and this is the source of all the evils and all the errors of life. For according to the rule of reason, each pleasure should be measured by the size of the perfection which produces it; it is thus that we measure those whose causes are clearly known to us. But often passion makes us believe certain things to be much better and more desirable than they are; then, when we have taken much trouble to acquire them, and in the process lost the chance of possessing other more genuine goods, possession of them brings home to us their defects; and thence arise dissatisfaction, regret and remorse. And so the true function of reason is to examine the just value of all the goods whose acquisition seems to depend in some way on our conduct, so that we never fail to devote all our efforts to trying to secure those which are in fact the most desirable. If, in such cases, fortune opposes our plans and makes them fail, we shall at least have the satisfaction that our loss was not our fault; and we shall still enjoy all the natural happiness whose acquisition was within our power.” (To Princess Elizabeth, 1 September 1645, AT IV 284-85 : CSMK 263-64)

knowledge of truth nor any false conviction can destroy them. (To Princess Elizabeth, 1 September 1645, AT IV 286 : CSMK 264-65).

But only the pleasures of the mind based on true knowledge, i.e. guided by reason, are pleasures that contribute to the contentment of the mind:

[N]ot all pleasures of the mind are praiseworthy: they can be founded in some false opinion. An instance is the pleasure we take in slander, which is based only on the belief that the worse others are esteemed, the better esteemed we shall be ourselves. Also they can deceive us by their appearance, when they are accompanied by some strong passion, as can be seen in the pleasure arising from ambition. (To Princess Elizabeth, 1 September 1645, AT IV 285-86 : CSMK 264)³⁹

As to the role of reason in the in the *regulation* of our passions (in the pursuit of happiness), Descartes assigns to it a double general role. (1) The “true function” of reason, is to determine “the just value” of the goods represented by the passions. And this implies, in particular, to “consider without passion” that value: “The true function of reason, then, in the conduct of life is to examine and consider *without passion* the value of all perfections, both of the body and of the soul, which can be acquired by our conduct, since we are commonly obliged to deprive ourselves of some goods in order to acquire others, we shall always choose the better” (To Princess Elizabeth, 1 September 1645; AT IV 287 : CSMK 265; my italics). The idea, not yet fully developed in this passage, that the value of the objects of our passions is their “perfection”—and that this is so in reference to both “the body and the soul”—will be central in explaining the function of the passions in the treatise.⁴⁰

This *evaluative* role of reason is necessary for virtue because “all [passions] represent the goods to which they may tend with greater splendour than they deserve” (To Princess Elizabeth, 1 September 1645, AT IV 285 : CSMK 264); and “often passion makes us believe certain things to be much better and

³⁹ The opposition between “pleasures of the body,” as opposed to pleasures of the mind “in so far as it is united to the body” has a clear parallelism in the treatise in the discussion of the function of the passions “in so far as they relate to the body” (*Passions* II, art. 137) and “in so far as they belong to the soul” (*Passions* II, art. 139). The latter term in each case seems to refer to the *mind-body union* (but, as in other cases, we predicate them of the “better part”). Thus, “pleasures of the body” are secondary for our happiness: “Because the pleasures of the body are minor, it can be said in general that it is possible to make oneself happy without them” (To Princess Elizabeth, 1 September 1645; AT IV 287 : CSMK 265). And for similar reasons, in the treatise, “we should consider the passions chiefly in so far as they belong to the soul” (*Passions* II, art. 139, AT XI 432 : CSM 1377).

⁴⁰ I will try to show in Chapter 3 that, according to Descartes, the function of our passions is, briefly put, to discriminate objects regarding their importance to increase our perfection, not only regarding our body (its state of health) but also our “mind,” which means regarding our perfection as humans (the perfection of the mind-body union).

more desirable than they are” (To Princess Elizabeth, 1 September 1645, AT IV 284 : CSMK 263-64).⁴¹ *Increase* or *decrease* in desirability is also a distortion Descartes attributes to the passions in the treatise (see e.g. *Passions* II, art. 138; AT XI 431 : CSM I 377). But whereas in the treatise, it can be said, that one is the only distortion (regarding the object they represent) of which the passions are clearly responsible,⁴² in the correspondence Descartes talks also of a different type of distortion: excesses which “change the nature” of the object—and thus “pass the limits of reason”. These distortions are the ones we should be particularly concerned about. In fact, the other excesses--those which “only increase the quantity” but do not “change the nature” of a thing—may even be beneficial for us:

I agree that the sadness of tragedies would not please as it does if we feared that it might become so excessive as to make us uncomfortable. But when I said that there are passions which are the more useful the more they tend to excess, I only meant to speak of those which are altogether good; as I indicated when I added that they should be subject to reason. There are, indeed, two kinds of excess. There is one which changes the nature of a thing, and turns it from good to bad, and prevents it from remaining subject to reason; and there is another which only increases its quantity, and turns it from good to better. Thus excess of courage is recklessness only when the courage passes the limits of reason; but while remaining within those limits, it can have another kind of excess, which consists in the absence of irresolution and fear. (To Princess Elizabeth, 3 November 1645, AT IV 331-332 : CSMK 276-77)

That passions can alter the “nature” of the object they represent, rather than simply alter the “quantity,” would be of consequence regarding the task reason would have to perform in helping determine when the goods represented by the passions are “real goods” and the evils “real” evils, as he puts it in the treatise (see e.g. *Passions* II, art. 139). The issue, however, does not reappear in the same terms in the treatise (see e.g. *Passions* II, art. 138), where the main role of reason seems to be rather to correct the latter alteration.

(2) Regarding the *actions* towards which our passions incline us, reason should also intervene to guarantee that we benefit from them (“It is enough to subject one’s passions to reason; and once they are

⁴¹ “Anger, for instance, can sometimes excite in us such violent desires for vengeance that it makes us imagine more pleasure in chastising our enemy than in preserving our honour or our life, and makes us risk both imprudently in the attempt. Whereas if reason examines what is the good or perfection on which the pleasure derived from vengeance is based, it will find—unless the vengeance serves to prevent future offenses—nothing except that it makes us imagine we have some superiority and advantage over the person on whom we are taking vengeance. And this is often only a vain imagination, which is worthless in comparison with honour or life, or even with the satisfaction to be had from seeing one’s own mastery of one’s anger when one abstains from revenge.” (To Princess Elizabeth, 1 September 1645, AT IV 285 : CSMK 264)

⁴² The idea, only suggested once in the treatise, is also much weaker there: “there are many things harmful to the body which cause no sadness initially (or which even produce joy), and [...] other things are useful to the body, although at first they are disagreeable” (*Passions* II, art. 138, AT XI 431 : CSM I 377).

thus tamed they are sometimes the more useful the more they tend to excess” [To Princess Elizabeth, 1 September 1645, AT IV 287 : CSMK 265; cf. e.g. *Passions* II, art. 139]). This implies, as we have seen, limiting and directing properly the *desires* aroused by our passions so that they lead us to the acquisition of “some perfection”. “The right use of reason [...] by giving a true knowledge of the good [...] sets bounds to our desires” (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258).

Reason should “set bounds” on our desires in several senses. First of all, it should limit them to those which are *within our reach*:

[T]he true function of reason is to examine the just value of all the goods whose acquisition seems to depend in some way on our conduct, so that we never fail to devote all our efforts to trying to secure those which are in fact the most desirable. If, in such cases, fortune opposes our plans and makes them fail, we shall at least have the satisfaction that our loss was not our fault; and we shall still enjoy all the natural happiness whose acquisition was within our power. (To Princess Elizabeth, 1 September 1645, AT IV 284-85 : CSMK 264)

Second, among those within our reach, reason should limit desires to those which are “useful”. Descartes tells Elizabeth that we should discard desires “for evil or superfluous things”: “I do not think that one can sin by excess in desiring the necessities of life; it is only desires for evil or superfluous things that need controlling.” (To Princess Elizabeth, May 1646, AT IV 411 : CSMK 287). In the treatise, where “the pursuit of virtue consists in doing the good things that depend on us” (*Passions* II, art. 144, AT XI 437 : CSM I 379), Descartes recommends again “to free our mind as much as possible from all kinds of other less useful desires” (*Passions* II, art. 144, AT XI 437 : CSM I 379). “Less useful,” when applied to our desires seems to mean for Descartes, less useful regarding our satisfaction. Those desires which do not depend on us are less useful in this sense because, supposedly, they will not lead us to acquire perfections.

Thus, when it comes to *acting* our passions, reason should guide us (1) by examining the “value” (for our “perfection”) of the object towards, or away from which, our passions incline us; and (2) by limiting our desires (to those whose realization depends on us and, at the same time, contribute to our perfection). And our free will should, on the other hand, make a habit of the resolution to act according to reason. These are, in fact, the “three conditions” to be virtuous (to live according to reason) Descartes recognizes, that is, the three conditions following which “each person can make himself content by

himself without any external assistance” (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 257):⁴³

The first is that he should always try to employ his mind as well as he can to discover what he should or should not do in all circumstances of life.

The second is that he should have a firm and constant resolution to carry out whatever reason recommends without being diverted by his passions or appetites. [...]

The third is that he should bear in mind that while he thus guides himself as far as he can, by reason, all the good things which he does not possess are one and all entirely outside his power. In this way he will become accustomed not to desire them. (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 257-58)

As it is apparent, and Descartes explicitly acknowledges, these three conditions “are related to the three rules of morality which I put forward in the *Discourse on the Method*.” (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 257). The four maxims of the “provisional moral code” presented in the *Discourse* were:

The first was to obey the laws and customs of my country, holding constantly to the religion in which by God’s grace I had been instructed from my childhood, and governing myself in all other matters according to the most moderate and least extreme opinions—the opinions commonly accepted in practice by the most sensible of those with whom I should have to live. [...]

My second maxim was to be as firm and decisive in my actions as I could, and to follow even the most doubtful opinions, once I had adopted them, with no less constancy than if they had been quite certain. [...]

My third maxim was to try always to master myself rather than fortune, and change my desires rather than the order of the world. [...]

Finally, to conclude this moral code, I decided to review the various occupations which men have in this life, in order to try to choose the best. Without wishing to say anything about the occupations of others, I thought I could do no better than to continue with the very one I was engaged in, and devote my whole life to cultivating my reason and advancing as far as I could in the knowledge of the truth, following the method I had prescribed for myself. (*Discourse on the Method* III, AT VI 23-27 : CSM I 122-24)

The most significant difference between both sets of rules is that the first and fourth maxims of the provisional code in the *Discourse* have merged into the first “condition” in the letters to Elizabeth of

⁴³ “It seems to me that each person can make himself content by himself without external assistance, provided he respects three conditions, which are related to the three rules of morality which I put forward in the *Discourse on the Method*.” (To Princess Elizabeth, 4 August 1645, AT IV 265 : CSMK 257).

1645. Instead of “to obey the laws and customs of my country” (first maxim in the *Discourse*) and to “devote my whole life to cultivating reason” (fourth maxim), a much more general rule is now given: “to employ [one’s] mind as well as he can to discover what he should or should not do in all circumstances of life”. The only *guidance* now, so to speak, is reason--not accepted customs, opinions or traditions—whose cultivation is still the “most useful occupation” (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258).⁴⁴

But there is another significant change between the *principles for a happy life*, and the provisional moral code, which is more relevant for our purposes. The second new principle refers not only to a “firm and constant resolution” to follow reason but to do so, specifically, against the possible diversions caused by “passions or appetites” (“a firm and constant resolution to carry out whatever reason recommends without being diverted by his passions or appetites”). The third maxim of the provisional code refers to “desires” in general terms (“[m]y third maxim was to try always to master myself rather than fortune, and change my desires rather than the order of the world”). The relationship between desires and passions is at this point not clear, in any case, even in the correspondence.

The “three conditions” to lead a virtuous life represent also our best protection, not only against passions, such as grief, that seem to oppose happiness directly (“not every kind of desire is incompatible with happiness—only those which are accompanied by impatience and sadness” [To Princess Elizabeth, 4 August 1645, AT IV 266 : CSMK 258])--but, most importantly, against the worst disturbances of the mind—the ones that result from having “lost the chance of possessing other more genuine goods”--namely, “dissatisfaction, regret, and remorse” (To Princess Elizabeth, 1 September 1645, AT IV 284 : CSMK 264). If we employ our mind “as well as we can” (first condition), firmly and constantly (second condition), and do not desire the goods which are “outside our power” (third condition), we should, not only master our passions, but benefit from them. (“True philosophy [...] teaches that even amid the saddest disasters and most bitter pains we can always be content, provided that we know how to use our reason” [To Princess Elizabeth, 6 October 1645, AT IV 315 : CSMK 272]).

Descartes is not simply trying to separate himself from Seneca in these 1645-46 letters to Elizabeth. He also provides some constructive proposals to the views expressed in *On the Happy Life*.

⁴⁴ “The right use of reason, on the other hand, by giving a true knowledge of the good, prevents virtue from being false; by accommodating it to licit pleasures, it makes virtue easy to practise; and by making us recognize the condition of our nature, it sets bounds to our desires. So we must conclude that the greatest felicity of man depends on the right use of reason; and consequently the study which leads to its acquisition is the most useful occupation one can take up. Certainly it is the most agreeable and delightful.” (To Princess Elizabeth, 4 August 1645; AT IV 267 : CSMK 258)

Building on what Descartes sees as common in both of them—happiness as the result of the pursuit of virtue—he is explicit about what he would have liked to see in Seneca but is missing: a list of those truths which are necessary for reason to guide us towards virtue—and at the same time towards the regulation of our passions:

Seneca should have taught us all the principal truths whose knowledge is necessary to facilitate the practice of virtue and to regulate our desires and passions, and thus to enjoy natural happiness. That would have made his book the finest and most useful that a pagan philosopher could have written. (To Princess Elizabeth, 4 August 1645, AT IV 267 : CSMK 258).

Notice the expression “natural happiness” (*beatitudo naturelle*). Although it is not explicitly discussed in the correspondence, or in the treatise, the concept plays a fundamental role in Descartes’ theory of passions, as I will try to show in Chapter 3 (and thus it would make of his own 1649 treatise “the finest and most useful that a pagan philosopher could have written”). Our *natural* happiness appears to be, first of all, the only happiness a *physicien* (as he presents himself in the prefatory letters to the treatise) could be concerned with, that is, the happiness we can pursue and achieve *naturally*. And insofar as our passions are our only *natural* guides to perfect ourselves (in the same sense that we can say our sensory perceptions are our natural guides to survive),⁴⁵ it is the happiness that results from properly mastering our passions, i.e. from benefiting from them. This idea, I will try to show, is one of the keystones in the bridge between the *physiological* and the *ethical* accounts of the passions in the treatise.

In the correspondence, however, the idea that our passions are to our natural happiness what our sensations are to our survival is not yet clear. This could explain why Descartes feels the need to refer to some *ad hoc* “truths” (and of whose oblivion he accuses Seneca). An alternative would be to think that, if *nature* includes that which *nature teaches us*, then those truths are not foreign to our nature.⁴⁶ But their provisionality in Descartes’ thought is, in any case, confirmed by their absence in the treatise.

Those truths are the “principal truths whose knowledge is necessary to facilitate the practice of virtue”. We have seen that “knowledge of the truth” and the ability “to regulate our desires and

⁴⁵ “[S]ensory perceptions are related exclusively to this combination of the human body and mind. They normally tell us of the benefit or harm that external bodies may do to this combination, and do not, except occasionally and accidentally, show us what external bodies are like in themselves.” (*Principles* II, art. 3, AT VIII A 41-42 : CSM I 224)

⁴⁶ Nature teaches us, for example, that we should prefer what is good for us: “if there are some who do want to lose it [their life], and who kill themselves, it is due to an intellectual error and not to a well-reasoned judgment, or to an opinion imprinted on them by nature, like the one which makes a man prefer the goods of this life to its evils” (To Princess Elizabeth, January 1646, AT IV 355-56 : CSMK 283).

passions” is all we need “in order to be always disposed to judge well”. Now we know that knowing the “truth” means not only knowledge of the object but also knowledge of those “truths most useful to us” in the pursuit of virtue:

In order to be always disposed to judge well, only two things seem to me necessary. One is knowledge of the truth; the other is practice in remembering and assenting to this knowledge whenever the occasion demands. But because nobody except God knows everything perfectly, we have to content ourselves with knowing the truths most useful to us. (To Princess Elizabeth, 15 September 1645, AT IV 291 : CSMK 265)

Which sort of truths are those? They are *practical* truths (the “most useful to us” in order to live according to virtue), which is, Descartes adds, all we can hope for given that “nobody except God knows everything perfectly” (To Princess Elizabeth, 15 September 1645, AT IV 291 : CSMK 265). And they are of two types: “those which concern all our actions in general” and “many others [...] which concern more particularly each individual action” (To Princess Elizabeth, 15 September 1645, AT IV 294 : CSMK 267). Among the former Descartes mentions four: (1) “the goodness of God,” (2) “the immortality of our souls,” (3) “the greatness of the universe,” and (4) that we are “a part of the universe”.⁴⁷

[1] [t]he first and chief of these is that there is a God on whom all things depend, whose perfections are infinite, whose power is immense and whose decrees are infallible (To Princess Elizabeth, 15 September 1645, AT IV 291 : CSMK 265);

[2] [t]he second thing that we must know is the nature of our soul, insofar as it subsists without the body [*en tant qu'elle subsiste sans le cors*], and is much nobler than the body, and able to enjoy an infinity of joys that cannot be found in this life.⁴⁸

[3] it may be useful to judge worthily of the works of God and to have a vast idea of the extent of the universe, such as I tried to convey in the third book of my *Principles* (To Princess Elizabeth, 15 September 1645, AT IV 292 : CSMK 266); and

[4] that though each of us is a person distinct from others, whose interests are accordingly in some way different from those of the rest of the world, we ought still to think that none of us could subsist alone and that each one of us is really one of the many parts of the universe, and more particularly a part of the earth, the state, the society and

⁴⁷ “Après qu’on a ainsi reconnu la bonté de Dieu, l’immortalité de nos ames & la grandeur de l’univers, il y a encore une vérité don’t la connoissance me semble fort utile: [...] on doit toutefois pense qu’on ne sçauroit subsister seul, & qu’on est, en effect, l’une des parties de l’univers [...]” (Descartes à Elisabeth, 15 Septembre 1645, AT IV 292-93)

⁴⁸ “La seconde chose, qu’il fau connoistre, est la nature de nostre ame, en tant qu’elle subsiste sans le cors, & est beaucoup plus noble que luy, & capable de iouir d’une infinite de contentemens qui ne se trouvent pas en cette vie” (Descartes à Elisabeth, 15 Septembre 1645, AT IV 292). The translation in CSM is somehow different and it clearly changes the meaning of the original: “The second thing we must know is the nature of our soul. We must know that it subsists apart from the body, and is much nobler than the body, and that is capable of enjoying countless satisfactions not to be found in this life” (To Princess Elizabeth, 15 September 1645, AT IV 292 : CSMK 265);

the family to which we belong by our domicile, our oath of allegiance and our birth. And the interests of the whole, of which each of us is a part, must always be preferred to those of our own particular person—with measure, of course, and discretion, because it would be wrong to expose ourselves to a great evil in order to procure only a slight benefit to our kinsfolk or our country. (To Princess Elizabeth, 15 September 1645, AT IV 293 : CSMK 266)

From each of these truths, according to Descartes, we should derive important practical conclusions. The first—the goodness of God—teaches us two things: (a) “to accept calmly all the things which happen to us as expressly sent by God”; and (b) to “rejoice in our afflictions at the thought that they are an expression of his will” (To Princess Elizabeth, 15 September 1645, AT IV 291-92 : CSMK 265).⁴⁹ Interestingly enough, however, Descartes does not use either of these two arguments in the correspondence with Pollot or Elizabeth in order to help them cope with their afflictions.

The second truth—i.e. the “immortality of the soul”—“prevents us from fearing death, and so detaches our affections from the things of this world that we look upon whatever is in the power of fortune with nothing but scorn” (To Princess Elizabeth, 15 September 1645, AT IV 292 : CSMK 266). Not fearing death, though, should be clearly distinguished from *desiring* it. In fact, since “we have always more good than evil” in this life, we should not seek it. “[N]atural reason teaches us also that we have always more good than evil in this life. Consequently, in my opinion, it teaches that though we should not seriously fear death, we should equally never seek it” (To Princess Elizabeth, 3 November 1645, AT IV 333 : CSMK 277). Those who seek it are guided by an “intellectual error” and not by a “well-reasoned judgment” or by an “opinion imprinted on them by nature”. Nature *teaches* us that we should “prefer the goods of this life to its evils”:

I think that even those who most give rein to their passions really judge deep down, even if they do not themselves perceive it, that there are more good things than evil in this life. Sometimes they may call upon death to help them when they feel great pain, but it is only to help them bear their burden, as in the fable, and for all that they do not want to lose their life. And if there are some who do want to lose it, and who kill themselves, it is due to an intellectual error and not to a well-reasoned judgment, or to an opinion imprinted on them by nature, like the one which makes a man prefer the goods of this life to its evils. (To Princess Elizabeth, January 1646, AT IV 355-56 : CSMK 283)

⁴⁹ “This [the first useful truth] teaches us to accept calmly all the things which happen to us as expressly sent by God. Moreover, since the true object of love is perfection, when we lift up our minds to consider him as he is, we find ourselves naturally so inclined to love him that we even rejoice in our afflictions at the thought that they are an expression of his will.” (To Princess Elizabeth, 15 September 1645, AT IV 291-92 : CSMK 265)

The statement “even those who most give rein to their passions really judge deep down [...] that there are more good things than evil in this life” undergoes a substantial transformation in the treatise: “[i]t is on the passions alone that all the good and evil of this life depends” (*Passions* III, art. 212, AT XI 488 : CSM I 404). The characterization of the will to die as an “intellectual error,” together with its opposition both to a “well-reasoned judgment” and to an “opinion imprinted by nature,” seems to indicate, as suggested above, that “principal truths” are *natural* truths. They are natural in the sense that their rejection would represent a misunderstanding or a *malfunction* of our own nature. In fact the opinion of those who prefer death is opposed to the one--“imprinted by nature”—according to which we “prefer the goods of this life to its evils”. The error, thus, could be “intellectual,” but also *natural*.

The third truth—the “greatness of the universe”—will lead us to the discovery of “the perfections that are truly within us” instead of “attribut[ing] to other creatures imperfections which they do not possess, so as to raise ourselves above them”. The latter would make us “so absurdly presumptuous as to wish to belong to God’s council and assist him in the government of the world; and this will bring us countless vain anxieties and troubles” (To Princess Elizabeth, 15 September 1645; AT IV 292 : CSMK 266). This truth should also lead us to limit our desires to those, as we saw before, which are “useful” insofar as they can increase our perfection.

And the fourth truth—i.e. that “none of us could subsist alone and that each one of us is really one of the many parts of the universe, and more particularly a part of the earth, the state, the society and the family to which we belong by our domicile, our oath of allegiance and our birth” and that “the interests of the whole, of which each of us is a part, must always be preferred to those of our own particular person”—“is the source and origin of all the most heroic actions done by men” (To Princess Elizabeth, 15 September 1645, AT IV 293 : CSMK 266). In other words, seeing ourselves primarily as parts of a *greater unity of perfection*, should lead us to prefer first that which is good for that larger unity:

[I]f someone considers himself a part of the community, he delights in doing good to everyone, and does not hesitate even to risk his life in the service of others when the occasion demands. [...] [W]hen a person risks death because he believes it to be his duty, or when he suffers some other evil to bring good to others, then he acts in virtue of the consideration that he owes more to the community of which he is a part than to himself as an individual, though this thought may be only confusedly in his mind without his reflecting upon it. Once someone knows and loves God as he should, he has a natural impulse to think in this way; for then, abandoning himself altogether to God’s will, he strips himself of his own interests, and has no other passion than to do what he thinks

pleasing to God. Thus he acquires a mental satisfaction and contentment incomparably more valuable than all the passing joys which depend upon the senses. (To Princess Elizabeth, 15 September 1645, AT IV 293-94 : CSMK 266-67).

Notice the relationship between the love for the community and the love for God. Although Descartes does not say that the *love* for the community *only* derives from the love for God, he does say that the latter--in particular, the desire to do what is “pleasing to God”--is source for the “natural impulse” towards the community. But we should probably not take the former (pleasing God) as a necessary condition for the latter (love for the community). The love for the community seems to follow *naturally* from the truths that (a) we constitute a *unity* with the community, and (b) a good for the community (unity of greater perfection) is of a higher value than a good for the part. In the treatise the priority of these truths seems unnecessary: the community results from constituting unities of greater perfection through love, and love itself leads us to take the unities we have constituted to be of greater importance for our happiness than the part. In the treatise, the generous—who “esteem nothing more highly than doing good to others” (*Passions* III, art. 156, AT XI 448 : CSM I 385)—do not act *from* truths. They are “naturally led to do great deeds,” (*Passions* III, art. 156, AT XI 447 : CSM I 385).

Summing up, it can be said that the first two truths should incline or dispose the individual to maintain a state of mind unaltered by our passions, a state which could be reminiscent of the *tranquillitas* of Seneca and the Stoics—insofar as it should lead us “to accept calmly all the things that happen to us”. But at the same time, if it also means that we should “rejoice in our afflictions at the thought that they are an expression of his [God’s] will,” this should imply that our passions are an “expression of God’s will” and thus, given his benevolence, that they must be *good*. We just need to find out in which sense they are good. The third and fourth truths impose on the individual *duties* that would take him/her out of a solipsistic happiness. Descartes’ is an *engaged* happiness, a happiness *in society*, a fundamental conclusion to be drawn also from the treatise. It is the happiness of those who are aware of both the limitations of their nature (from the third truth) and of the relative value of themselves as part of the community (from the fourth truth). It is the happiness of those who “pursue virtue in a perfect manner” (*Passions* III, art. 153, AT XI 446 : CSM I 384), i.e. the *generous* (see e.g. *Passions* III, arts. 153-156). A generous person, in Descartes’ sense, knows “that nothing truly belongs to him but his freedom to dispose his volitions” (*Passions* III, art. 153, AT XI 446 : CSM I 384) and never “lack[s] the will to undertake and carry out whatever he judges to be best” (*Passions* III, art. 153, AT XI 446 : CSM I 384). This combination of free will and virtue allows them to enjoy a “complete command over their passions”

(*Passions* III, art. 156, AT XI 448 : CSM I 385), that is, allows them to *use well* their passions without being “slaves” of them.

Despite the apparent centrality Descartes attributes to these truths, he does not refer to them, as such, in other letters or in the *Passions*. But he returns in particular to the idea of *devotion to the community* in the letter to Elizabeth dated on 6 October 1645. He says that this devotion is, at least in part, the result of “the order of things” established by God, and that “even if everyone were to relate everything to himself and had no charity for others, he would still commonly work for them as much as was in his power, provided he exercised prudence, and specially if he lived in an age in which morals were not corrupted”:

I agree that it is difficult to determine exactly how far reason ordains that we should devote ourselves to the community. However, it is not a matter on which it is necessary to be very precise; it is enough to satisfy one’s conscience, and in doing so one can leave a lot of room for one’s inclination. For God has also established the order of things, and has joined men together in so close a community, that even if everyone were to relate everything to himself and had no charity for others, he would still commonly work for them as much as was in his power, provided he exercised prudence, and specially if he lived in an age in which morals were not corrupted. Moreover, it is a nobler and more glorious thing to do good to others than to oneself, it is the noblest souls who have the greatest inclination thereto and who make least account of the goods they possess. Only weak and base souls value themselves more than they ought, and are like small vessels that a few drops of water can fill. [...] Base souls cannot be persuaded to take trouble for others unless you can show them that they will reap some profit for themselves [...]. (To Princess Elizabeth, 6 October 1645, AT IV 316-317 : CSMK 273)

Notice that, although Descartes says that even in a *community of selfish* individuals (“encore que chacun raportast tout a soy mesme, & n’eust aucune charité por les autres”), each of them would be working for the rest, he adds a condition: “provided he [each individual] exercised prudence, and specially if he lived in an age in which morals were not corrupted”. It is not clear what this “in which morals were not corrupted” means. It could mean the morals *of the individual*, that is a society in which each individual still pursues what is *most useful* for him/herself (i.e. follows his/her nature). The virtuous search for what is most useful for each of us would thus appear to be enough for that community to be constituted. The community itself would be a good *useful* to each of us, or would be a side-effect of the pursuit of what is useful to each of us. Such a conclusion would not be too foreign to the spirit of the treatise. If we were all generous, we would indeed constitute a community, and *vice versa*, if a *true* community were to exist we can assume its members would be generous.

Notice also in the above passage the suggestion, already indicated in other places, that the *nobility* of the soul appears to be *natural* feature (“it is the noblest souls who have the greatest inclination thereto and who make least account of the goods they possess”) rather than one acquired through the habit of following reason. This ambiguity survives in the treatise, but it is also resolved: although our souls have, in principle, different natural inclinations from birth, we can “correct” them through habit:

There is, it seems, no virtue so dependent on good birth as the virtue which causes us to esteem ourselves in accordance with our true value, and it is easy to believe that the souls which God puts into our bodies are not all equally noble and strong [...]. It is certain, however, that a good upbringing is a great help in correcting defects of birth. Moreover, if we occupy ourselves frequently in considering the nature of free will and the many advantages which proceed from a firm resolution to make good use of it—while also considering, on the other hand, the many vain and useless cares which trouble ambitious people—we may arouse the passion of generosity in ourselves and then acquire the virtue. (*Passions* III, art. 161, AT XI 453-54 : CSM I 388)

The apparent conflict between our free will and “the infinite power of God” as presented in the first of the principal truths Seneca had neglected was addressed by Descartes one month later, on 3 November 1645, and again in January 1646. In the first of these two letters, Descartes explains that although free will does *not* mean independence from God, dependence on God does not mean either that our actions are not “praiseworthy or blameworthy,” which is what counts for the purpose of virtue. “The independence which we experience and feel in ourselves, and which suffices to make our actions praiseworthy or blameworthy, is not incompatible with a dependence of quite another kind, whereby all things are subject to God” (To Princess Elizabeth, 3 November 1645, AT IV 333 : CSMK 277).⁵⁰ Notice the indirect characterization of free will: “the independence which we *experience and feel in ourselves*” (my italics), which prevents from confusing the origin of the soul with a form of determinism of our will.

But this did not seem to have satisfied Elizabeth. In January 1646 Descartes returns to the issue and provides “an illustration to explain how this [i.e. free will] is both dependent and free.” In that

⁵⁰ “As for free will, I agree that if we think only of ourselves we cannot help regarding ourselves as independent; but when we think of the infinite power of God, we cannot help believing that all things depend on him, and hence that our free will is not exempt from this dependence. For it involves a contradiction to say that God has created human beings of such a nature that the actions of their will do not depend on his. It is the same as saying that his power is both finite and infinite: finite, since there is something which does not depend on it; infinite, since he was able to create that independent thing. But just as the knowledge of the existence of God should not take away our certainty of the free will which we experience and feel in ourselves, so also the knowledge of our free will should not make us doubt the existence of God. The independence which we experience and feel in ourselves, and which suffices to make our actions praiseworthy or blameworthy, is not incompatible with a dependence of quite another kind, whereby all things are subject to God.” (To Princess Elizabeth, 3 November 1645, AT IV 332-333 : CSMK 277)

illustration Descartes establishes a comparison between God and a “a king [who] has forbidden duels, and knows with certainty that two gentlemen of his kingdom who live in two different towns have a quarrel, and are so hostile to each other that if they meet, nothing will stop them from fighting” (To Princess Elizabeth, January 1646, AT IV 353 : CSMK 282). This is the lesson we should draw from the illustration:

In the king of my story it is possible to distinguish two different types of volition, one according to which he willed that these gentlemen should fight, since he caused them to meet; and the other according to which he did not so will, since he forbade duels. In the same way the theologians make a distinction in God’s willing: he has an absolute and independent will, according to which he wills all things to come about as they do, and another relative will which concerns the merit and demerit of men, according to which he wants them to obey his laws. (To Princess Elizabeth, January 1646, AT IV 354 : CSMK 282)

The fact that our free will is not jeopardized by God’s—and, thus, we can have full control of it—is precisely the reason why Descartes thinks that “we have always more good than evil in this life” (To Princess Elizabeth, 3 November 1645, AT IV 333 : CSMK 277). Elizabeth objected to this idea quite forcefully arguing that “it is more difficult to obtain the latter [evil] than the former [good]; men can find displeasure in more places than pleasure; there is an infinite numbers of mistakes for each truth [...]”(Elizabeth à Descartes, 30 Novembre 1645, AT IV 336-37).⁵¹ Descartes answered by offering a more detailed explanation. He first clarifies what we should take as the “good and evil” of something:

[W]hen we consider the good and evil which may exist in a single thing, in order to discover what value to put on it, as I did when I spoke of the value we should put on this life, we must take the good to consist in whatever may be advantageous to us, and the evil to consist in whatever may be disadvantageous; the other defects which the thing may have are not taken into account. (To Princess Elizabeth, January 1646, AT IV 354-55 : CSMK 283).

⁵¹ “[J]’ay de la peine a me persuader que nous avons toujours plus de biens, dans la vie, que de maux, puisqu’il faut plus pour composer ceux la que ceux ci; que l’homme a plus d’endroits, pour recevoir du deplaisir, que du plaisir; qu’il y a un nombre infini d’erreurs, pour une verité; tant de moyens de de se fourvoyer, pour un qui mene le droit chemin; quantité de personnes en dessin & en pouvoir de nuire, pour peu qui ayent l’un & l’autre a server. Enfin tout ce qui depend de la volonté & du cour du reste du monde, est capable d’incommoder; & selon vostre propre sentiment, il n’y a rien que ce qui depend absolument de la nostre, suffisant pour nous donner une satisfaction réelle & constante.” (Elizabeth à Descartes, 30 Novembre 1645, AT IV 336-37)

And then he adds a very important qualification to his general view--that “in this life we have always more good than evil” (To Princess Elizabeth, January 1646, AT IV 354 : CSMK 282). We do have more good than evil (“in this life”) “provided we know how to use our will well,” in other words, *provided* that we know to choose the good and avoid the evil:

Provided we know how to use our will well, we can make everything which depends on it good and thus prevent the evils that come from elsewhere, however great they may be, from penetrating any further into our souls than the sadness which actors arouse in it when they enact before us some tragic history. But I agree that to reach such a point we have to be very philosophical indeed. Nevertheless, I think that even those who most give rein to their passions really judge deep down, even if they do not themselves perceive it, that there are more good things than evil in this life. (To Princess Elizabeth, January 1646, AT IV 355 : CSMK 283)⁵²

As mentioned, Descartes talks of two types of “principal truths” necessary to guide us to achieve a happy life--“those which concern all our actions in general” and “many others [...] which concern more particularly each individual action” (To Princess Elizabeth, 15 September 1645; AT IV 294 : CSMK 267). Of the second type Descartes mentions only the two “chief of these,” both of which concern passions more directly than the four general truths: 1) “that all our passions represent to us the goods to whose pursuit they impel us as being much greater than they really are”; and 2) “the pleasures of the body are never as lasting as those of the soul, or as great in possession as they appear in anticipation” (To Princess Elizabeth, 15 September 1645, AT IV 294 : CSMK 267).

These truths *teach* us that we should be cautious both about casting judgments based on our passions (i.e. on the goods they represent) and about following the inclination of the will they bring about. “We must pay careful attention to this, so that when we feel ourselves moved by some passion we suspend our judgement until it is calmed, and do not let ourselves easily be deceived by the false appearance of the goods of this world” (To Princess Elizabeth, 15 September 1645, AT IV 295 : CSMK 267). A similar advice is given at the end of the treatise: “When the passion urges us to pursue ends whose attainment involves some delay, we must refrain from making any immediate judgement about them, and distract ourselves by other thoughts until time and repose have completely calmed the

⁵² The passage continues with the explanation of why desiring to die “is due to an intellectual error and not to a well-reasoned judgment, or to an opinion imprinted [...] by nature”: “Sometimes they may call upon death to help them when they feel great pain, but it is only to help them bear their burden, as in the fable, and for all that they do not want to lose their life. And if there are some who do want to lose it, and who kill themselves, it is due to an intellectual error and not to a well-reasoned judgment, or to an opinion imprinted on them by nature, like the one which makes a man prefer the goods of this life to its evils. (To Princess Elizabeth, January 1646, AT IV 355-56 : CSMK 283)

disturbance in our blood” (*Passions* III, art. 211, AT XI 487 : CSMK 403). The advice is not, in a sense, very different from the one he had repeatedly offered in the *Principles* regarding our sensations (“[e]rror arises only when, as often happens, we make a judgment about something even though we do not have an accurate perception of it” [*Principles* I, art.33, AT VIIIA : CSM I 204]). But in the case of passions there is a very importance difference: the worst error is not simply to *judge* from the representation, but to *act* according to the inclination of the soul they bring about.

Descartes does not only offer Elizabeth *theory* and general rules to master the passions. He also gives her specific practical advice, supposedly drawn from his own experience. In Descartes’ words, the princess was suffering in the summer of 1645 a “bodily indisposition” which was “taking away the power of reasoning” and “preventing the will from being free” (To Princess Elizabeth, 1 September 1645; AT IV 282 : CSMK 262). From the other scarce details Descartes offers in the letters we know that the cause of her indisposition (or/and maybe a consequence also) was some sort of *emotional state* similar to melancholy or deep sadness. According to Descartes’ *diagnosis*, “health and prosperity” do not abound, and “many things must continually distress” her, those things being “of such a kind that true reason does not command us to oppose directly or try to remove them” (To Princess Elizabeth, May or June 1645, AT IV 218 : CSMK 249). Descartes calls those “things” that distress her “domestic enemies with whom we are forced to keep company, and we have to be perpetually on guard lest they injure us” (To Princess Elizabeth, May or June 1645, AT IV 218 : CSMK 249).

In face of this, the “only remedy” Descartes provides for the princess’s sadness reminds of the advice he gave Pollot four years earlier: to “distract our imagination and senses from them [i.e. from the thoughts that may cause the distress]” and “when obliged by prudence to consider them, to do so with our intellect alone” (To Princess Elizabeth, May or June 1645; AT IV 218 : CSMK 249).⁵³ He offers again his own experience as the best evidence to convince the princess that his remedy is a good one. But in this case, unlike Pollot’s grief, Descartes compares Elizabeth’s sadness to an “illness” he had when he was a child, “an illness almost exactly similar”:

I take the further liberty of adding that I found by experience in my own case that the remedy I have just suggested cured an illness almost exactly similar, and perhaps even more dangerous. I was born of a mother who died, a few days after my birth, from a disease of the lungs, caused by distress. From her I inherited a dry cough and a pale

⁵³ “I know only one remedy for this: so far as possible to distract our imagination and senses from them, and when obliged by prudence to consider them, to do so with our intellect alone.” (To Princess Elizabeth, May or June 1645; AT IV 218 : CSMK 249)

colour which stayed with me until I was more than twenty, so that all the doctors who saw me up to that time gave it as their verdict that I would die young. But I have always had an inclination to look at things from the most favorable angle and to make my principal happiness depend upon myself alone, and I believe that this inclination caused the indisposition, which was almost part of my nature, gradually to disappear completely. (To Princess Elizabeth, May or June 1645; AT IV 220 : CSMK 250-51)

Notice the two pieces of advice: (1) “to look at things from the most favorable angle”; and (2) “to make my principal happiness depend upon myself alone”. The first is a more general, and positive, version of the advice to Pollot not to think about the reasons of his grief; the second is a familiar one, to preserve our free will and pursue only the desires within our reach. The novelty, thus, of this case is that Descartes is not simply attempting to offer a remedy against the effects of certain *thoughts*, but against the effects of what appears to be also a bodily indisposition. “There are other indispositions which do not trouble one’s senses but merely alter the humours, and make one unusually inclined to sadness, or anger, or some other passion” (To Princess Elizabeth, 1 September 1645, AT VI 283 : CSMK 263).

The first remedy—“to look at things from the most favorable angle”—can be followed also to avoid “bad dreams”—although “nobody, however philosophical, can prevent himself having bad dreams when his bodily condition so disposes him”: “Experience [...] shows that if one has often had a certain thought while one’s mind was at liberty, it returns later on, however indisposed one’s body may be. Thus I can tell you that my own dreams never portray anything distressing, and there is no doubt that it is a great advantage to have long accustomed oneself to drive away sad thoughts” (To Princess Elizabeth, 1 September 1645, AT IV 282 : CSMK 263). As it will be clearer in the physiological account, thoughts can “return” because they leave a physical mark in the brain, which the spirits can *carry* to the gland (not only as they move fortuitously in the brain but also following an action of the mind, i.e. a volition) (see e.g. *Passions* I, arts.21, 26, 41 and 42). And, similarly, it can be used for cases in which sadness is caused by “external handicaps”: “The same is true of all external handicaps, such as the splendour of high birth, the flatteries of Court, the adversities of fortune, and also great prosperity, which commonly does more than misfortune to hamper the would-be philosopher” (To Princess Elizabeth, 1 September 1645, AT IV 283 : CSMK 263).

There is no doubt for Descartes that *changing* our thoughts for “favourable” ones is always possible, “[f]or no events are so disastrous, or so absolutely bad in the judgement of ordinary people, that they cannot be considered in some favourable light by a person of intelligence” (To Princess Elizabeth, June 1645; AT IV 237 : CSMK 253). And as to how this can be done, Descartes advises: “This is done by

striving to consider all the benefits that can be derived from the thing which had been regarded as a great misfortune on the previous day, while turning one's attention away from the evils which this thing had been imagined to contain" (To Princess Elizabeth, June 1645, AT IV 237 : CSMK 253).⁵⁴ But the goal is, rather than remembering to apply the *remedy* at each occasion, developing the *habit* to have cheerful thoughts. This new habit should eventually alter the *normal* physiological condition--that is what Descartes calls the "normal flow" of the spirits in his letter of October 6, 1645; or what seems to be the normal state of "the humours" in the letter of 1 September 1645--and thus result in a different general emotional state.

The letter Descartes sends to Elizabeth in May 1646 is the last one before this quasi-monothematic exchange on passions with her comes to an intermission. Elizabeth has already read the manuscript and apparently found in it detailed answers to most of her questions on passions. On April 25, 1646, she tells Descartes that the treatise, which "surpasses all that has ever been said on the issue," has left her with very few questions.⁵⁵ But a few remain, among which are precisely some about how to put into "practice" Descartes' recommendations to help her cope with her sadness:

I find it easier to understand everything you say about the passions, than to practice the remedies that you order against their excess. For how to anticipate all the accidents which may occur in life, which are impossible to enumerate? And how to prevent ourselves from desiring with ardor the things that necessarily tend to the conservation of man (such as health and the means of living), which however do not depend on our will? (Elisabeth à Descartes, 25 avril 1645, AT IV 405)⁵⁶

⁵⁴ "I know indeed that it is almost impossible not to give in to the disturbances which new misfortunes initially arouse in us. I know too that ordinarily the best minds are those in which the passions are most violent and act most strongly on their bodies. But the next day, when sleep has calmed the turbulence that affects the blood in such cases, I think one can begin to restore one's mind to a state of tranquility. This is done by striving to consider all the benefits that can be derived from the thing which had been regarded as a great misfortune on the previous day, while turning one's attention away from the evils which this thing had been imagined to contain. For no events are so disastrous, or so absolutely bad in the judgement of ordinary people, that they cannot be considered in some favourable light by a person of intelligence. And Your Highness may draw this general consolation from the disfavours of fortune: that they have perhaps contributed greatly towards making her cultivate her mind to the extent that she has." (To Princess Elizabeth, June 1645; AT IV 236-37 : CSMK 253)

⁵⁵ "[L]es obscurités que ma stupidité me fait trouver en vostre *Traité des Passions* [...] sont en petit nombre, puisqu'il faudroit estre impassible, pour ne point comprendre que l'ordre, la definition & les distinctions que vous donnez aux passions, & en fin toute la partie morale du traité, passe tout ce qu'on a jamais dit sur ce sujet." (Elisabeth à Descartes, 25 avril 1645, AT IV 404)

⁵⁶ "Mais ie trouve encore moins de difficulté a entendre tout ce que vous dites des passions, qu'a pratiquer les remedes que vous ordonnez contre leurs excés. Car comment prévoir tous les accidents qui peuvent survenir en la vie, qu'il est impossible de nombrer? Et comment nous empecher de desirer avec ardeur les choses qui tendent necessairement a la conservation de l'homme (come la santé & les moyens pour vivre), qui neantmoins ne dependent point de son arbitre?" (Elisabeth à Descartes, 25 avril 1645, AT IV 405)

Descartes acknowledges (in his letter of May 1646 to Elizabeth) that the remedy he had recommended might be “difficult to practice,” but reminds her that it might, in any case, be enough to avoid the consequences of “excessive passions,” which was the main purpose of his advice (he specifically refers to “remedies against excessive passions”). “[T]hey [those remedies] are difficult to practice, and also [...] they are insufficient to prevent bodily disorders; but they may suffice to prevent the soul being troubled by them and losing its free judgement” (To Princess Elizabeth, May 1646, AT IV 411 : CSMK 287). The immediate goal is thus “to prevent the soul being troubled” specially because this means the loss of our “free judgement”—a major impediment to be virtuous. Keeping reason *free*—not so much to recuperate cheerfulness—is a *sine qua non* condition for happiness: “True philosophy [...] teaches that even amid the saddest disasters and most bitter pains we can always be content, provided that we know how to use our reason” (To Princess Elizabeth, 6 October 1645, AT IV 315 : CSMK 272).

Elizabeth’s skepticism about his first remedy—i.e. to bring about cheerful thoughts—thus forces Descartes to propose an alternative in May 1646: instead of bringing up cheerful thoughts, he suggests to think of circumstances “more distressing” than the current ones. “It is enough in general to have imagined circumstances more distressing than one’s own and to be prepared to bear them” (To Princess Elizabeth, May 1646, AT IV 411 : CSMK 287). Imagining “more distressing” circumstances may help reduce the effect of the current ones, we can assume—although Descartes is not explicit about this—because it would make our “circumstances” look, by comparison, less “distressing” (as the warm water feels hot after putting our finger in cold water, but feels cold if we have put it before in hot water).⁵⁷ The most important thing is that this remedy might be easier for the princess to practice in her current state.

Another pending question Elizabeth had after reading the draft was whether, why and how we should control the desires which incline us towards that which conserves us. Descartes reminds that excess is of concern only insofar as it is of “desires for evil or superfluous things”. This means that excesses which incline us towards goods do not “need controlling”. “I do not think that one can sin by excess in desiring the necessities of life; it is only desires for evil or superfluous things that need controlling” (To Princess Elizabeth, May 1646, AT IV 411 : CSMK 287). In the treatise: “all that the most excessive love can do is to join us so perfectly to these goods that the love we have especially for

⁵⁷ “For this purpose I do not consider it necessary to have an exact knowledge of the truth on every topic, or even to have foreseen in detail all possible eventualities, which would doubtless be impossible. It is enough in general to have imagined circumstances more distressing than one’s own and to be prepared to bear them.” (To Princess Elizabeth, May 1646, AT IV 411 : CSMK 287)

ourselves must apply to them as well as to us; and this, I believe, can never be bad” (*Passions* II, art.139, AT XI 432 : CSM I 377).

Having already learned, as she says, about Descartes’ views regarding “private” life [*vie particuliere*], Elizabeth also wanted to know about his “maxims” [*maximes*] on public service [*vie civile*], a realm in which she has herself so far “found it better to follow experience rather than reason”.⁵⁸ Descartes avoids giving a detailed answer by appealing to his own lack of experience in public affairs, but believes the maxim the princess is following to be “the best of all” specially given that (in public affairs) “[i]t is rarely that we have to do with people who are as perfectly reasonable as everyone ought to be”.⁵⁹ Wanting to clarify her mind a bit more on this issue, Elizabeth proposed Descartes to discuss Machiavelli’s *The Prince*. Descartes accepts and in the letter he sends to Elizabeth in September 1646 he touches upon a good number of ethical questions. Among the ideas he offers as potential advice for a governor, three, in particular, are direct consequence of the discussion he has maintained with the princess on passions.

First, in agreement with the “rules” Descartes has established for the pursuit of virtue (and with the provisional code), a (good) prince “should be immovable and inflexible” regarding his decisions, that is, once he has made a decision, he should “inflexible in holding to it even if this does him harm” (To Princess Elizabeth, September 1646, AT IV 489-90 : CSMK 294).⁶⁰ Second, Descartes reminds Elizabeth that since virtue requires following reason and following reason means pursuing what is truly good for us, “the best thing is to try always to be good”. “[I]f we consider that a good man is one who does all that true reason tells him, it is certain that the best thing is to try always to be good” (To Princess Elizabeth, September 1646, AT IV 490 : CSMK 294). And thirdly, since our happiness depends only on us,

⁵⁸ “Puisque vous m’avez deja dit les principales, touchant la vie particuliere, ie me contenterois de savoir encore vos maximes touchant la vie civile, quoy que celle-la nous rende dependants de personnes si peu raisonnables, que iusqu’icy ie me suis touiours mieux trouvée de me servir de l’experience que de la raison, aux choses qui la concernent.” (Elisabeth à Descartes, 25 avril 1645, AT IV 405-406)

⁵⁹ “I lead such a retired life, and have always been so far from the conduct of affairs, that I would be no less impudent than the philosopher who wished to lecture on the duties of a general in the presence of Hannibal if I took it on me to enumerate here the maxims one should observe in a life of public service. I do not doubt that Your Highness’s maxim is the best of all, namely that it is better to be guided by experience in these matters than by reason. It is rarely that we have to do with people who are as perfectly reasonable as everyone ought to be, so that one can judge what they will do simply by considering what they ought to do; and often the soundest advice is not the most successful. That is why one has to take risks and put oneself in the power of fortune [...]” (To Princess Elizabeth, May 1646, AT IV 412 : CSMK 287-88)

⁶⁰ “[The prince] should be immovable and inflexible. I do not mean that he should hold fast to his own first designs; he cannot have his eye everywhere and so he must ask for advice, and hear many people’s reasons, before coming to a decision. But once he has announced his decision, he must be inflexible in holding to it even if this does him harm; for it can hardly be as harmful to him as the reputations of being irresolute and inconstant.” (To Princess Elizabeth, September 1646, AT IV 489-90 : CSMK 294)

particularly on how we use our free will (to choose the good and avoid the evils), “one must not let oneself be ruled by Fortune.”⁶¹

In the letter of October or November 1646, Descartes returns to the question how to avoid the harmful excesses of passions. Aware that his “maxims”—as Elizabeth referred to his advice—did not seem to have persuaded Elizabeth,⁶² his recommendations become now much more practical and much more specific about actions the princess can undertake. Although it may seem to be tailored *for the princess* only, this advice is well rooted in his views on how to control passions. Descartes gives Elizabeth three main pieces of advice: (a) to maintain bodily health, (b) to be in the presence of “agreeable objects”, and (c) to “be dispassionate” about “objects which may offend the senses” or about any “disposition which troubles the body”:

When there are no objects present which offend the senses, or any indisposition which troubles the body, it is easy for a mind that follows true reason to be contented. For that, we do not need to forget or neglect objects which are not present: it is enough that we try to be dispassionate about those which may cause us distress. This does not go against charity, for we can often more readily find remedies for evils which we examine dispassionately than for those which afflict us sorely. But bodily health and the presence of agreeable objects greatly aid the mind by chasing from it all the passions which partake of sadness and making way for those which partake of joy. So too, conversely, when the mind is full of joy, this helps greatly to cause the body to enjoy better health and to make the objects which are present appear more agreeable. (To Princess Elizabeth, October or November 1646, AT IV 528-29 : CSMK 296)

The goal is, again, to *free* the mind, i.e. to make possible for it “to be contented” by following true reason. But there are two important novelties in his new advice. On one hand, he is recommending Elizabeth one action aimed directly at changing the state of mind, and another aimed at changing the state of the body. This appears to be a practical implication of the *institution of nature*, which guarantees that changing the disposition of the body will change our thoughts and vice versa. On the other, regarding the mind, Descartes is not suggesting now simply that the princess change her thoughts. He is rather

⁶¹ “[E]ach person’s felicity depends on himself and [...] one must not let oneself be ruled by Fortune. We must take every advantage that Fortune offers, but we must not be unhappy over those she refuses. In all the affairs of the world there are many reasons *pro* and many reasons *contra*; and so we must dwell principally on those which make us approve what we cannot avoid. The most unavoidable evils, I think, are the diseases of the body, from which I pray God preserve you.” (To Princess Elizabeth, September 1646, AT IV 492 : CSMK 295)

⁶² After having seen Descartes in The Hague, for the last time, Elizabeth wrote in reference to her own passions aroused by her “Malheur”: “Il falloit que vostre presence y apportoit la cure, que vos maxims ni mon raisonnement n’avoient pu appliquer” (Elisabeth à Descartes, juillet 1646, AT IV 449)

proposing to accept the “secret power” of “inner joy”. “[I]nner joy has some secret power to make Fortune more favourable” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 296).

That inner joy is a “cheerful heart” or a “secret feeling of cheerfulness” that, if it accompanies our actions, may bring a “happy outcome” (To Princess Elizabeth, October or November 1646, AT IV 529-30 : CSMK 296-97). Descartes also refers to it as the “voice within” (“I think it is quite right for us to follow the advice of ‘the voice within’” [To Princess Elizabeth, October or November 1646, AT IV 530 : CSMK 297]). These terms—“inner,” “secret,” “within”—seem to indicate that this joy does not depend on any specific thought we may have. We may have that joy in us, so to speak, but apparently we need to be aware of it for it to be *efficient*, i.e. for it to be source of the “strong conviction” of success Descartes thinks it brings about. “[The things I have done with a cheerful heart and without any inner reluctance have usually brought me success” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 297); “it is beneficial to have a strong conviction that we will not fail to succeed in those undertakings that we enter upon without reluctance and with the freedom that ordinarily accompanies joy” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 297).

This “inner joy” could be a case of what Descartes calls in the treatise “internal emotions” (*Passions* II, art. 147, AT XI 440-41 : CSM I 381). Internal emotions differ from regular passions (love, anger, and so on) in that (1) they “are produced in the soul by the soul itself” and thus do not depend “on some movement of the spirits” (*Passions* II, art. 147, AT XI 440 : CSM I 381), which is also why they are called “emotions” and not “passions” (which always depend on the spirits); (2) although they are “often joined with the passions which are similar to them, they frequently occur with others, and they may even originate in those to which they are opposed” (*Passions* II, art. 147, AT XI 441 : CSM I 381); and (3) they “affect us more intimately, and consequently have much more power over us than the passions which occur with them but are distinct from them” (*Passions* II, art. 148; AT XI 441-42 : CSM I 381-82). They “affect us more intimately” means that “our well-being depends principally” on them (*Passions* II, art. 147, AT XI 440 : CSM I 381). Why they affect us “more intimately” seems to be due to the fact that they are aroused only by the soul, and thus they are only perceptions the soul has of itself:

[I]f anyone lives in such a way that his conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’), he will receive from this a satisfaction which has such power to make him happy that the most

violent assaults of the passions will never have sufficient power to disturb the tranquility of his soul. (*Passions* II, art. 148, AT XI 442 : CSM I 382)⁶³

The “satisfaction” of living according to reason, as we saw, is the contentment of the mind Descartes identifies with happiness. Since it depends only on reason, it cannot be affected by the outcome of our actions. Similarly, when Descartes tells Elizabeth that “[I]nner joy has some secret power to make Fortune more favourable” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 296) he is not asking her simply to be optimistic, to have joyful thoughts, or to *hope for the best* so to speak. He is telling her that, as she does what she is supposed to do—i.e. lead her life according to reason—she can *listen* to the “voice within” (i.e. her soul’s “voice”) if she pays attention. And she will *hear* (i.e. she will experience) “inner joy” precisely because the soul experiences joy each time it is aware of possessing a perfection—and acting according to reason reveals the possession of a perfection. “[W]e cannot ever practise any virtue—that is to say, do what our reason tells us we should do—without receiving satisfaction and pleasure from so doing.” (To Princess Elizabeth, 1 September 1645; AT IV 284 : CSMK 263); and in the treatise: “A good done by ourselves gives us an internal satisfaction, which is the sweetest of all the passions.” (*Passions* II, art. 63, AT XI 377 : CSM I 351)

This reading seems to be confirmed by Descartes’ own acknowledgment that this advice is only for those with *strong minds*. “I would not care to say this to persons who possess a weak mind, for fear that it would lead them into some superstition.” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 296-97) Understanding *strong minds* as those minds which are resolute in the use of reason to judge what is best, we can say those minds can always experience the “inner joy” which results from becoming aware of their own perfection. For similar reasons, the “voice within” is not only a valuable resource in circumstances similar to those Elizabeth is going through, but also in front of “important actions of life” in which “their outcome is so doubtful that prudence cannot tell us what we ought to do” (To Princess Elizabeth, October or November 1646, AT IV 530 : CSMK 297). “[W]ith regard to the important actions of life, when their outcome is so doubtful that prudence cannot tell us what

⁶³ “[T]hese internal emotions affect us more intimately, and consequently have much more power over us than the passions which occur with them but are distinct from them. To this extent, it is certain that, provided one soul always has the means of happiness within itself, all the troubles coming from elsewhere are powerless to harm it. Such troubles will serve rather to increase its joy; for on seeing that it cannot be harmed by them, it becomes aware of its perfection. And in order that our soul should have the means of happiness, it needs only to pursue virtue diligently. For if anyone lives in such a way that his conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’), he will receive from this a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquility of his soul.” (*Passions* II, art. 148, AT XI 441-42 : CSM I 381-82)

we ought to do, I think it is quite right for us to follow the advice of ‘the voice within’” (To Princess Elizabeth, October or November 1646, AT IV 530 : CSMK 297).

The second practical piece of advice Descartes gives Elizabeth—the one related to the body—is about the possible benefits—for health and for the control of the passions—of certain natural springs. The princess had mentioned to Descartes on 10 October 1646 that, while on a trip to Berlin, she had stopped by “the miraculous fountain you told me about in The Hague” (Elisabeth à Descartes, 10 octobre 1646, AT IV 523), referring to a spring which probably was at Hornhausen, near Berlin.⁶⁴ Although Descartes expressed later some reservations about the supposed health benefits of “the secret of the miraculous spring” (To Princess Elizabeth, October or November 1646, AT IV 531: CSMK 298),⁶⁵ he was inclined to recommend the waters of Spa: “The acid and iron in the waters of Spa are much less to be feared; and because they diminish the spleen and chase away melancholy, I value them both” (To Princess Elizabeth, October or November 1646, AT IV 531 : CSMK 298).

The issue was not totally new. They had talked about the possible benefits of natural waters, and in particular of the waters of Spa, in previous correspondence. In a letter to the princess dated on May or June 1645 Descartes had suggested that the waters of Spa could be of help to control excessive passions—if combined with his general *remedy* based on deviating our thoughts towards the “consideration of objects which could furnish contentment and joy” (To Princess Elizabeth, May or June 1645, AT IV 219 : CSMK 250), that is, if combined with the general *remedy for the mind*:

I think that the waters of Spa are very good for this purpose, above all if your Highness while taking them observes the customary recommendation of doctors, and frees her mind from all sad thoughts, and even from all serious meditations on scientific subjects. She should be like people who convince themselves they are thinking of nothing because they are observing the greenness of a wood, the colours of a flower, the flight of a bird, or something else requiring no attention. This is not a waste of time but a good use of it; for one can, in the process, content oneself with the hope that in this way one will recover perfect health, which is the foundation of all the other goods of this life. (To Princess Elizabeth, May or June 1645, AT IV 219 : CSMK 250)

⁶⁴ This spring was, according to CSMK 298, note 1, “at Hornhausen, a village about 180 km south of Berlin”. They could have talked about it during Descartes’ trip to The Hague in March of 1646—when he probably also gave the princess the first draft of the treatise.

⁶⁵ “[M]any people have made use of this spring, and those who have benefited from it speak well of it, while no one mentions the others. However that may be, the purgative quality in one of the springs, and the white colour, softness and refreshing quality of the other, make me think that they pass through deposits of antimony or mercury, which are both bad drugs, especially mercury. That is why I would advise no one to drink from them.” (To Princess Elizabeth, October or November 1646, AT IV 532 : CSMK 298)

But Descartes himself had apparently not been yet in Spa since in June 1645 he expresses to Elizabeth his desire to know more about those waters. (“I would much rather go to The Hague to learn about the powers of the waters at Spa than gain knowledge here about the plants in my garden” [To Princess Elizabeth, June 1645, AT IV 238 : CSMK 254]). Notice, in any case, the two reasons Descartes offers in favor of visiting the waters of Spa: (1) to “free her mind of all sad thoughts”—which, being sadness one of the greatest causes of trouble, is a very important step towards achieving the “contentment of the mind”; and (2) to maintain good health “which is the foundation of all the other goods of this life”. Thus, the ideal *treatment* should include both changes in the mind (first recommendation) and changes in the body (second recommendation). Happiness implies joyful thoughts, but also a healthy state of the body. Or, as it will be clear in the treatise, it is a particular state of the mind-body union.

The brief letter of June 15, 1646 which Descartes sent to Chanut is particularly relevant to appreciate what the first draft of the treatise on passions meant for Descartes. After acknowledging that so far he had not invested too much time thinking on “moral philosophy”—which seemed to have been Chanut’s main interest—Descartes informs him that he has lately made some progress in the area. Descartes tells him he has reached “satisfactory conclusions” in “establishing sure foundations in moral philosophy”.

I must say in confidence that what little knowledge of physics I have tried to acquire has been a great help to me in establishing sure foundations [*fondements certains*] in moral philosophy. Indeed I have found it easier to reach satisfactory conclusions on this topic [*ie me suis plus aisement satisfait en ce point*] than on many others concerning medicine, on which I have spent much more time. So instead of finding ways to preserve life, I have found another, much easier and surer way, which is not to fear death. (To Chanut, 15 June 1646, AT IV 441-42 : CSMK 289)

And in the same letter Descartes explicitly links this progress on moral philosophy to his draft for the treatise on passions:

I will say, moreover, that while I am waiting for the plants to grow in my garden which I need for some experiments to continue my physics, I am spending some time also in thinking about particular problems in ethics. Last winter, for instance, I sketched a little treatise on the nature of the passions of the soul, without any idea of publication; and I would now feel inclined to write something more on the topic, if it were not made indolent by seeing how depressingly few people condescend to read what I write. (To Chanut, 15 June 1646, AT IV 441-42 : CSMK 289)

As mentioned above, this is particularly interesting in the context, not only of the preparation of the *Passions*, but also of the view of morals--as one of the three main branches of the tree of philosophy--that he will offer one year later in the 1647 Preface to the French Edition of the *Principles of Philosophy*. The views on morals in the *Passions* can, in fact, be read as a *branch* emerging from the trunk of physics, in this case as emerging from the *natural* study of human passions. This study, insofar as it is part of the study of *human nature*, does not have to be limited to physiology, as Descartes' 1647 definition of "physics" leaves clear:

The second part is physics, where, after discovering the true principles of material things, we examine the general composition of the entire universe and then, in particular, the nature of this earth and all the bodies which are most commonly found upon it, such as air, water, fire, magnetic ore and other minerals. Next we need to examine individually the *nature of plants, of animals and, above all, of man*, so that we may be capable later on of discovering the other sciences which are beneficial to man. (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186 [my emphasis])

Since the study of human nature will reveal which "sciences" are "beneficial to man," the former is prior and broader in scope than the latter. Most importantly, as the study of passions reveals to Descartes himself, our nature, unlike other natures, includes a *mind*. To study it means to study more than matter; it means to study the nature of the mind-body union. And whereas the most we can expect of the study of our human *matter* (our body) is to find ways to "preserve life," the study of the mind-body union (and in particular of the passions) reveals ways how "not to fear death," that is, how to have a satisfied and content mind. "[I]nstead of finding ways to preserve life, I have found another, much easier and surer way, which is not to fear death."

In the letter to Chanut of 1 November 1646, Descartes touches briefly on the specific dangers of anger, supposedly in order to lead a virtuous life. It is "one of the passions one must guard against, in so far as its object is an insult that one has received" (To Chanut, 1 November 1646, AT IV 538 : CSMK 300). We can avoid its dangers if we "elevate our mind so high that we are simply untouched by the insults of others" (To Chanut, 1 November 1646, AT IV 538 : CSMK 300).⁶⁶ Descartes places in the treatise a stronger emphasis on the importance of avoiding anger, presenting it as the "passion whose

⁶⁶ "Anger is indeed one of the passions which I judge one must guard against, in so far as its object is an insult that one has received. To do this we must try to elevate our mind so high that we are simply untouched by the insults of others. In place of anger, however, I believe it is right to feel indignation, which I confess I have often felt at the ignorance of those who wish to be taken as learned, when I see this ignorance joined with malice." (To Chanut, 1 November 1646, AT IV 538 : CSMK 300)

excesses we should take more care to avoid” (*Passions* III, art. 203; AT XI 481 : CSM I 400). The main reason why anger disturbs so deeply the mind--is a familiar one: because it can lead us to actions that we might regret, that is to actions not performed according to reason: “For such excesses confuse our judgment and often make us commit misdeeds of which we must afterwards repent” (*Passions* III, art. 203, AT XI 481 : CSM I 400). “Repentance is directly opposed to self-satisfaction” because “[i]t is a kind of sadness, which results from our believing that we have done some evil deed; and it is very bitter because its cause lies in ourselves alone” (*Passions* III, art. 191, AT XI 472 : CSM I 396).

On 1 February 1647 Descartes answered to a letter (dated on 1 December 1646) where Chanut passed on to Descartes one of the questions Queen Christina had apparently asked in personal conversation: which excesses are worse, the ones derived from love or the ones derived from hatred.⁶⁷ The topic is new one in the correspondence and of certain importance later on in the treatise. To determine this—i.e. “whether love or hatred is worse if immoderate” (To Chanut, 1 February 1647, AT IV 613 : CSMK 311)--Descartes explains, first of all, in which sense he thinks we can say certain passions might be *better* or *worse* than others. “The question can be understood in different senses, which I think should be examined separately. One passion might be called worse than other [1] because it makes us less virtuous; or [2] because it is more of an obstacle to our happiness; or [3] because it carries us to greater excesses, and disposes us to do more harm to other people” (To Chanut, 1 February 1647, AT XI 613 : CSM I 312 [numbers added]).

Thus, if we take into account the object, and compare “love for an undeserving object” to “hatred for an object we should love” the former is worse according, supposedly, to the second reason above—i.e. it is more of an obstacle to our happiness:

I consider that love for an undeserving object can make us worse than hatred for an object we should love, because there is more danger in being joined to a thing which is bad, and in being as it were transformed into this thing, than there is in being separated willingly from a thing which is good. (To Chanut, 1 February 1647, AT IV 613 : CSMK 312)

This same idea survives in the treatise, where Descartes refers to those passions for “undeserving objects” as “unjustified” or “false” (see e.g. *Passions* II, arts. 142 and 143). Since, as it is clear in the treatise, love

⁶⁷ “La dernière fois que j’eus l’honneur de la voir, elle tomba, par l’occasion d’une affaire, sur une question don’t elle m’obligea de dire mon sentiment. La question étoit de sçavoir, quand on use mal de l’Amour ou de la Haine, lequel de ces deux déréglemens ou mauvais usages étoit le pire. Le terme d’Amour étoit entendu à la manière des Philosophes, & non pas comme on le fait sonner si souvent aux oreilles des filles, & la question étoit générale.” (Chanut à Descartes, 1 decembre 1646, AT IV 582).

is naturally associated to the *representation of a good* (*Passions* II, art. 56), we can love a *bad* thing (Descartes explicitly mentions this possibility a few lines before)⁶⁸ as long as it is represented in our mind as a *good* one.

Whether certain passions are *better* than others regarding our happiness depends both on the actions they dispose us to perform and on whether their object is a good or an evil. Thus, since love disposes us to join goods, if the good is not a true good, excessive love will lead us to join something potentially harmful. And since hatred disposes us to separate ourselves from the object represented, it cannot harm us as much even if that object is not a true evil.

However, if we evaluate these two passions simply according to their *excesses*—regardless of any future action and its consequences—which was apparently Christina’s question, excess of hatred itself will make us “less virtuous” according to Descartes, precisely because it has “evil” as its object and, thus, it makes one “accustomed to malice”—as opposed to an excess of love which, even if “immoderate and frivolous” will make us “more decent and virtuous” (To Chanut, 1 February 1647, AT IV 613-14 : CSMK 312).⁶⁹ Love “cannot corrupt our morals as much as hatred” because “[l]ove, however immoderate, always has the good for its object” (To Chanut, 1 February 1647, AT IV 614 : CSMK 312). Similarly in the treatise: “It seems to me that if we consider them [i.e. love and joy] just as they are in themselves with respect to the soul, we may say that although joy is less secure, and love less beneficial, than when they have a better foundation, they are still preferable to any sadness or hatred resting on an equally bad foundation” (*Passions* II, art. 142, AT XI 435 : CSM I 378). This seems to imply that the habit of having *certain thoughts*, in particular the habit of having *good* thoughts, contributes to our virtue. This is so because they bring “pleasure” to the soul, as Descartes tells Chanut in the same letter regarding the contribution of love to our happiness. “Love . . . however immoderate it may be, gives pleasure; and though the poets often complain of it in their verses, I think that men would naturally give up loving if they did not find it more sweet than bitter” (To Chanut, 1 February 1647, AT IV 614 : CSMK 312).

⁶⁸ “[T]here is more danger in being joined to a thing which is bad, and in being as it were transformed into this thing, than there is in being separated willingly from a thing which is good.” (To Chanut, 1 February 1647, AT XI 613 : CSM I 312)

⁶⁹ “[I]f I pay attention to the inclinations or habits which arise from these passions, I change my mind. Love, however immoderate, always has the good for its object, and so it seems to me that it cannot corrupt our morals as much as hatred, whose only object is evil. We see by experience that the best people, if they are obliged to hate someone, become malicious by degrees; for even if their hatred is just, they so often call to mind the evils they receive from their enemy, and the evils they wish him, that they become gradually accustomed to malice. By contrast, those who abandon themselves to love, even if their love is immoderate and frivolous, often become more decent and virtuous than they would if they turned their mind to other thoughts.” (To Chanut, 1 February 1647, AT IV 613-14 : CSMK 312)

The comparative evaluation of the excesses of love and hatred is different if we try to determine which of the two “disposes us to do more harm to other people”. According to Descartes, love does. He gives two main reasons: a physiological one and one based on how each passion affect its object. According to the physiological explanation, love can lead us “to do more harm to other people” because “when we love, all the purest blood in our veins flows in abundance towards the heart, which sends a great quantity of animal spirits to the brain, and so gives us more power, more strength and more courage.” On the other hand, “if we feel hatred, the bitterness of gall and the sourness of the spleen mixes with our blood and diminishes and weakens the spirits going to the brain, and so we become feebler, colder and more timid” (To Chanut, 1 February 1647, AT IV 615 : CSMK 312-13). This explains also why those who feel love are, at least as long as the passion lasts, stronger and those who feel hatred are weaker.⁷⁰

As to the second reason—the one based on the objects of love and hatred-- Descartes believes that the excess of love can do more harm *to others* because “evil arising from hatred extends only to the hated object, whereas immoderate love spares nothing but its object, which is commonly very slight in comparison with all the other things which it is ready to abandon and destroy to serve as seasoning for its immoderate passion” (To Chanut, 1 February 1647, AT IV 616 : CSMK 313).⁷¹

In the letter to Chanut of 6 June 1647, Descartes addresses the interesting “question about the reasons which often impel us to love one person rather than another before we know their worth” (To Chanut, 6 June 164, AT V 56 : CSMK 322). The issue is quite relevant in order to observe the role Descartes assigns to past experience in the arousal of passions and to reason in their guidance. It is also one of the very rare occasions in the correspondence where Descartes offers some physiological details.

⁷⁰ “[I]f I am asked which of the two passions carries us to greater excesses, and makes us capable of doing more harm to other people, I think I must say that it is love. It has by nature much more power and strength than hatred; and often affection for an unimportant object causes incomparably more evils than the hatred of a more valuable one could ever do. I can show that hatred has less vigour than love by considering the origin of each. As I said earlier, our first feelings of love arose because our heart was receiving suitable food in abundance, whereas our first feelings of hatred were caused by harmful nourishment reaching the heart, and the same motions still accompany the same passions. If this is so, it is evident that when we love, all the purest blood in our veins flows in abundance towards the heart, which sends a great quantity of animal spirits to the brain, and so gives us more power, more strength and more courage; by contrast, if we feel hatred, the bitterness of gall and the sourness of the spleen mixes with our blood and diminishes and weakens the spirits going to the brain, and so we become feebler, colder and more timid. Experience confirms what I say, for heroes like Hercules and Roland love more ardently than other men, whereas people who are weak and cowardly are more inclined to hatred. Anger can indeed make people bold, but it borrows its strength from the love of self which is always its foundation, and not from the hatred which is merely an accompaniment. Despair also calls forth great efforts of courage, and fear can lead to great cruelties; but there is a difference between these passions and hatred.” (To Chanut, 1 February 1647, AT IV 615-16 : CSMK 312-13)

⁷¹ “[E]vil arising from hatred extends only to the hated object, whereas immoderate love spares nothing but its object, which is commonly very slight in comparison with all the other things which it is ready to abandon and destroy to serve as seasoning for its immoderate passion. [...] Moreover, the greatest evils of love are not those which are committed through the intermediary of hatred; the chief and most dangerous are those which are done or permitted for the sole pleasure of the loved object or for oneself.” (To Chanut, 1 February 1647, AT IV 616 : CSMK 313)

Cases in which we may feel impelled “to love one person rather than another before we know their worth” can be explained according to two different types of reasons, “one belonging to the mind and one to the body.” But since he does not think a letter is the right place to address the former, he only gives the reason “belonging to the body” (“The one in the mind presupposes too many things concerning the nature of our souls which I would not dare to try to explain in a letter” [To Chanut, 6 June 164, AT V 56 : CSMK 322]). He explains that our specific past experiences of love and their objects may have left a “fold” in our brain which may dispose the brain to be “folded” again in the same manner in the presence of a similar object. “The objects which strike our senses move parts of our brain by means of the nerves, and there make as it were folds, which undo themselves when the object ceases to operate; but afterwards the place where they were made has a tendency to be folded again in the same manner by another object resembling even incompletely the original object” (To Chanut, 6 June 1647, AT V 57 : CSMK 322). Descartes provides an example from his own experience to show how the existence of a previous fold in the brain may explain why we may feel impelled to “love one person rather than another before we know their worth”:

[W]hen I was a child I loved a little girl of my own age who had a slight squint. The impression made by sight in my brain when I looked at her cross-eyes became so closely connected to the simultaneous impression which aroused in me the passion of love that for a long time afterwards when I saw persons with a squint I felt a special inclination to love them simply because they had that defect. (To Chanut, 6 June 164, AT V 57 : CSMK 322)

But in the same way that we should not, in principle, let the original folds on a sheet be our *guidance* to fold it so that it will fit in an envelope, we should not *trust* the folds in the brain if we are to lead a virtuous life. “[A] wise man will not altogether yield to such a passion [i.e. love for women with a slight squint] without having considered the worth of the person to whom he thus feels drawn” (To Chanut, 6 June 164, AT V 57 : CSMK 323). According to his own account Descartes himself did not feel any more in love with women with a squint since the moment in which he “reflected on it and recognized that it was a defect”. “At that time I did not know that was the reason for my love; and indeed as soon as I reflected on it and recognized that it was a defect, I was no longer affected by it” (To Chanut, 6 June 164, AT V 57 : CSMK 322). Although Descartes seems to emphasize the awareness that it was a *defect*, what is relevant to realize whether the object is *worthy* of our love is not that defect, but our *awareness of the reasons* why

we felt thus impelled. Realizing that the squint was enough to arouse love in him does not mean the object is not worth loving; it means that reason must still evaluate and determine its worth.

But even with the mediation of reason—to evaluate the worth of objects of our love—we may not be able to make a decision as to which of two objects of love we should pursue. And since, according to Descartes, “we cannot love equally all those in whom we observe equal worth” (To Chanut, 6 June 164, AT V 58 : CSMK 323), it seems necessary to find another way to determine what is best for us. In these cases, Descartes proposes to follow our “secret inclinations”: “since the chief good of life is friendship, we are right to prefer those to whom we are joined by secret inclinations, provided we also see worth in them” (To Chanut, 6 June 164, AT V 58 : CSMK 323). We should then only resort to these secret inclinations *after* reason has evaluated the object. But if reason is not enough—that is, if *both* objects are worth our love (“provided we also see worth in them”)—then, rather than remaining in a state of indecision, a virtuous person (a “wise man”) may still make a *final decision* about whom to *join* based on his “secret inclinations”.

Although Descartes does not define what he understands by “secret inclinations,” his use of the term indicates that he means precisely that: *inclinations* which are “secret” to us, that is, inclinations of which we are unaware. We also know these inclinations may be “aroused by something in the mind” or “by something in the body”. If both occur, we “should always” follow the former. This is then another way of determining which love to pursue: everything else being equal—i.e. having found similar worth in both objects and feeling secret inclinations towards both—the object towards which we feel secret inclinations aroused in the mind is the one we should pursue. Unlike the inclinations aroused by something in the body, Descartes thinks we can recognize those aroused in the mind because they are “reciprocated”:

But because we cannot love equally all those in whom we observe equal worth, I think that our only obligation is to esteem them equally; and since the chief good of life is friendship, we are right to prefer those to whom we are joined by secret inclinations, provided we also see worth in them. Moreover, when these secret inclinations are aroused by something in the mind and not by something in the body, I think they should always be followed. The principal criterion by which they can be known is that those which come from the mind are reciprocated, which is often not the case in the others. (To Chanut, 6 June 164, AT V 58 : CSMK 323)

Descartes does not elaborate in which sense we should understand this “reciprocated” and/or how, in fact, we can confirm those secret inclinations are “reciprocated”. But, without looking for a second meaning,

we can assume they are reciprocated *by the object* of our love, that is, similar “secret inclinations” will be aroused in his/her mind. Thus, assuming that the *inclination* towards (i.e. to join) those who manifest interest in art in general is a *secret inclination of the mind*, those who possess this inclination will quite likely also be the object of a similar secret inclination in others. But we should not expect this of the inclinations *aroused in the body*. We should not, in principle, expect a greater inclination towards those with a squint *in those who have a squint* than in those who do not. The lack of reciprocity would confirm that, in fact, this is an inclination “aroused by something in the body”. As to why we should follow the former inclinations—the ones “aroused by something in the mind”—we can assume that, since the soul is our “better part” and thus “we should consider the passions chiefly in so far as they belong to the soul” (*Passions* II, art. 139, AT XI 432 : CSM I 377), the inclinations *belonging to the mind* would be a better guide than the ones belonging to the body regarding what is good for the mind-union, that is for our happiness.

Notice that the “secret inclinations” Descartes talks about in Chanut—in particular the ones “aroused in the mind”—do not seem to be equivalent to the “internal emotions” Descartes introduces in the treatise. The latter are emotions “produced in the soul only by the soul itself” (*Passions* II, art. 147, AT XI 440 : CSM I 381)—of which Descartes gives the example of a man sadly mourning his dead wife who, nevertheless, “feels at the same time a secret joy in his innermost soul” (*Passions* II, art. 147, AT XI 441: CSM I 381). Descartes does not use the term *emotion* to refer to the secret inclinations—and he never talks, on the other hand, of internal *passions* (only of internal *emotions*). Furthermore, we know that secret inclinations, unlike internal emotions, can be “aroused in the body”—even if Descartes does not say much about this type. However, insofar as passions *dispose* the soul to want, or not to want, their object, they all seem to imply *inclinations* (of the will) (e.g. *Passions* II, art.52, AT XI 372 : CSM I 349). We could then think that secret inclinations are one of two types of possible inclinations aroused by emotions: *secret* and *transparent*. Inclinations (dispositions) aroused by any passion, that is dispositions we are aware of, would be transparent, and inclinations prior to or independent of any passion, of which we are not aware, would be *secret*. Thus understood, since we should avoid talking about unconscious thoughts, secret inclinations would thus not be different from natural dispositions or dispositions which have resulted from past experience. They are, in any case, rather dispositions *to have certain passions* than dispositions to undertake certain actions (although, of course, they might lead to this). They can become transparent, as it occurred to Descartes, when we search for the causes of the passion they may contribute to arouse. When he looked for the reasons of his love towards women with a squint, he realized

that his past experience had created in him the disposition for it, which means that the perception of the squint in women is enough to arouse love in him. Notice also that his disposition to love women with a squint became transparent to him as he evaluated another disposition: the *disposition to act* aroused by that love—which is the main role of reason in the control of our passions. Then he realized that having a squint is not enough reason to pursue that love (i.e. to pursue the disposition to join the object), that is, it is not enough to determine whether we are joining a real good. The fact that the treatise does not make any mention to “secret inclinations,” together with the fact that by then Descartes has completed the physiological study of the passions, can also be understood in support of the idea that their role in the theory is not different from the role played by our natural constitution and our past experience (which means mainly changes in the brain).

There is, however, a sense in which secret inclinations share with internal emotions a functional similarity as guides to our happiness. Whereas secret inclinations can help resolve *conflicts* regarding which objects of our passions to pursue (after reason has already evaluated but not determined their comparative worth), our internal emotions are the *most reliable* emotions in a different sense: revealing the state of well-being and happiness of the soul. “[O]ur well-being depends principally on internal emotions which are produced in the soul only by the soul itself” (*Passions* II, art. 147, AT XI 440 : CSM I 381); “these internal emotions affect us more intimately, and consequently have much more power over us than the passions which occur with them” (*Passions* II, art.148, AT XI 441-42 : CSM I 381-82).

1.2. THE NATURE OF HUMAN PASSIONS

In a letter to Regius dated May 1641, Descartes is compelled to clarify three important issues regarding the nature of our mind which will also be of importance for the theory of passions he puts forth in the treatise, namely, (1) whether the soul has parts or not, (2) whether willing and understanding are “actions” of the soul, and (3) what it means “to say of the passions that their seat is in the brain” (To Regius, May 1641, AT III 371 : CSMK 182).

Regarding the first issue—whether the soul has parts or not--Descartes’ view is that there is only one soul, without parts, that he calls the “rational soul”--since only this can be the “first principle of [humans’] actions”:

There is only one *soul* in human beings, the *rational soul*; for no actions can be reckoned human unless they depend on reason. The *vegetative power* and the *power of moving the body*, which are called the *vegetative* and *sensory souls* in plants and animals, exist also in human beings; but in the case of human beings they should not be called *souls*, because they are not the first principle of their actions, and they belong to a totally different genus from the *rational soul*. (To Regius, May 1641, AT III 371 : CSMK 182)

There are two important ideas here: (1) the distinction of *parts* of the soul should, according to Descartes, be reformulated in terms of actions (rational soul) and passions (vegetative power and power to move the body) of the soul—or, more generally, simply in terms of different functions of the soul;⁷² and (2) we should only properly talk about *soul* when we are referring to “the principle of [human] actions”.

The distinction between actions and passions of the soul and whether the soul has parts are two significant themes in the treatise. Past misunderstandings, in general, about the nature of the soul (and its relation to the body), Descartes will write in the treatise, are “the primary cause of our failure up to now to give a satisfactory explanation of the passions and of everything else belonging to the soul” (*Passions* I, art. 5; AT XI 330 : CSM I 329). To avoid this Descartes engages at the beginning of the treatise in a discussion of the distinction between actions and passions of the soul (*Passions* I, art. 1)—which reappears throughout the treatise in different places (see e.g. *Passions* I, arts. 17 ff.),--and later on directly attacks the idea that the soul has “parts” (see e.g. *Passions* I, art. 47; and *Passions* II, art. 68), which is in the treatise his most explicit criticism of previous views of the soul.

The distinction between “action” and “passion” in general--which is also the main subject of the brief letter addressed to Regius a few months later (To Regius, December 1641)—will serve to establish a number of crucial distinctions among *mental events*, specially between volitions (actions), on one hand, and sensations, passions and appetites on the other (passions) (see e.g. *Passions* I, arts. 1, 17, 19, and 25). As to the division in parts of the soul, it appears in the treatise not only as an obstacle to understand the

⁷² This is explicit in the *Passions*: “[T]here is within us but one soul, and this soul has within it no diversity of parts: it is at once sensitive and rational too, and all its appetites are volitions. It is an error to identify the different functions of the soul with persons who play different, usually mutually opposed roles—an error which arises simply from our failure to distinguish properly the functions of the soul from those of the body. It is to the body alone that we should attribute everything that can be observed in us to oppose our reason” (*Passions* I, art. 47; AT XI 364-65 : CSM I 346); “I part company with the opinion of all who have written previously about the passions. But I do so for good reason. For they derive their enumeration [of the passions] from a distinction they draw, within the sensitive part of the soul, between the two appetites they call ‘concupiscible’ and ‘irascible’. As I have said already I recognize no distinction of parts within the soul; so I think their distinction amounts merely to saying that the soul has two powers, one of desire and the other of anger. But since the soul has in the same way the powers of wonder, love, hope, and anxiety, and hence the power to receive in itself every other passion, or to perform the actions to which the passions impel it, I do not see why they have chosen to refer them all to desire or to anger. And besides, their enumeration does not include all the principal passions.” (*Passions* II, art. 68; AT XI, 352 : CSM I 379).

difference between actions and passions of the soul, but, more specifically, as an obstacle to properly understand conflicts of the soul in which the will seems to be *inclined* in opposite directions. Rather than as a confrontation of different *actions* of the same soul, Descartes understands these cases as conflicts of functions, more specifically conflicts between volitions (which are actions of the soul) and desires (which are passions of the soul) (*Passions* I, art. 47).

The second question discussed in the 1641 letter to Regius--whether willing and understanding are actions—is of particular interest to clarify what an *action* and a *passion* of the mind are. Descartes' answer is that “strictly speaking, understanding is the passivity [*passio*] of the mind and willing is its activity [*actio*]” (To Regius, May 1641, AT III 371 : CSMK 182). A few months later, in the letter to Regius of December 1641, Descartes explains further that, properly speaking, “action” should be reserved “for what plays the role of a moving force” and he specifically gives volition as an example of action of the soul (“like volition in the mind”):

[W]e should use the term ‘action’ for what plays the role of a moving force [*parte motoris*], like volition in the mind, while we apply the term ‘passion’ to what plays the role of something moved [*parte moti*], like intellection and vision in the same mind. Those who think perception should be called an action are apparently taking the term ‘action’ to mean any real power; for since they think perception is an action, they would no doubt say that the reception of motion in a hard body, or the power whereby it receives the motions of other bodies, is an action. Yet it is incorrect to say this, since the ‘passion’ correlative to this action would exist in the body that is moved. Those who say that every action can be taken [*actionem omnem ab agente auferr*] from that which acts are correct if by ‘action’ they mean merely motion, but incorrect if they mean to include every kind of power under the term ‘action’ [*si omnem vim sub nomine actionis veint comprehendere*]. (To Regius, December 1641, AT III 455 : CSMK 199)

This passage is of great importance. It is probably the clearest definition of “action” Descartes provides, in the correspondence on passions or in the treatise. It helps understand the often-misunderstood first article of the treatise, where Descartes writes that “although an agent and patient are often quite different, an action and a passion must always be a single thing [*une mesme chose*] which has these two names on account of the *two different subjects* to which it may be related [*deux divers sujets auxquels on la peut rapporter*]” (*Passions* I, art. 1, AT XI 327 : CSM I 328 [my emphasis]). This should not be understood as meaning that we can properly call the passions of the soul also actions (of the soul). Our passions are not actions of the soul because they are not events which play the role of a “moving force,” i.e. they are not *initiating-motion* events; they are *undergoing-motion* events. We cannot, thus, say whether a motion or

change is an action or a passion unless we can identify a subject as its *actor* or *patient*. In other words, change in general is neither action nor passion: it is an *action* of its actor(s) and a *passion* of any of its patients.

It is also paradoxical to say that ‘reception is an action’ [*receptionem esse actionem*], when in fact it is merely a passion, quite contrary to action. But what you write could perhaps be retained with the following modification: ‘Reception is an automatic animal action, or rather passion, whereby we receive the movements of things; for here we are linking passions with actions, in order to include under one category everything that occurs in man.’ (To Regius, May 1641, AT III 373 : CSMK 183)

To say then that volitions are actions of the mind means that a volition is *motion initiated by the mind*. That same motion can be said to be a passion insofar as it can also be an undergoing-motion event (as when the mind perceives its own volitions). The mind is now a *patient* of a motion, not an actor. “[A]lthough willing something is an action with respect to our soul, the perception of such willing may be said to be a passion in the soul” (*Passions* I, art. 19, AT XI 343 : CSM I 335-36). This is, of course, a limiting case insofar as there is no mediation between the action (volition) and the passion (perception of the volition) but this does not make the distinction useless.

As to the third important question discussed in the May 1641 letter to Regius--the “seat” of the passions, and in particular whether it is in the heart or in the brain--Descartes explains that “[t]he principal seat of the passions, in so far as they are corporeal, is in the heart, since that is principally affected by them; but in so far as they affect also the mind, the seat is solely in the brain, since the brain alone can directly affect the mind” (To Regius, May 1641, AT III 373 : CSMK 183).⁷³

Descartes will add a number of important clarifications in the 1649 treatise that will *revise* this double-seat view (one mental and one corporeal). The brain, and in particular the gland (located *within* the cavities of the brain) will be the only seat, so to speak, of the passions, insofar as the passions are thoughts and the gland is the “principal seat of the soul” (*Passions* I, art. 32). And this means that the gland is the only bodily organ that can immediately move and be moved by the soul. As to the heart, in the treatise it maintains a unique role in the generation and maintenance of the passions but Descartes will not talk about it as the “seat” of the passions. Art. 33, in fact, is titled “The seat of the passions is not the

⁷³ CSMK translates “...ab illo solo mens immediate pati potest” as “...since the brain alone can directly act upon the mind” which seems to be unjust both to the original and to the very idea of action Descartes is trying to explain.

heart". The reason for this is that "the opinion of those who think that the soul receives its passions in the heart [...] is based solely on the fact that the passions make us feel some change in the heart" (*Passions I*, art.33, AT XI 353 : CSM I 340).⁷⁴ And although talking about the cause of the primitive passions he says that it (the cause) is not only "located" in the brain but "also in the heart" he makes clear that this is so in the sense that they play some role in the process: "their cause is located also in the heart, the spleen, the liver and all the other parts of the body, in so far as they help produce blood and hence the spirits" (*Passions II*, art. 96, AT XI 401 : CSM I 362-63).⁷⁵ The idea of being the "seat" and being the "cause" are, in any case, different concepts. By "seat of the soul" Descartes means the identifiable bodily part "where the soul directly exercises its functions" (*Passions I*, art. 32, AT XI 353 : CSM I 340).

As to what passions are, Descartes provides a first explicit, although quite general, definition of passions four years later, on 6 October 1645, in a letter to Elizabeth. At the same time he establishes three important distinctions for his theory of passions: (a) between sensations and passions, (b) between passions and "inclinations or habits which dispose to a certain passion," and (c) between passions and judgments. He also discusses how actions of the soul may alter our passions.

As to what passions are, this is the general definition he gives:

[T]he term 'passion' can be applied in general to all the thoughts which are thus aroused in the soul by cerebral impressions alone, without the concurrence of its will, and therefore without any action of the soul itself; for whatever is not an action is a passion. Commonly, however, the term is restricted to thoughts which are caused by some special agitation of the spirits. (To Princess Elizabeth, 6 October 1645, AT IV 310 : CSMK 270)

Descartes is thus (a) completing the distinction between action and passion he gave to Regius in 1641 by adding new physiological details, and (b) introducing a new distinction between what he will call in the treatise *passions* "in general" and passions in a "restricted" sense (see e.g. *Passions I*, art.25). Whereas the former are "aroused in the soul by cerebral impressions alone," the latter—which is the term that we should properly use to refer to joy, anger, and so on—are "caused by some special agitation of the

⁷⁴ The passage continues: "It is easy to see that the only reason why this change is felt as occurring in the heart is that there is a small nerve which descends to it from the brain—just as pain is felt as in the foot by means of the nerves in the foot, and the stars are perceived as in the sky by means of their light and the optic nerves. Thus it is no more necessary that our soul should exercise its functions directly in the heart in order to feel its passions there, than that it should be in the sky in order to see the stars there" (*Passions I*, art.33, AT XI 353-54 : CSM I 341).

⁷⁵ The passage continues explaining why it is difficult to assign, in particular, to the heart a special role in the process: "For, although all the veins conduct the blood to the heart, it sometimes happens that the blood in some veins is driven there with greater force than the blood in other veins; and it also happens that the openings through which the blood enters or leaves the heart are enlarged or contracted to a greater extent at one time than at another" (*Passions II*, art. 96, AT XI 401 : CSM I 363).

spirits”. But since from the treatise we know that cerebral impressions are necessary in both cases, and that the impressions in the brain (in *any* passion) result in motions of the gland (and thus of the soul) through the agitation of the spirits, we can assume that it is not the “agitation” but the “special agitation” of the spirits what really differentiates the passions *of the soul* (passions in the restricted sense) from other passions in general (i.e. other perceptions). This special agitation of the spirits is, in fact, referred to in the treatise as the cause of the passions in the restricted sense (see e.g. *Passions* I, arts.27 and 37).

Notice that, simultaneously, Descartes seems to be trying to justify why they are called “passions”: because they occur “without the concurrence of its will, and therefore without any action of the soul itself [*sans le concours de la volonté, & par consequent, sans aucune action qui viene d’elle*].” There are, however, cases in which we can say that passions occur *with* the “concurrence” of the will--passions “may sometimes be caused by an action of the soul” (*Passions* I, art. 51, AT XI 371 : CSM I 349), that is, by our volitions (*Passions* I, art. 41). We can bring about thoughts, for example, which may arouse passions. In the same letter Descartes explains: “But when the soul uses the will to determine itself to some thought which is not just intelligible but also imaginable, this thought makes a new impression in the brain; this is not a passion within the soul, but an action—and this is what is properly called imagination” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 271). But the passion resulting from our imaginations would not be an action of the will, but its effect, which seems to be what Descartes is trying to distinguish here.

Among the thoughts that we should call passions in a general sense Descartes mentions five types: (1) “thoughts that come from external objects”; (2) thoughts that come “from internal dispositions of the body”; (3) dreams: “real dreams in sleep or daydreams in waking life”; (4) thoughts that arise from “the normal flow of the spirits”; and (5) “thoughts that come from some special agitation of the spirits, whose effects are felt as in the soul itself” (To Princess Elizabeth, 6 October 1645, AT IV 310-11 : CSMK 270-71). Only the last type of thoughts “are passions properly so called” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 271).

Descartes acknowledges that this classification may create certain confusion, because “almost all our thoughts depend on more than one of the causes”. However we should call each thought “after its chief cause”. “Of course almost all our thoughts depend on more than one of the causes I have just listed; but each thought is called after its chief cause or the cause with which we are chiefly concerned” (To Princess Elizabeth, 6 October 1645; AT IV 311-12 : CSMK 271). This confluence of causes would explain why, for example, “people confuse the sensation of pain with the passion of sadness,” or a

“pleasurable sensation with the passion of joy,” or “of thirst and hunger with the desires to drink and eat, which are passions”. This is so “because the causes that give rise to pain commonly also agitate the spirits in such a way as to arouse sadness, and those that produce a pleasurable sensation agitate them in such a way as to arouse joy, and likewise in other cases” (To Princess Elizabeth, 6 October 1645; AT IV 312 : CSMK 271).⁷⁶

The two first types—thoughts “from external objects” and “from internal dispositions”—constitute our *sensations*. The first type—thoughts that come from “external objects”—are called by Descartes “external sensations,” and those that come from “internal dispositions” are called “internal sensations” (To Princess Elizabeth, 6 October 1645, AT IV 310-11 : CSMK 270).⁷⁷ Dreams on the other hand, originate in “traces left by previous impressions in the memory” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 270).⁷⁸ The distinction between the fourth and fifth types of passions—those that arise from “the normal flow of spirits” and those that arise from a “special agitation of the spirits”—is not, however, as clear. As to the reasons why the passions that arise “from the normal flow of spirits” (the fourth type) should *not* be called passions in a strict sense, Descartes explains:

[W]hen the normal flow of the spirits is such that it commonly arouses sad or cheerful thoughts or the like, this is not attributed to passion, but to the nature or humour of the person in whom they are aroused; and so we say that one person has a sad nature, another is of a cheerful humour, and so on. (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 271)

One may however ask why, if the result is *sad* or *cheerful* thoughts, even if the cause is the “nature or humour of the person,” why these thoughts do not qualify as “passions properly so called”. Descartes’ distinction—between thoughts caused by the “nature or humour” and by a “special agitation of the spirits”—could be aiming at separating *moods* from passions. The cause—and probably its duration—are relevant for this purpose, not just the resulting thoughts. Thus in the former cases we should talk about

⁷⁶ Although not central for the idea Descartes is trying to explain here, notice that this explanation—about why we often confuse sensations and passions or appetites with passions—can be understood, at least, in two ways: one is that the same cause may produce certain sensations and certain passions—but both sensations and passions are *independent* events; the other is that certain sensations are, in turn, *causes* of passions (and thus the same cause of the sensation is also the first cause of the passion).

⁷⁷ “[T]houghts that come from external objects, or from internal dispositions of the body—such as the perception of colours, sounds, smells, hunger, thirst, pain, and the like—are called external or internal sensations.” (To Princess Elizabeth, 6 October 1645, AT IV 310-11 : CSMK 270)

⁷⁸ “Those [thoughts] that depend on the traces left by previous impressions in the memory and the ordinary movement of the spirits are dreams, whether they are real dreams in sleep or daydreams in waking life when the soul does not determine itself to anything of its own accord, but idly follows the impressions that happen to be in the brain” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 270).

having a sad humour rather than about *being sad* (or experiencing the *passion* of sadness). And, thus, whereas passions would be *events* with a certain duration triggered by a punctual change in the agitation of the spirits, humours (i.e. moods) would be rather *states* (in so far as they express our “nature”).

This should not mean there is no room to distinguish long-term and short-term passions. The “special agitation of the spirits” which defines passions (To Princess Elizabeth, 6 October 1645, AT IV 310 : CSMK 270; AT IV 311 : CSMK 271)⁷⁹—or, as he told Pollot in 1641, the “disturbance” that is fundamental to passions (To [Pollot], mid January 1641, AT III 280 : CSMK 168)—could be understood in both cases as a “disturbance” of the “normal flow” of the spirits (which is, in principle, different for each of us). Long-term passions, such as *being in love* or *being hopeful* about improving our quality of life, would be longer disturbances of the normal flow (if they are to be passions). Long-term passions would be, in this sense, the most significant and durable alteration of the normal flow of the spirits that we can undergo. The “cheerfulness” that Descartes recommends Elizabeth to maintain could suggest either that habit can reinforce long term passions or that it can even alter the normal flow of the spirits.⁸⁰

Descartes’ indication that the natural flow causes “sad or cheerful thoughts or the like,” instead of saying it causes certain *passions* may be suggesting that a “sad thought” and the *passion of sadness* are different events. Descartes does not explain here what a “sad thought” is—and the fact that the expression does not reappear in the treatise could be an indication that he himself did not find it very useful. We can, in any case, say, that whereas a sad mood *causes* sad thoughts, sadness (the passion) only *implies* sad thoughts (but it is not equivalent to them). But this could be suggesting not only that sadness is *not only* sad thoughts, but also that moods can cause only sad thoughts (without also causing sadness).

The first idea—that a sad thought is necessary for sadness to occur but it is not the same as the passion itself—would be in agreement with the physiologico-mental account provided in the treatise (and with the *Principles*: the “emotions or passions of the mind [...] do not consist of thought alone” [*Principles* I, 48, AT VIIIA : CSM I 209]). Sad thoughts would be one stage of a longer process (the passion of sadness). The second idea—whether sad moods could cause *only* sad thoughts without causing

⁷⁹ “Commonly, however, the term [‘passion’] is restricted to thoughts which are caused by some special agitation of the spirits” (To Princess Elizabeth, 6 October 1645; AT IV 310 : CSMK 270). “So there remain only the thoughts that come from some special agitation of the spirits, whose effects are felt as in the soul itself. It is these that are passions properly so called” (To Princess Elizabeth, 6 October 1645; AT IV 311 : CSMK 271).

⁸⁰ “It is easy to show that the pleasure of the soul which constitutes happiness is not inseparable from cheerfulness and bodily comfort.” (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270). “[The things I have done with a cheerful heart and without any inner reluctance have usually brought me success.” (To Princess Elizabeth, October or November 1646, AT IV 529 : CSMK 297)

sadness (i.e. without being followed by the bodily changes proper of sadness, a disposition of the soul, and so on)—is not so clear, though. If this were the case, then we could attribute the “sad thoughts” Lucia has on many rainy Sunday evenings to her *nature* without at the same time being forced to say she is *experiencing sadness* (while she is having those sad thoughts). But are “sad thoughts” not “sad” precisely because they *accompany* sadness? We could try to avoid this by saying that sadness (the passion) may occur but that would be at a later stage, that is, that whereas the mood would cause sad thoughts only, those thoughts, in turn, could cause sadness. But this would still not resolve whether we can have sad thoughts *without* being sad, sad thoughts without experiencing sadness.

We can understand the normal flow both as *cause* of certain thoughts and as a *disposition* to have *certain thoughts*. And since in both cases those thoughts in turn can arouse passions, we can say the normal flow of spirits is both cause of, and disposition to have, *passions*. That normal flow would be immediate cause of thoughts (which in turn may be proper of certain passions) in a way similar to how imaginings might result from the fortuitous motion of the spirits (*Passions* I, art.26). And we can understand it as disposition to have passions insofar as, although not sufficient to have certain thoughts, it could explain their occurrence under specific circumstances. A rainy day, in the case of Lucia, could explain why, given her otherwise general sad mood, she is having certain sad thoughts at this moment. Thus when Descartes talks in the same letter of the “inclinations or habits which dispose to a certain passion”—and which explains why, in similar circumstances, “some are more affected than others in proportion to the greater or less *habit* or inclination they have towards fear” (my italics)—could correspond to the alteration of the normal flow of the spirits.⁸¹ Lucia would have a stronger *inclination* to have sad thoughts because she has developed a firmer *habit* by having experienced that particular passion a greater number of occasions.

Understanding the normal flow of spirits as cause and disposition would then explain both the overall larger frequency of certain thoughts (i.e. a certain mood), as well as why certain thoughts may occur more readily under certain circumstances (and thus certain passions). In both cases, though, certain

⁸¹ “Sometimes also people confuse the inclinations or habits which dispose to a certain passion with the passion itself, though the two are easy to distinguish. For instance, when it is announced in a town that enemies are coming to besiege it, the inhabitants at once make a judgement about the evil which may result to them: this judgement is an action of their soul and not a passion. And though this judgment is to be found in many alike, they are not all equally affected by it; some are more affected than others in proportion to the greater or less habit or inclination they have towards fear. Their souls can receive the emotion that constitutes the passion only after they have made the judgement, or else at least conceived the danger without making a judgement, and then imprinted an image of it in the brain, by another action, namely imagining.” (To Princess Elizabeth, 6 October 1645; AT IV 312 : CSMK 271)

thoughts would be necessary both for the mood and for specific passions to occur—the latter is required by Descartes' causal account of the passions (see Chapter 2).

Summing up, there are at least three provisional conclusions we can draw from this discussion. (1) Descartes is separating passions (properly speaking) from *natural dispositions* or from *moods*. (2) He seems to be distinguishing “sad thoughts” from what should properly be called passions of sadness or joy implying that passions are not only *thoughts* or, at least, are not only the *resulting thought* (in the process of generation of passions). And (3) he is indicating that passions (properly speaking), unlike moods, have a *historical cause other than our nature*. This does not seem to mean, however, that whereas passions (properly speaking) are well-defined (i.e. temporally limited) *events*, the thoughts that may originate in our nature are not. A *mood* would be distinguishable from passions, not for being a different type of thoughts, but rather because of the *frequency* of certain (temporally limited) thoughts.

As mentioned above, in the same letter to Elizabeth of 6 October 1645, Descartes touches on the question about how the *actions* of the soul (in particular, judging and imagining) may alter sensations and thus arouse certain *passions*—and, by doing so, clearly distinguishes judgments and passions.

The actions of the soul upon our perceptions can partially explain, for example, why the same sensation may cause a certain passion in some cases but not in others:

For instance, when it is announced in a town that enemies are coming to besiege it, the inhabitants at once make a judgement about the evil which may result to them: this judgement is an action of their soul and not a passion. And though this judgment is to be found in many alike, they are not all equally affected by it; some are more affected than others in proportion to the greater or less habit or inclination they have towards fear. Their souls can receive the emotion that constitutes the passion only after they have made the judgement, or else at least conceived the danger without making a judgement, and then imprinted an image of it in the brain, by another action, namely imagining. (To Princess Elizabeth, 6 October 1645, AT IV 312 : CSMK 271)

Notice two important implications of this example: (1) sensory perceptions do not seem in principle to be *enough* to arouse passions (something else is needed); and (2) *imagination* and *judgment* are not a passions but *actions* of the soul. In the example above, the sensation that corresponds to the visual perception of the enemies coming to town, is followed by either a judgment (about the danger of the situation), or simply by the *conception of danger*. Both are in turn followed by another action of the soul,

imagination, which would explain why a passion (and not simply a sensation) was caused.⁸² That imagination would in turn cause a new impression in the brain that supposedly would lead the spirits towards the gland and, we can assume now, would move the gland in a different way. “[W]hen the soul uses the will to determine itself to some thought which is not just intelligible but also imaginable, this thought makes a new impression in the brain; this is not a passion within the soul, but an action—and this is what is properly called imagination.” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 271)⁸³

Although Descartes does not explain the relationship between judging and “conceiving the danger without making a judgment,” it seems that this is also an opposition between an action (judgment) and a passion of the soul (a perception of fear).⁸⁴ He does not however clarify what it means to “conceive fear”.

Both the imagination and judgment are thus actions of the soul that can alter a causal process that, otherwise, would have resulted in this case only in a sensory perceptions (not in passions in the strict sense) of men coming to the village.⁸⁵ Once the villagers have *judged* that the situation is dangerous, they *imagine* the state of affairs that the invasion of the enemy may bring about, and this (image), in turn, seems to trigger the passion of fear. This seems to imply that others may judge the situation dangerous *but* not suffer fear because the ensuing *imagination* may have been of a different kind, and still others may not even judge it dangerous.

⁸² “[A]vant que leur ame reçoive l’emotion, en laquelle seule consiste la passion, il faut qu’elle fçace ce iugement, ou bien, sans juger, qu’elle conçoive au mons le danger, & en imprime l’image dans le cerveau (ce qui se fait par une autre action qu’on nomme imaginer) [...]” (Descartes à Elisabeth, 6 October 1645, AT IV 312)

⁸³ Decartes provide in the correspondence some details as to what occurs in the brain and the body when the soul (actively) *imagines* something:

When a soul does this it acts upon the spirits which travel from the brain through the nerves into the muscles, and makes them enter the muscles whose function is to close the openings of the heart. This retards the circulation of the blood so that the whole body becomes pale, cold and trembling, and the fresh spirits returning from the heart to the brain are agitated in such a way that they are useless for forming any images except those which excite in the soul the passion of fear. All these things happen so quickly one after the other that the whole thing seems like a single operation. Similarly in all the other passions there occurs some special agitation in the spirits leaving the heart. (To Princess Elizabeth, 6 October 1645, AT IV 312-313 : CSMK 271-72)

Notice also the important role of the heart in generating the “special agitation” of the spirits, and the clear suggestion that a passion is much more than just a thought (“[a]ll these things happen so quickly one after the other that the whole thing seems like a single operation”).

⁸⁴ Judgments are unequivocally considered actions of the soul in the *Principles* (see *Principles* I, arts. 32 and 34).

⁸⁵ The possible disparity between the (mind-body) *event* that is, properly speaking, a passion, and our judgement *about that passion* is, incidentally, an irrelevant question for Descartes (not discussed in the correspondence or in the treatise). Since our passions are guides to act, what is relevant is whether we should follow or not the disposition they bring about.

Although the example may suggest that the imagination is necessary in this case for the arousal of fear, and that the “conception of danger”—which could correspond to the representation of an evil, to use terminology of the treatise—or the judgment are not enough, this is not supported by the account provided in the treatise. The imagination, however, would be causally sufficient to arouse passions: even without a visual perception of the enemy, we may still experience fear by bringing about the *image* of an enemy attacking our village. As to whether passions *require* a judgment of any sort at some stage of the corporeo-mental process through which they are aroused, Chapter 2 will allow to provide a better answer.

The example we saw above of passions we may undergo as we watch a play is also of certain relevance regarding the role of the imagination.⁸⁶ The correspondence offers two important footnotes to the idea that “tragedies please us more the sadder they make us.” One is that Descartes accepts that these tragedies may have, in certain cases, the power to make us (genuinely) sad. “I agree that the sadness of tragedies would not please as it does if we feared that it might become so excessive as to make us uncomfortable” (To Princess Elizabeth, 3 November 1645, AT IV 331 : CSMK 276). The other is that the reason why a theater play may “please” us rather than sadden us does not seem to reside in the fact that we know our life is *not affected* by the events on the stage, or at least this is not the only possible explanation. In fact, according to Descartes, even a person “who had every reason to be happy but who saw continually enacted before him tragedies full of disastrous events” would eventually be saddened:

[C]onsider . . . a person who had every reason to be happy but who saw continually enacted before him tragedies full of disastrous events, and who spent all his time in the consideration of sad and pitiful objects. Let us suppose that he knew they were imaginary fables, so that though they drew tears from his eyes and moved his imagination, they did not touch his intellect at all. I think that this by itself would be enough gradually to constrict his heart and make him sigh in such a way that the circulation of his blood would be delayed and slowed down. The grosser parts of his blood, sticking together, could easily block the spleen, by getting caught and stopping in its pores; while the more rarefied parts, being continually agitated, could affect his lungs and cause a cough which in time could be very dangerous. (To princess Elizabeth, May or June 1645, AT IV 219 : CSMK 250)

⁸⁶ “It is easy to show that the pleasure of the soul which constitutes happiness is not inseparable from cheerfulness and bodily comfort. This is proved by tragedies, which please us more the sadder they make us, and by bodily exercises like hunting and tennis which are pleasant in spite of being arduous—indeed we see that often the fatigue and exertion involved increase the pleasure. The soul derives contentment from such exercise because in the process it is made aware of the strength, or skill, or some other perfection of the body to which it is joined; but the contentment which it finds in weeping at some pitiable and tragic episode in the theatre arises chiefly from its impression that it is performing a virtuous action in having compassion for the afflicted. Indeed in general the soul is pleased to feel passions arise in itself no matter what they are, provided it remains in control of them.” (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270) Descartes provides in the treatise a similar example in the context of the discussion of the causes of joy (see *Passions* II, art.94).

Notice the emphasis of Descartes on the fact that this person “knew they were imaginary fables, so that though they drew tears from his eyes and moved his imagination, they did not touch his intellect at all.” This means that tragedies do not need “to touch his intellect” to cause in someone the same bodily motions sadness causes. But we have read above that the imagination causes passions by producing *a new impression in the brain* (To Princess Elizabeth, 6 October 1645, AT IV 312 : CSMK 271). This means that we should probably understand “intellect” as referring only to the mind, not to the brain. Thus, not “touching the intellect” would simply mean that the soul is not affected.

But if the soul is not “touched,” these cases would not represent passions properly speaking—which always require the *movement* of the soul. And if the soul is not touched we should not either expect the subsequent motion of the spirits. One possible answer to this could be that watching repeated tragedies, rather than arousing certain passions, modifies the *mood* or the *natural disposition* which, according to the discussion above, would not be equivalent to passions according to Descartes—and thus should not be considered as “touching” the soul. But this would apply only to the effect of the repeated experience. Another alternative would be noticing that although Descartes says that the tragedies do not touch the intellect, they, however, “move the imagination”. Thus, we could explain the sadness of the spectator (after repeatedly watching tragedies) in a way similar to the fear aroused in those who thought the enemies were coming: the play serves as an occasion for the imagination to bring about the images (impressions in the brain) that in turn would trigger the bodily motions proper of sadness. In this sense, we could say, the tragedy does not touch the intellect *directly*; the imagination does. This seems to imply also that sensations which result in passions would *touch directly* the intellect, but Descartes does not provide here much more to elucidate this question. And still another, and probably more plausible reading, is that whereas tragedies would arouse passions, they would not bring about the same type of *dispositions* to act passions *in real life* do. The anger caused by the tragedy does not incline us to hit the actor who represents the villain.

This example could also be suggesting a distinction between the experience of the person who “imagines” disasters and the one who *lives* them as truly threatening his life. What would be the difference between the *experience* of the person who constantly “enacted before him tragedies full of disastrous events” and the experience a spectator might undergo by *putting himself* in the skin of the actors so vividly that, even if he knows it is “imaginary,” he might become, so to speak, as emotionally affected as if he were *living* those events? The case of the *ordinary* spectator, as we saw above, is

according to Descartes a good example of how the “soul derives contentment” from the awareness of possessing a perfection: “in general the soul is pleased to feel passions arise in itself no matter what they are, provided it remains in control of them” (To Princess Elizabeth, 6 October 1645; AT IV 309 : CSMK 270). But what about the case just mentioned? It seems that the soul would not “derive contentment” in that situation. Should we then say that there are, at least, two types of *spectator sadness*, sadness *accompanied by pleasure* and simply *sadness*, the latter being characterized for lasting outside the theater and not being different from say, genuine sadness (except probably in the disposition to act)? The general case discussed by Descartes—the case in which the spectator’s soul “derives contentment”—would be leaving aside the second type, one which, on the other hand, seems to correspond to quite ordinary experiences.

In the letter to Chanut of 1 November 1646, Descartes touches briefly on the issue of the usefulness of passions. He reminds Chanut, very generally and vaguely, of his position—later developed in the treatise—that *all* passions are good but, simultaneously, adds some relevant comments:

[Y]ou seem to conclude from the fact that I have studied the passions that I must no longer have any. But let me tell you, on the contrary, that in examining the passions I have found almost all of them to be good, and to be so useful in this life that our soul would have no reason to wish to remain joined to its body for even one minute if it could not feel them. (To Chanut, 1 November 1646, AT IV 538 : CSMK 300)

Thus, (1) to be “good” means clearly to be “useful in this life”—a recurrent idea both in the correspondence and in the treatise (although what “useful” means still has to be clarified); (2) the usefulness of the passions should primarily be measured in reference to the soul (as usefulness *for* the soul); and (3) this usefulness appears to be the main reason for the soul “to remain joined” to the body. If we add the premise that the soul cannot have passions without joining the body (which we must accept by definition), the following argument can be constructed. Since passions are good (i.e. useful) for the soul, and the soul cannot have them without joining the body, having passions appears as a reason for the soul to remain joined to the body. If we add still another premise, namely, that if the soul has *reasons* to remain joined to the body it may also have had them *to join* the body in the first place, then having passions could also be the main reason for the mind-body union to be constituted in the first place. This latter premise is suggested, if not too strongly, in at least one place in the treatise (*Passions* II, art. 107).

The following year, in letter also to Chanut (1 February 1647) Descartes addresses the question of what love is and, by doing it, he provides quite a few details on the distinction between “the love which is

purely intellectual or rational” and “the love which is a passion” (To Chanut, 1 February 1647, AT IV 601 : CSMK 306). This is particularly relevant to understand the distinction in the treatise, a central one, between “intellectual” and properly called *passions* of the soul.

“Intellectual love” is, unlike the passion of love, a “rational thought” (To Chanut, 1 February 1647, AT IV 602 : CSMK 306) and “consists simply in the fact that when our soul perceives some present or absent good, which it judges to be fitting for itself, it joins itself to it willingly [*de volonté*] that is to say, it considers itself and the good in question as forming two parts of a single whole” (To Chanut, 1 February 1647, AT 601 : CSMK 306). As it will be clearer in the discussion of the term “willingly” in Chapter 3, we do not have to understand it as a judgment or as any form of volition. This would make of “intellectual” love an action, not a *passion*. This does not mean, however, that judgments do not arouse these emotions as, in fact, they do. “Commonly, however, these two loves [rational and the passion] occur together; for the two are so linked that when *the soul judges an object to be worthy of it*, this immediately makes the heart disposed to the motions which excite the passion of love” (To Chanut, 1 February 1647, AT IV 603 : CSMK 307; my italics); similarly, “if the soul perceived that there are many very fine things to be known about nature, its will would be infallibly impelled to love the knowledge of those things, that is, to consider it as belonging to itself” (To Chanut, 1 February 1647, AT 602 : CSMK 306).

The crucial distinction between intellectual emotions and passions is in whether the body intervenes or not in their arousal. Intellectual passions occur without the intervention of the body:

All these movements of the will which constitute love, joy, sadness and desire, in so far as they are rational thoughts and not passions, could exist in our soul even if it had no body. For instance, if the soul perceived that there are many very fine things to be known about nature, its will would be infallibly impelled to love the knowledge of those things, that is, to consider it as belonging to itself. And if it was aware of having that knowledge, it would have joy; if it observed that it lacked the knowledge, it would have sadness; and if it thought it would be a good thing to acquire, it would have desire. (To Chanut, 1 February 1647, AT IV 602 : CSMK 306).

The independence from bodily motions explains why whereas intellectual emotions are “rational” thoughts, *passions of the soul* are “sensual or sensuous” (To Chanut, 1 February 1647, AT 602 : CSMK 306); and whereas intellectual emotions are “clearer thoughts,” passions are “confused thoughts”. “This [passion of love] [...] is nothing but a confused thought, aroused in the soul by some motion of the nerves, which makes it disposed to have other, clearer, thought which constitutes rational love” (To Chanut, 1 February 1647, AT IV 602-603 : CSMK 306). As he himself reminds Chanut, Descartes had

already in the *Principles*--first published in Latin in 1644 and re-published in French in 1647 (the year he wrote to Chanut about it)--considered the passions as “confused thoughts.”⁸⁷ He also offered there a brief account of the distinction between intellectual emotions and passions properly speaking, which he calls there “animal” passions, very similar to the one he provides in this letter to Chanut:

[W]hen we hear good news, it is first of all the mind which makes a judgement about it and rejoices with that intellectual joy which occurs without any bodily disturbance [...]. But later on, when the good news is pictured in the imagination, the spirits flow from the brain to the muscles around the heart and move the tiny nerves there, thereby causing a movement in the brain which produces in the mind a feeling of animal joy. (*Principles* IV, art. 190, AT VIII A 317 : CSM I 281).

A consequence of this distinction is that intellectual love, unlike the passion of love, does not seem to imply an inclination to join the loved object. Intellectual love “consists simply in the fact that when our soul perceives some present or absent good, which it judges to be fitting for itself, it joins itself to it willingly, that is to say, it *considers* itself and the good in question as forming two parts of a single whole” (To Chanut, 1 February 1647, AT 601 : CSMK 306; my italics). The *passion* of love, on the other hand brings about the inclination to join the object represented. “I know no other definition of love save that it is a passion which makes us join ourselves willingly *to some object*” (To Chanut, 1 February 1647, AT IV 611 : CSMK 310; my italics); “[i]t is the nature of love to make one consider oneself and *the object loved* as a single whole of which one is but a part; and *to transfer the care* one previously took of oneself to the preservation of this whole” (To Chanut, 1 February 1647, AT IV 611 : CSMK 311; my italics).

However, Descartes talks about “[a]ll these movements of the will which constitute love, joy, sadness, and desire, in so far as they are rational thoughts and not passions [...]” (To Chanut, 1 February 1647, AT 602 : CSMK 306). This means that certain “movements of the will” take place also in intellectual emotions--even if we are also not experiencing a *passion* properly speaking. Since, we can assume, these movements must be different from the *disposition* which passions bring about, Descartes

⁸⁷ “This (as I said briefly of all passions, appetites and sensations on page 461 of the French edition of my *Principles*) is nothing but a confused thought, aroused in the soul by some motion of the nerves, which makes it disposed to have other, clearer, thought which constitutes rational love. Just as in thirst the sensation of the dryness of the throat is a confused thought which disposes the soul to desire to drink, but is not identical with the desire, so in love a mysterious heat is felt around the heart, and a great abundance of blood in the lungs, which makes us open our arms as if to embrace something, and this inclines the soul to join to itself willingly the object presented to it. But the thought by which the soul feels the heat is different from the thought which joins it to the object [...]” (To Chanut, 1 February 1647, AT IV 602-603 : CSMK 306-307)

could just be referring to the judgments (volitions) which usually give place to these emotions, or to the *disposition to judge* which certain representation could cause in the will and thus result in intellectual emotions. This would be compatible with two important features of those “movements the will” (1) they “could exist in our soul even if it had no body” (“All these movements of the will which constitute love, joy, sadness and desire, insofar as they are rational thoughts and not passions, could exist in our soul even if it had no body” [To Chanut, 1 February 1647, AT IV 602 : CSMK 306]); and (2) can be perfectly clear thoughts if they only refer to the soul (“There is nothing in all these movements of its will which would be obscure to it [i.e. the soul], or anything of which it could fail to be perfectly aware, provided it reflected in its own thoughts” [To Chanut, 1 February 1647, AT IV 602 : CSMK 306]).

As we have seen, another feature of intellectual emotions is that they are “commonly accompanied” by sensuous passions, which explains why they might be difficult to identify: “But while our soul is joined to the body, this rational love is commonly accompanied by the other kind of love, which can be called sensual or sensuous” (To Chanut, 1 February 1647, AT IV 602 : CSMK 306). Thus, in the case of love,

Commonly ... these two loves occur together; for the two are so linked that when the soul judges an object to be worthy of it, this immediately makes the heart disposed to the motions which excite the passion of love; and when the heart is similarly disposed by other causes, that makes the soul imagine lovable qualities in objects in which, at another time, it would see nothing but faults. (To Chanut, 1 February 1647, AT IV 603 : CSMK 307).

Expressed in these terms, the relationship between intellectual and sensuous love seems to be an instance of the *natural association* between certain thoughts (intellectual love) and certain passions (sensuous love), and between certain thoughts (representation of a good) and certain bodily motions (those proper of the passion of love) (“certain motions of the heart [are] naturally connected ... with certain thoughts, which in no way resemble” [To Chanut, 1 February 1647, AT IV 603-604 : CSMK 307]).

Being accompanied by passions is not a necessary feature of intellectual emotions. The latter not only do not need to be followed by their *corresponding* passions, they do not even need to be followed by a passion whatsoever. Intellectual love, for example, will not be accompanied by the passion of love if “we do not come across any object we think worthy of it”: “[S]ometimes it happens that the feeling of love occurs in us without our will being impelled to love anything, because we do not come across any object we think worthy of it. It can also happen, on the other hand, that we are aware of a most

worthwhile good, and join ourselves to it willingly, without having any corresponding passion, because the body is not appropriately disposed” (To Chanut, 1 February 1647, AT IV 603 : CSMK 307). This means that intellectual love, unlike the passion, does not need to have a specific object. This same reason explains why an intellectual emotion can also be followed by a passion which is not its corresponding sensuous one. In the case of intellectual love, precisely because it is not *about* a specific object, it can be followed by different passions. The difference in each case will depend on the judgment made about the presence of the good. “Then, if on the one hand the good is present—that is, if the soul possesses it, or is possessed by it, or is joined to it not only by its will but also in fact and reality in the appropriate manner—in that case, the movement of the will which accompanies the knowledge that this is good for it is joy; if on the other hand the good is absent, then the movement of the will which accompanies the knowledge of its lack is sadness; while the movement which accompanies the knowledge that it would be a good thing to acquire it is desire” (To Chanut, 1 February 1647, AT 601-602 : CSMK 306).

In the letter to Chanut of 1 February 1647 Descartes briefly refers also to the possible confusion of love and desire, an important distinction which helps understand in which sense desire is a passion according to Descartes. Desire, considered in the treatise one of the six basic passions (see *Passions* II, art. 69, AT XI 380 : CSM I 353),⁸⁸ is different both from the passion of love, and, in a certain sense, from the disposition of the soul (or inclination of the will) that is essential to *all* passions. In the letter to Chanut Descartes simply says about their distinction that desire “is so commonly taken for love that people have distinguished two sorts of love: one called ‘benevolent love’, in which desire is less apparent, and the other called ‘concupiscent love’, which is simply a very strong desire, founded on a love which is often weak” (To Chanut, 1 February 1647, AT IV 606 : CSMK 308). Descartes returns to this question in the treatise (in art. 81: “The distinction usually made between concupiscent love and benevolent love”).⁸⁹ I will discuss the issue at certain length in Chapter 3.

⁸⁸ “The passion of desire is an agitation of the soul caused by the spirits, which disposes the soul to wish, in the future, for the things it represents to itself as agreeable. Thus we desire not only the presence of goods which are absent but also the preservation of those which are present. In addition we desire the absence of evils, both those that already affect us and those we believe we may suffer in some future occasion.” (*Passions* II, art 147, AT XI 392 : CSM I 359)

⁸⁹ “A distinction is commonly made between two sorts of love, one called ‘benevolent love’, which prompts us to wish for the well-being of what we love, and the other called ‘concupiscent love’, which makes us desire the things we love. But it seems to me that this distinction concerns only the effects of love and not its essence. For as soon as we have joined ourselves willingly to some object, whatever its nature may be, we feel benevolent towards it—that is, we also join to it willingly the things we believe to be agreeable to it: this is one of the principal effects of love. And if we judge that it would be beneficial to possess an object or to be associated with it in some manner other than willingly, then we desire it: and this, too, is one of the most common effects of love.” (*Passions* II, art.81; AT XI 388 : CSM I 356)

1.3. THE MIND-BODY UNION

In 1643 Elizabeth asks Descartes, in the context of their exchange on passions, about the nature of the relationship between the soul and the body. The princess wanted him to explain, in particular, the “nature of an immaterial substance” and “the manner of its actions and passions in the body” (“aussi bien la nature d’une substance immatérielle & la manière de ses actions & ses passions dans le corps” [Elizabeth à Descartes, 10/20 juin 1643, AT III 685]). Elizabeth also questioned in that letter Descartes’ suggestion in a previous one that the relationship between heaviness and body could serve as a good analogy to understand the relationship between mind and soul as long as we understand heaviness as a real quality. But, as Elizabeth pointed out, Descartes himself had refuted the idea that heaviness is a real quality:

Why should this power to carry the body towards the center of the earth, which you have then wrongly attributed to it under the name of a quality, persuade us that a body can be pushed by something immaterial rather than confirm the opinion of its impossibility by the demonstration of an opposite truth (which you promise in your physics) [...] (Elisabeth à Descartes, 10/20 juin 1643, AT III 684)⁹⁰

Descartes had, in fact, proposed that *if* we “suppose that heaviness is a real quality,” “we have no difficulty in conceiving how it moves this body or how it is joined to it” (To Princess Elizabeth, 21 May 1643, AT III 667 : CSMK 219). But his comparison does not mean we *should* understand heaviness as a real quality. Heaviness (as a real quality) serves as a valid analogy only insofar as it illustrates two features about “how it [the soul] moves this body or how it is joined to it”. Those features are: (1) the *action* of the mind on the body should *not* be understood as an action *through contact*, and (2) since qualities are not real, the “power to act” cannot be attributed to them:

I think we have hitherto confused the notion of the soul’s power to act on the body [*la force don’t l’ame agit dans le corps*] with the power one body has to act on another. We have attributed both powers not to the soul, for we did not yet know it, but to the various qualities of bodies such as heaviness, heat, etc. We imagined these qualities to be real, that is to say to have an existence distinct from that of bodies, and so to be substances, although we called them qualities. In order to conceive them we sometimes used notions we have for the purpose of knowing bodies, and sometimes used notions we have for the

⁹⁰ “[P]ourquoy cette puissance, que vous luy auez alors, sous le nom d’une qualité, faussement attribuée, de porter le corps vers le centre de la terre, nous doit plutôt persuader qu’un corps peut estre poussé par quelque chose d’immatériel, que la demonstration d’une vérité contraire (que vous promettez en vostre physique) nous confirmer dans l’opinion de son impossibilité [...]” (Elisabeth à Descartes, 10/20 juin 1643, AT III 684)

purpose of knowing the soul, depending on whether we were attributing to them something material or something immaterial. For instance, when we suppose that heaviness is a real quality, of which all we know is that it has the power to move the body that possesses it towards the centre of the earth we have no difficulty in conceiving how it moves this body or how it is joined to it. (To Princess Elizabeth, 21 May 1643, AT III 667 : CSMK 219)

Thus the heaviness analogy should be taken seriously *even if* it is based on an erroneous understanding of heaviness as a real quality (“heaviness [...]—as I hope to have shown in my *Physics*--is not anything really distinct from body” [To Princess Elizabeth, 21 May 1643, AT III 668 : CSMK 219]). In fact, although Descartes does accept Elizabeth’s objection, he does not regret having used the analogy:

It does not seem to me that the human mind is capable of forming a very distinct conception of both the distinction between the soul and the body and their union; for to do this it is necessary to conceive them as a single thing and at the same time to conceive them as two things; and this is absurd. This is why I made use earlier of the analogy with heaviness and other qualities which we commonly imagine to be united to certain bodies in the way that thought is united to ours. I supposed that Your Highness still had in mind the arguments proving the distinction between the soul and the body, and I did not want to ask her to put them aside in order to represent to herself the notion of the union which everyone invariably experiences in himself without philosophizing. Everyone feels that he is a single person with both body and thought so related by nature that the thought can move the body and feel the things which happen to it. I did not worry about the fact that the analogy with heaviness was lame because such qualities are not real, as people imagine them to be. This was because I thought that Your Highness was already completely convinced that the soul is a substance distinct from the body. (To Princess Elizabeth, 28 June 1643, AT IV 693-94 : CSMK 227-228)

The analogy appears then to be of more utility than simply trying to conceive something which is “absurd,” namely “to conceive them [i.e. body and soul] as a single thing and at the same time to conceive them as two things” (To Princess Elizabeth, 28 June 1643, AT III 693 : CSMK 227).

But this does not mean we do not have any means to grasp the union. We have, Descartes tells Elizabeth, a “ready-made” notion of it, a notion which “was given us for the purpose of conceiving the manner in which the soul moves the body” and to which we only have access through our “inner experience”:

We never think that this motion is produced by a real contact between two surfaces, since we find, from our own inner experience, that we possess a notion that is ready-made for forming the conception in question. [...] I believe that it was given us for the purpose of

conceiving the manner in which the soul moves the body. (To Princess Elizabeth, 21 May 1643, AT III 667-668 : CSMK 219)

This notion is one of a set of “very few” notions Descartes calls “primitive notions,” which are “as it were the patterns on the basis of which we form all our other conceptions” (To Princess Elizabeth, 21 May 1643, AT III 665 : CSMK 218).⁹¹ To say they are “primitive” means each of them can only be understood “through itself” (To Princess Elizabeth, 21 May 1643, AT III 666 : CSMK 218).⁹² And although the soul possesses these notions “by nature” (To Princess Elizabeth, 21 May 1643, AT III 666 : CSMK 219) it may not always distinguish them or apply them correctly. (“[I]t [the soul] does not always sufficiently distinguish them from each other, or assign them to the objects to which they ought to be assigned” [To Princess Elizabeth, 21 May 1643, AT III 666-67 : CSMK 219]).⁹³ To do this is the task of knowledge (“all human knowledge consists solely in clearly distinguishing these notions and attaching each of them only to the things to which it pertains” [To Princess Elizabeth, 21 May 1643, AT III 665-666 : CSMK 218]). Thus, for example, Descartes thinks “we misuse this notion [of the union] when we apply it to heaviness, which—as I hope to show in my *Physics*—is not anything really distinct from body” (To Princess Elizabeth, 21 May 1643, AT III 667-668 : CSMK 219).

The notions of “the soul’s power to move the body” and “the body’s power to act on the soul,” however, are not primitive: they “depend” on “the [primitive] notion of their union” (of the soul and the body): “as regards the soul and the body together, we have only the notion of their union, on which depends our notion of the soul’s power to move the body, and the body’s power to act on the soul and cause its sensations and passions. (To Princess Elizabeth, 21 May 1643, AT III 665 : CSMK 218)

⁹¹ Two other primitive notions are the notion of the body and of the mind: “[A]s regards body in particular, we have only the notion of extension, which entails the notions of shape and motion; and as regards the soul on its own, we have only the notion of thought, which includes the perceptions of the intellect and the inclinations of the will.” (To Princess Elizabeth, 21 May 1643, AT III 665 : CSMK 218) Notice how the “notion of thought” is characterized: it “includes the perceptions of the intellect and the inclinations of the will,” that is the *passions* (perceptions) and *actions* (volitions) of the soul.

⁹² “I observe next that all human knowledge consists solely in clearly distinguishing these notions and attaching each of them only to the things to which it pertains. For if we try to solve a problem by means of a notion that does not pertain to it, we cannot help going wrong. Similarly we go wrong if we try to explain one of these notions by another, for since they are primitive notions, each of them can be understood only through itself. The use of our senses has made the notions of extension, of shapes and of motions much more familiar to us than the others; and the main cause of our errors is that we commonly want to use these notions to explain matters to which they do not pertain. For instance, we try to use our imagination to conceive the nature of the soul, or we try to conceive the way in which the soul moves the body by conceiving the way in which one body is moved by another.” (To Princess Elizabeth, 21 May 1643, AT III 665-666 : CSMK 218)

⁹³ “[T]he next thing I must explain is how to conceive those [notions] which belong to the union of the soul with the body, as distinct from those which belong to the body alone or to the soul alone. At this point what I wrote at the end of my Reply to the Sixth Objections may be useful. It is in our own soul that we must look for these simple notions. It possesses them all by nature, but it does not always sufficiently distinguish them from each other, or assign them to the objects to which they ought to be assigned.” (To Princess Elizabeth, 21 May 1643, AT III 666-667 : CSMK 218-219)

Besides the primitive notion of the union, we also have *experience* of that union (something to which Descartes had already vaguely referred to in the letter of 21 May). We (mind-body unions) can “feel” that union, Descartes tells Elizabeth. “Everyone feels that he is a single person with both body and thought so related by nature that the thought can move the body and feel the things which happen to it” (To Princess Elizabeth, 28 June 1643; AT III 694 : CSMK 228). This is why neither “the intellect alone” nor “the intellect aided by the imagination” are of much help. The former can help us conceive the soul; the latter the body. About the union we can only know “very clearly” through the “senses” (To Princess Elizabeth, 28 June 1643, AT III 691-92 : CSMK 227). By the “senses,” we can assume, Descartes means *having sensations* rather than using the organ of the senses to grasp it. This idea is reinforced as his advice to Elizabeth about how to grasp the union gets more and more specific. The “ordinary course of life and conversation,” together with “abstention from meditation and from the study of the things which exercise the imagination,” teach us more about the union than the intellect—which is why it is easier to grasp the union for those who, unlike the princess, “never philosophize”:

The soul is conceived only by the pure intellect; body (i.e. extension, shapes and motions) can likewise be known by the intellect alone, but much better by the intellect aided by the imagination; and finally what belongs to the union of the soul and the body is known only obscurely by the intellect alone or even by the intellect aided by the imagination, but it is known very clearly by the senses. That is why people who never philosophize and use only their senses have no doubt that the soul moves the body and that the body acts on the soul. They regard both of them as a single thing, that is to say, they conceive their union; because to conceive the union between two things is to conceive them as one single thing. Metaphysical thoughts, which exercise the pure intellect, help to familiarize us with the notion of the soul; and the study of mathematics, which exercises mainly the imagination in the consideration of shapes and motions, accustoms us to form very distinct notions of body. But it is the ordinary course of life and conversation, and abstention from meditation and from the study of the things which exercise the imagination, that teaches us how to conceive the union of the soul and the body. (To princess Elizabeth, 28 June 1643, AT III 691-92 : CSMK 227)

Despite the difficulties to grasp the union, Elizabeth admits (in her letter of June 10/20, 1643) that it is easier for her to understand a *material* soul than the capability of an immaterial one to act on, or be moved by, a body. “I confess that it would be easier for me to concede matter and extension to the soul, than the power to move a body and being moved by it to an immaterial being” (Elizabeth à Descartes,

10/20 juin 1643, AT III 685).⁹⁴ Descartes does not see this, however, different from trying to understand it “as united to the body”:

Your Highness observes that it is easier to attribute matter and extension to the soul than to attribute to it the capacity to move and be moved by the body without having such matter and extension. I beg her to feel free to attribute this matter and extension to the soul because that is simply to conceive it as united to the body. (To Princess Elizabeth, 28 June 1643, AT III 694 : CSMK 228)

This alternative does not protect us, in any case, from facing the absurdity of having to think two things as one.

And once she has formed a proper conception of this [i.e. the attribution of matter and extension to the soul] and experienced it in herself, it will be easy for her to consider that the matter she has attributed to the thought is not thought itself, and that the extension of this matter is of a different nature from the extension of the thought, because the former has a determinate location, such that it thereby excludes all other bodily extension, which is not the case with the latter. And so Your Highness will easily be able to return to the knowledge of the distinction between the soul and the body in spite of having conceived their union. (To Princess Elizabeth, 28 June 1643, AT III 694-95 : CSMK 228)

Thus, Descartes seems to be suggesting, although we *can* grasp the union, we *cannot* conceive it *at the same time* that we conceive *separately* the body and the soul. Although the concept of a *material soul* might not be different from the one of a *souled body*, it is worth noting that Descartes does not take advantage of the occasion to remind Elizabeth that the idea of a *material soul* might preclude us from attributing to it actions, that is, free will, which is the fundamental distinction between nature and mind-body unions. Unless by *material soul* we mean *matter with an active principle*, in which case we would be expressing well Descartes' own thought. The mind-body union is a body that, unlike matter, can *act* in the strict sense, i.e. can initiate action, create motion in the world. This is already clear in the correspondence and will be reaffirmed in the *Passions*, where the most relevant difference throughout the treatise between matter and mind is not extension or lack thereof but the ability or inability to act. Our passions appear to be the only perceptions which may both guide and interfere with our free will (regarding our happiness).

⁹⁴ “Et i'avoue qu'il me seroit plus facile de conceder la matiere & l'extension a l'ame, que la capacite de mouvoir un corps & d'en estre emeu, a un estre immateriel.” (Elisabeth à Descartes, 10/20 juin 1643, AT III 685)

After reading the draft, the princess had a few questions that prompted Descartes to add some thoughts about the mind-union. The princess wanted to know (1) “how we can know the different motions of the blood which cause the five primitive passions since they [the passions] never occur by themselves”;⁹⁵ (2) why the same passion has different consequences in different people;⁹⁶ and (3) in which way admiration can, when accompanied by joy, make the lungs inflate given that it “seems to be operate only on the brain”.⁹⁷ Descartes addresses these questions in his letter of May 1646 from a discussion of what he calls the “chief” “principles of physics” which, as he says, he followed in order “to work out the particular movements of blood accompanying each passion” (To Princess Elizabeth, May 1646, AT IV 407 : CSMK 285).⁹⁸ Those “chief principles of physics” [*principes de Physique*]—are three. The first is that “[t]he function of the liver and the spleen is to contain reserve blood, less purified than the blood in the veins; and the fire in the heart needs constantly to be fed either by the juices of food coming directly from the stomach, or in their absence by this reserve blood (since the other blood in the veins expands too easily)” (To Princess Elizabeth, May 1646, AT IV 407-408 : CSMK 285-86).

The second “principle of physics” is the expression of the natural association which exists between certain thoughts (i.e. passions in this case) and certain bodily motions: “[o]ur soul and our body are so linked [*il y une telle liaison entre nostre ame & notre corps*] that the thoughts which have accompanied [*accompagné*] some movements of our body since our life began still accompany them at

⁹⁵ “[I]e ne vois point comment on peut savoir les divers mouvements du sang, qui causent les cinq passions primitives, puisqu’elles ne sont jamais seules.” (Elisabeth à Descartes, 25 avril 1645, AT IV 404) Notice that this question seems to imply that in the draft Descartes talks only of five primitive passions, not six as he does in the treatise (joy, sadness, love, hatred, wonder and desire). But if, as it appears to be the case, wonder is the one left aside, there is a reason for the exclusion. “It is true that wonder has its origin in the brain, and cannot be caused solely by the condition of the blood, as joy and sadness can. Yet by means of the impression it makes in the brain, it can act on the body just like any other passion, and in a way more effectively because the surprise which it involves causes the promptest of all movements” (To Princess Elizabeth, May 1646; AT IV 409 : CSMK 286). Thus, Elisabeth could simply have left wonder aside precisely because it is the only primitive passion which “has no relation with the heart and blood,” as Descartes himself acknowledges again in the treatise, in an article itself titled “In this passion [wonder] there occurs no change in the heart or in the blood”: “It is a peculiarity of this passion that we do not find it accompanied by any change in the heart or in the blood, such as occurs in the case of the other passions. The reason for this is that it has as its object not good or evil, but only knowledge of the thing that we wonder at. Hence it has no relation with the heart and blood, on which depends the whole well-being of our body, but only with the brain, in which are located the organs of the senses used in gaining this knowledge.” (*Passions* II, art. 71, AT XI 381 : CSM I 353)

⁹⁶ “[E]n chacune de ces passions, n’est pas de mesme en tous les temperaments : & le mien fait que la tristesse m’emporte toujours l’appetit, quoy qu’elle ne foit meslée d’aucune haine, me venant seulement de la mort de quelque ami.” (Elisabeth à Descartes, 25 avril 1645, AT IV 404-405)

⁹⁷ “Lorsque vous parlez des signes extérieurs de ces passions, vous dites que l’admiration, iointe a la ioye, fait enfler le poumon a diverses secousses, pour causer le rire. A quoy ie vous supplie d’ajouter de quelle fasson l’admiration (qui, selon vostre description, semble n’operer que sur le cerveau) peut ouvrir si promptement les orifices du coeur” (Elisabeth à Descartes, 25 avril 1645, AT IV 405).

⁹⁸ This serves him to explain why the same passion may have different bodily effects in different people (To Princess Elizabeth, May 1646, AT IV 409 : CSMK 286) and whether the “external signs that usually accompany passions” can also be produced by other causes (To Princess Elizabeth, May 1646, AT IV 410-11 : CSMK 287).

present; so that if the same movements are excited afresh by some external cause, they arouse in the soul the same thoughts; and conversely, if we have the same thoughts they produce the same movements” (To Princess Elizabeth, May 1646, AT IV 408 : CSMK 286). This principle becomes in the treatise “the principle which underlies everything I have written about them [the passions]” (*Passions* II, art. 136, AT XI 428 : CSM I 375). The fact that Descartes considers it a “principle of physics” provides further support for the interpretation according to which saying that Descartes is studying passions as a *physicien* does not mean the soul is excluded, and thus the study of human nature (as part of Physics) can lead us to the study of morals (as the study of what is naturally good for the soul).

The third “principle of Physics” seems to be a particular application of the second one to passions. Certain thoughts--Descartes mentions, as an example, “a single thought of joy or love”--are “sufficient” to cause the motion of the animal spirits. “Finally, the machine of our body is constructed in such a way that a single thought of joy or love or the like is sufficient to send the animal spirits through the nerves into all the muscles needed to cause the different movements of the blood which, as I said, accompany the passions” (To Princess Elizabeth, May 1646, AT IV 408 : CSMK 286).

Notice that Descartes avoids here talking of the relationship between mind and body in causal terms. He simply says that bodily motions “accompany” (*accompagner*) certain thoughts and vice versa, which is probably a more proper way of talking if we want to be consistent with the idea that the union means *one*, not two joined. In this sense, all we can say is that every time one occurs the other occurs (thought and bodily motion). And second, this principle appears, at first sight, to be compatible with (a) the existence of a mind-body union *prior* to the different *unions* which may occur in our lifetime--and thus the former would be different from the sum of the latter; and (b) a mind-body union understood as the result of the sum of all the *unions* established during our lifetime. The second option is suggested in a later letter to Chanut in 1647:

The soul’s natural capacity for union with a body brings with it the possibility of an association between each of its thoughts and certain motions [*de ce que nostre ame est de telle nature qu’elle a pû ester unie à un corps, elle a aussi cette propriété que chacune de ses pensées se peue tellement associer avec quelques mouvements*] or conditions of this body so that when the same conditions recur in the body, they induce the soul to have the same thought; and conversely when the same thought recurs, it disposes the body to return to the same condition. In the same way when we learn a language, we connect the letters or the pronunciation of certain words, which are material things, with their meanings, which are thoughts, so that when we later hear the same words, we conceive

the same things, we remember the same words. (To Chanut, 1 February 1647, AT IV 604 : CSMK 307)

If the very possibility of the associations between thoughts and bodily motions is grounded on “the soul’s natural capacity for union with a body,” each of those associations could be viewed as an actualization of that “capacity.” The set of those natural associations (between thoughts and bodily motions) would be unique to each mind-body union. The specific historical origin of those associations is, in fact, one of the factors which explain, according to Descartes, why the same passion may be accompanied by different bodily motions in different people, one of Elizabeth’s questions after having read the draft. Thus, for example, whereas sadness results in lack of appetite in the princess, it makes Decartes hungry:

I quite believe that sadness takes away many people’s appetite; but because I have always found in my own case that it increases it, I have based my account on that, I think that the difference between people in this matter arises thus: for some people the first thing that made them sad as babies was their not getting enough food, while for others it was that the food received was bad for them. In the latter case, the movement of animal spirits which takes away the appetite has ever afterwards remained joined with the passion of sadness. We see also that the movements which accompany other passions differ slightly from person to person, and this can be attributed to some similar cause. (To Princess Elizabeth, May 1646, AT IV 409 : CSMK 286)

Descartes does not elaborate more on this idea in the letter. But we can extract some implications for the study of passions. One is that, not only the set of natural associations (*liaisons*) of certain thoughts and certain passions differs in each mind-body union, but that it can also potentially change in our lifetime. Another one is that, according to the above account, the thought *that happens to accompany the first* experience of each of our passions seems to determine the first association between that thought and a particular passion. This would imply that, in principle, *any* thought could be “accompanied” by *any* passion. But there are some indications in this letter, and there will be more in the treatise, against this view.

First of all, Descartes considers those differences among natural associations (in different people) as minor ones: “the movements which accompany other passions differ *slightly* [*pas entierement semblables*] from person to person” (my italics). Second, judging from the example he provides—although it may not be conclusive—it seems that, at least, thoughts about goods (*representations of goods* in the terminology of the treatise) are joined to passions that will incline us towards those goods, and thoughts about evils (representations of an evil) are joined to passions that will incline us to avoid them.

Thus, in the above case, it would be within the *natural order* to experience sadness both when we receive bad food and when we do not receive any, but it seems that it would not be within the natural order to feel joy in any of those circumstances. Notice there is an important assumption here, which will be explicit in the treatise: both the experiences of not having food and of receiving bad food have been naturally associated to the representation of an evil. We have to assume this because without the latter representation sadness cannot be aroused (*Passions* II, art. 92). If, for some reason, we enjoyed the lack of food, we would experience joy (*Passions* II, art. 138) since a representation of a good would have occurred.

A different question is whether we can associate the same representation of an object, in principle associated to the *representation of an evil*, to a *representation of a good*. We can. This is, in fact, one of the ways to “acquire an absolute power over [one’s] passions” Descartes proposes in the treatise (*Passions* I, art. 50). But notice that in this case we are altering the association between two thoughts, not between a thought and a bodily motion. We cannot alter the association between the representation of an evil and the bodily motions (proper of sadness) that may follow.

That the union of mind and body precedes the specific historical associations of thoughts is implicit in the letter to Chanut of 1 February 1647, where Descartes provides some interesting details about how the *union* between mind and body could have been established. The union seems to precede birth but is, afterwards, in *progress*--insofar as new specific *associations* of thoughts and bodily changes can occur during our lifetime. Not all those associations, however, occur after birth. Some passions, in fact, occurred for the first time before birth—in particular, joy, love, sadness and hatred. Their corresponding intellectual emotions, however, could occur only after birth because before birth “the soul was so attached to matter that it could not yet do anything else except receive various impressions from it” (To Chanut, 1 February 1647, AT IV 605 : CSMK 308), that is it could *perceive* but not have rational thoughts (and thus not intellectual emotions).

Those four passions [joy, love, sadness, hatred], I believe, were the first we had, and the only ones we had before our birth. I think they were then only sensations or very confused thoughts, because the soul was so attached to matter that it could not yet do anything else except receive various impressions from it. (To Chanut, 1 February 1647, AT IV 605 : CSMK 308).

As to how each of these passions occurred for the first time, this is what Descartes says about love:

Before birth, love was caused only by suitable nourishment which, entering in abundance into the liver, heart and lungs, produced an increase of heat: this is the reason why similar heat still always accompanies loves even though it comes from other very different causes. (To Chanut, 1 February 1647, AT IV 606 : CSMK 308)

Thus the presence of “suitable nourishment” appears to be the first cause of the series of bodily motions that characterize the passion of love. What else, besides these motions, love is, is not taken into account here. Descartes does not either address the question of how, later on in life, similar bodily motions can be triggered without the presence of suitable nourishment. All we know (from this letter) is that after the first *experience* of the bodily motions (proper of certain passions), we “began to have other joys and other loves,” particularly “intellectual” ones:

Some years later it began to have other joys and other loves besides those which depend only on the body’s being in a good condition and suitably nourished, but nevertheless the intellectual element in its joys or loves has always been accompanied by the first sensations which it had of them, and even the motions or natural functions which then occurred in the body. (To Chanut, 1 February 1647, AT IV 606 : CSMK 308)

The intellectual emotions “have always been accompanied” by the “first sensations”. A possible reason why, from this moment on, intellectual joy, for example, has been “accompanied” by the first “sensation” of joy could be because the first sensation also caused a certain thought (a representation of a good in this case). That thought itself, later on, will bring about the sensation that first accompanied it. Besides this, we can also expect the first associations between thoughts and certain bodily motions to be particularly strong. “[T]here is no doubt that the bodily conditions that were the first to accompany our thoughts when we came into the world must have become more closely connected with them than those which accompany them later” (To Chanut, 1 February 1647, AT IV 604 : CSMK 307). This explains, according to Descartes, among other things, “the origin of the heat felt around the heart, and the other bodily conditions that accompany love” (To Chanut, 1 February 1647, AT IV 604 : CSMK 307). This is how the former (heat) explains the latter (love)—as well as why joy, love, hatred and sadness must have been the first passions we had:

I consider it probable that the soul felt joy at the first moment of its union with the body, and immediately after it felt love, then perhaps also hatred, and sadness; and that the same bodily conditions which then caused those passions have ever since naturally accompanied the corresponding thoughts. I think that the soul’s first passion was joy, because it is not credible that the soul was put into the body at a time when the body was

not in a good condition; and a good condition of the body naturally gives us joy. I say that love followed because the matter of our body is in perpetual flux like the water in a stream, and there is always need for new matter to take its place, so that it is scarcely likely that the body would have been in a good condition unless there were nearby some matter suitable for food. The soul, uniting itself willingly to that new matter, felt love for it; and later, if the food happened to be lacking, it felt sadness. And if its place was taken by some other matter unsuitable as food for the body, it felt hatred. (To Chanut, 1 February 1647, AT IV 604-605 : CSMK 307-308)

Notice a few important ideas worth keeping in mind for when we revisit the issue later on: (1) The very first passion we experienced must have been joy because “it is not credible that the soul was put into the body at a time when the body was not in a good condition”; (2) “a good condition of the body naturally gives us joy”; (3) love must have been the *second* passion we experienced precisely because “it is scarcely likely that the body would have been in a good condition unless there were nearby some matter suitable for food”; (4) sadness and hatred must have followed love as soon as the food was lacking or “its place was taken by some other matter unsuitable as food”; and (5) if we take literally the expression “the soul was put into the body” [*que l’ame ait esté mise dans le corps*] then, we can at least conclude that the first moment of the union was not the result of an action of the soul. Whether “being put in the body” and becoming *one* with the body are one and the same event is not clear.

Descartes says that he considers “it probable that the soul felt joy at the first moment of its union with the body”. But did the union precede that joy or was that joy simply the first of many other potential unions? On one hand, since we know that the cause of that first joy was the “good condition” of the body, we could think that the soul could not have perceived that condition without being joined to the body. On the other, we could think that *joining* the body and feeling *joy* not only occurred simultaneously but they were one and the same event. In this sense, as suggested above, each mind-body union would simply be the sum of all the unions that have occurred during its lifetime, that is, mind-body unions would differ from each other on the set of natural associations established.

The above explanation of the first occurrence of joy, sadness, love and hatred, seems to indicate also that the first associations between the thoughts and the bodily motions proper of these passions are universal, the same for any mind-body union. This, together with the list of primitive passions Descartes gives in the treatise—wonder, joy, sadness, love, hatred, and desire, being the rest of the passions “species” or “composed” of them (*Passions* II, art. 69, AT XI 380 : CSM I 353)—suggests that all passions are *universal*, at least, insofar as they refer to the body. The discussion in Chapter 3 of the

function of both wonder and desire, on one hand, and of the distinction between passions *about the body* and passions *about the soul* (*Passions* II, arts. 137 and 139) will clarify this.

II. THE CAUSAL (PHYSIOLOGICO-MENTAL) ACCOUNT

INTRODUCTION

Descartes claims to be studying the passions as a “natural philosopher [*physicien*], and not as a rhetorician or even as a moral philosopher” (*Passions*, Prefatory letters, AT XI 326 : CSM I 327). This confines his work to the *nature* of our passions, which is part of the study of human nature as defined two years earlier in the *Principles* (Preface to French Edition, AT IXB 14 : CSM I 186). And since to know about our nature means to know about our body, our soul, and their functions, “there is no better way of coming to know about our passions than by examining the difference between the soul and the body, in order to learn to which of the two we should attribute each of the functions present in us” (*Passions* I, art. 2, AT XI 328 : CSM I 328).

As to how he should proceed, since “[t]he defects of the sciences we have from the ancients are nowhere more apparent than in their writings on the passions” (*Passions* I, art. 1, AT XI 327 : CSM I 328)—these are the opening words of the treatise-- Descartes feels “obliged to write just as if I were considering a topic that no one had dealt with before me” (*Passions* I, art. 1, AT XI 327-28 : CSM I 328).⁹⁹ The topic, on the other hand, “does not seem to be one of the more difficult to investigate,” which means for Descartes that an examination of how one “feels passions in himself” should yield enough “observations to establish their nature” (*Passions* I, art. 1, AT XI 327 : CSM I 328).¹⁰⁰

Thus, Descartes starts his study by attempting to determine whether passions are functions *of the body* or functions *of the soul*. Having assumed these to be exclusive options, Descartes proceeds to

⁹⁹ “[T]he teachings of the ancients about the passions are so meager and for the most part so implausible that I cannot hope to approach the truth except by departing from the paths they have followed.” (*Passions* I, art. 1, AT XI 327-28 : CSM I 328)

¹⁰⁰ “This topic, about which knowledge has always been keenly sought, does not seem to be one of the more difficult to investigate since everyone feels passions in himself and so has no need to look elsewhere for observations to establish their nature.” (*Passions* I, art. 1, AT XI 327 : CSM I 328)

examine first the body. And since “anything in us which we cannot conceive in any way as capable of belonging to a body must be attributed to our soul” (*Passions* I, art. 3, AT XI 329 : CSM I 329), the conclusion--as to whether the functions we consider passions belong to the body or to the soul—should follow by elimination. Descartes does not, however, provide a reason as to why we should proceed in this way, why first the body and then a conclusion about the soul by exclusion.¹⁰¹ This step leaves open the question of whether, had Descartes proceeded otherwise (i.e. by examining the soul first), he would have reached a different conclusion. The body-or-soul dilemma seems in conflict with a *third* possibility which acquires validity throughout the treatise, namely that passions “belong” to (i.e. are “functions” of) the mind-body union: “[T]hey [the passions] are all ordained by nature to relate to the body, and to belong to the soul only insofar as it is joined with the body” (*Passions* II, art.137, AT XI 430 : CSM I 376).

In order to determine what belongs to the body, the general “rule” he follows is consider so that which is common to humans and “wholly inanimate bodies,” that is, what can be explained purely in material terms. “We shall not find this very difficult [to decide which functions belong to the body and which ones to the soul] if we bear in mind that anything we experience as being in us, and which we see can also exist in wholly inanimate bodies, must be attributed to the body” (*Passions* I, art.3, AT XI 329 : CSM I 329). At the same time, “because we have no conception of the body as thinking in any way at all, we have reason to believe that every kind of thought present in us belongs to the soul” (*Passions* I, art. 4, AT XI 329 : CSM I 329). His dualism, and the definition of its terms, then, only leaves us with this option.

As to inanimate bodies their motion depends only on heat (“fire is the corporeal principle underlying all these movements of our limbs” [*Passions* I, art. 8, AT XI 333 : CSM I 331]),¹⁰² which means the principle of their motion “belongs solely to the body”.¹⁰³ In humans, an examination of the “functions belonging to the body” (“Having thus considered all the functions belonging solely to the body...” [*Passions* I, art.17, AT XI 342 : CSM I 335]) reveals that passions are not among them (see *Passions* I, arts. 4-16), that is, that passions cannot be explained in terms of matter and heat. Although it

¹⁰¹ Other passages, however, suggested that the other option—first the soul and then the body—could have been equally acceptable: “[i]t is to the body alone that we should attribute everything that can be observed in us to oppose our reason.” (*Passions* I, art. 47, AT XI 365 : CSM I 346)

¹⁰² “While we are alive there is a continual heat in our hearts, which is a kind of fire that the blood of the veins maintains there. This fire is the corporeal principle underlying all the movements of our limbs.” (*Passions* I, art. 8, AT XI 333 : CSM I 331)

¹⁰³ “Since we do not doubt that there are inanimate bodies which can move in as many different ways as our bodies, if not more, and which have as much heat or more [...] we must believe that all the heat and all the movements present in us, in so far as they do not depend on thought, belong solely to the body.” (*Passions* I art. 4, AT XI 329 : CSM I 329)

is not clear whether Descartes intends to be exhaustive (regarding the functions proper of the body) he shows that the “movement of the heart” (*Passions* I, art.9), the production of the animal spirits in the brain (*Passions* I, art. 10), the movements of the muscles (*Passions* I, art. 11), and the action of “external objects upon the sense organs” (*Passions* I, art. 12), are functions of the body. They can be explained in terms of (a) organs--“a heart, brain, stomach, muscles, nerves, arteries, veins, and similar things” (*Passions* I, art. 7, AT XI 331 : CSM I 330)--; (b) “animal spirits and nerves”--which “help produce movements and sensations, or what corporeal principle makes them act”--; and (c) heat--“a continual heat in our hearts, which is a kind of fire that the blood of the veins maintains there” and which is “the corporeal principle underlying all the movements of our limbs” (*Passions* I, arts. 7-8, AT XI 332 : CSM I 333). Assuming the functions of the body discussed by Descartes represent an exhaustive list, at this point we should probably simply say that passions, whatever they are, they are *not only* functions of the body. Descartes seems to argue, however, that this means they are functions *of the soul*.

But it soon seems that this way of reasoning was not even of much value because *we know* they are thoughts:

Having thus considered all the functions belonging solely to the body, it is easy to recognize that there is nothing in us which we must attribute to our soul except our thoughts. These are of two principal kinds, some being actions of the soul and others its passions. Those I call its actions are all our volitions, for we experience them as proceeding directly from our soul and as seeming to depend on it alone. On the other hand, the various perceptions or modes of knowledge present in us may be called its passions, in a general sense, for it is often not our soul which makes them such as they are, and the soul always receives them from the things that are represented by them. (*Passions* I, art. 17, AT XI 342 : CSM I 335)

Descartes does not even attempt to show that passions are functions of the soul, that is that they are *only* thoughts—as supposedly he tried to do regarding the functions of the body (*Passions* I, arts. 9-16)—or, negatively, that corporeal matter and motion are not enough to explain the passions. The conclusion follows rather from the definition of passions. Since our passions are thoughts and “it is easy to recognize that there is nothing in us which we must attribute to our soul except our thoughts” (*Passions* I, art. 17, AT XI 342 : CSM I 335), we must admit that passions are functions of the soul.

But why should we accept that all the functions of the soul are thoughts? Could a corporeo-mental event not be also a *function* of the soul and yet not be only thought? Similarly, Descartes has not either considered the possibility of functions of the body not reducible to matter and motion, or the

possibility of functions which, properly speaking, would not be either of the body or of the soul, but, as suggested above, of the mind-body union. All this will not be so clear at the end of the treatise but, at the onset, Descartes seems to be clearly writing under a firm dualistic assumption--within which the passions will reveal themselves as an *anomaly*.

In any case, thoughts, as we have read, can be of “two principal kinds, some being actions of the soul and others its passions”: (a) “actions are all our volitions, for we experience them as proceeding directly from our soul and as seeming to depend on it alone”; and (b) “the various perceptions or modes of knowledge present in us may be called its passions, in a general sense, for it is often not our soul which makes them such as they are, and the soul always receives them from the things that are represented by them” (*Passions* I, art. 17, AT XI 342 : CSM I 335).

We have seen this idea in the correspondence but it has not been so clearly expressed before in his major works.¹⁰⁴ This means, first of all, that we are “animate” insofar as we have the ability to have volitions, insofar as we can *act* in the true sense, that is, initiate motions (motions which “proceed directly from our soul” and “depend on it alone”).¹⁰⁵ And, as it will be clearer in the following pages, to say that *passions* are always *received* by the soul (“the soul always receives them from the things that are represented by them”) means that the mental event Descartes thinks we should properly call a passion (1) is *not* an event that *initiates* change—it is instead motion that is a stage of a longer process--and, (2) it is *not* a motion initiated by the soul. This does not mean that the soul cannot be cause of passions, i.e. that it cannot start a process that may result in a passion. It can do it by, for example, bringing about thoughts which in turn may arouse certain passions.

Within “passions” (in a general sense) Descartes considers in the treatise our “perceptions and modes of thought”. This includes sensations, natural appetites, and passions in the strict sense—that is

¹⁰⁴ “[W]e should use the term ‘action’ for what plays the role of a moving force [*parte motoris*], like volition in the mind, while we apply the term ‘passion’ to what plays the role of something moved [*parte moti*], like intellection and vision in the same mind. Those who think perception should be called an action are apparently taking the term ‘action’ to mean any real power; for since they think perception is an action, they would no doubt say that the reception of motion in a hard body, or the power whereby it receives the motions of other bodies, is an action. Yet it is incorrect to say this, since the ‘passion’ correlative to this action would exist in the body that is moved. Those who say that every action can be taken [*actionem omnem ab agente auferri*] from that which acts are correct if by ‘action’ they mean merely motion, but incorrect if they mean to include every kind of power under the term ‘action’ [*si omnem vim sub nomine actionis veint comprehendere*].” (To Regius, December 1641, AT III 455 : CSMK 199)

¹⁰⁵ In some places Descartes seems to leave the door open to other actions but does not name any, e.g.: “volition [...] is the only, or at least the principal activity of the soul” (*Passions* I, art. 13, AT XI 339 : CSM I 333). In the correspondence he mentioned at least two actions of the soul, judgments and imagination, but there is no reason not to think they are just different types of volitions (see To Princess Elizabeth, 6 October 1645, AT IV 312 : CSMK 271). An important change occurs, however, between the *Principles* and the *Passions*. In the *Principles* “desire, aversion, assertion, denial, and doubt are various modes of willing” (*Principles* I, art. 32, AT VIII 17 : CSM I 204). In the *Passions* desire is a passion, one of the six basic ones, not a volition.

fear, love, joy and so on (see *Passions* I, arts. 23-25). But it also includes: (a) the perceptions the soul may have of its own willing—even if “we do not normally call it a ‘passion’, but solely an ‘action’” (*Passions* I, art.19, AT XI 343 : CSM I 336);¹⁰⁶ and (b) the “imaginings and other thoughts formed by the soul” (insofar as they are perceived)—even if, again, “we usually regard these perceptions as actions rather than passions” (*Passions* I, art. 20, AT XI 344 : CSM I 336).

This distinction between actions and passions should also serve to question a common reading among commentators of Descartes’ brief remarks at the very beginning of the treatise on the difference between action and passion in general. There Descartes writes that “although an agent and a patient are often quite different, an action and passion must always be the same thing [*une mesme chose*] which has these two names on account of the two different subjects to which it may be related” (*Passions* I, art. 1, AT XI 328 : CSM I 328 [translation revised]). This has quite often been understood as meaning that we can say of any passions that it is also an *action*. This is not an appropriate reading. We cannot say so—unless all is meant by it is that for a passion to occur *there must be an action* (but not vice versa). So, what does Descartes mean by “an action and a passion must always be the same thing”? It means they refer (i.e. are referred) to the same event. But they are “related” to “two different subjects”. My volition to raise my arm is not different from the motion of the arm. However, whereas the soul is actor, the arm is patient. My perception of that motion, still part of the same process, is also a passion, not an action (because the soul is *moved*, not a moving agent) (see *Passions* I, art.19). As he himself put it in the letter to Regius of December 1641, “[t]hose who say that every action can be taken [*actionem omnem ab agente auferri*] from that which acts are correct if by ‘action’ they mean merely motion, but incorrect if they mean to include every kind of power under the term ‘action’” (To Regius, December 1641, AT III 455 : CSMK 199). But it is also true that, despite the relevance of this distinction, Descartes uses terms such as “act,” “action,” and “activity” as if they were synonyms of *motion* or *change* rather than of *action* in the true sense (equivalent to *initiating motion* or *power to create motion*).¹⁰⁷

This question is not a minor one. It brings to prominence a fundamental distinction between mind and body in terms of actions and passions--which contrasts with the usual characterizations of the dualism

¹⁰⁶ “It is certain that we cannot will anything without thereby perceiving that we are willing it. And although willing something is an action with respect of the soul, the perception of such willing may be said to be a passion in the soul. But because this perception is really one and the same thing as the volition, and names are always determined by whatever is most noble, we do not normally call it a ‘passion’, but solely an ‘action’.” (*Passions* I, art.19, AT XI 343 : CSM I 335-336)

¹⁰⁷ See e.g. *Passions* I, arts. 8, 13, 16, 23 and 24.

in terms of thinking vs. extension. Confusing actions with passions may lead us to attribute the “power” to act to matter.¹⁰⁸ Descartes does not say that a passion in the soul is an action *of* the body. He says that “what is a passion in the soul is usually an action *in* the body [*en luy une action*]” (*Passions* I, art. 2, AT XI 327 : CSM I 328; my italics). This also means that only the mind can *create* motion. And it explains why we should not establish a similar distinction between actions and passions *of the body*. Matter is not a subject of which we can predicate actions taking the latter as defined in the 1641 letter to Regius (“we should use the term ‘action’ for what plays the role of a moving force [*parte motoris*], like volition in the mind, while we apply the term ‘passion’ to what plays the role of something moved [*parte moti*]” [To Regius, December 1641, AT III 455 : CSMK 199]). About matter we can only predicate, if anything, *passions*, but not actions, which is not different from saying that matter can be *in motion* but cannot act (“variation in mater or diversity in its many forms depends on motion” [*Principles* II, 23, AT VIII A 52 : CSM I 232]). It would not be improper, then, to talk about both passions *of the soul* and passions *of the body*.¹⁰⁹ In fact, the passions of the soul, insofar as they always require the body, are also passions of the body (i.e. changes in matter). But we cannot explicate them (passions of the soul) in terms of the latter because, as it will be clearer below, their arousal requires at least one thought and they bring about a certain disposition of the will.

Summing up so far, we know that passions are functions of the soul, are thoughts, and are, in particular, *passive* thoughts (as opposed, particularly, to volitions which are actions), that is perceptions (“the various perceptions or modes of knowledge present in us may be called its passions” [*Passions* I, art.17, AT XI 342 : CSM I 335]).

Among the perceptions, Descartes mentions three main types--besides our imaginings (not to be confused with the imagination, which is an action) and the perceptions of our volitions, as mentioned above. These three types are: (a) “perceptions we refer to things outside us” [*perceptions que nous rapportons aux objets qui sont hors de nous*]; (b) “perceptions we refer to our body or to certain of its

¹⁰⁸ “[T]he nature of matter, or body considered in general, consists not in its being something which is hard or heavy or coloured, or which affects the senses in any way, but simply in its being something which is extended in length, breadth and depth.” (*Principles* II, 4, AT VIII A 42 : CSM I 224)

¹⁰⁹ Descartes himself seems actually to talk about *passions of the body* even if he does not use this term. According to him, our volitions are of two sorts depending on whether they “terminate” in the soul or in the body. They are of the first kind—i.e. they terminate in the soul—“when we will to love God or, generally speaking, to apply our mind to some object which is not material” (*Passions* I, art. 18, AT XI 343 : CSM I 335). An example of the second sort of volition—i.e. the one which terminates in the body—would be “our merely willing to walk” which “has the consequence that our legs move and we walk” (*Passions* I, art. 18; AT XI 343 : CSM I 335). Walking, then, would be a clear case of a *passion of the body*.

parts” [*perceptions que nous raportons à nostre corps*]; and (c) “perceptions we refer only to the soul” [*perceptions que nous raportons à nostre ame*] (*Passions* I, arts. 22-25, AT XI 345-48 : CSM I 336-37). The latter include “feelings of joy, anger and the like” and “are aroused in us sometimes by the objects which stimulate our nerves and sometimes also by other causes” (*Passions* I, 25, AT XI 347 : CSM I 337) (see Figure 1). This type of perceptions—the ones “we refer to our soul”—are the ones Descartes properly calls “passions of the soul”:

[A]ll our perceptions, both those we refer to objects outside us and those we refer to the various states of our body, are indeed passions with respect to our soul, so long as we use the term ‘passion’ in its most general sense; nevertheless we usually restrict the term [passions of the soul] to signify only perceptions which refer to the soul itself. And it is only the latter that I have undertaken to explain here under the title ‘passions of the soul’.” (*Passions*, art. 25, AT XI, 347-48 : CSM I 337-38)

Thus a new defining feature of the passions is that they are passions in a restricted sense; they are *perceptions* which “we refer to the soul”. The latter expression—specially the words “we refer to” [*que nous raportons à*—is a bit ambiguous and has created some debate among scholars. The emphasis on “we refer” [*nous raportons*]—that he repeats for each of the three cases (although he uses it also, at least once, without “we” [“perceptions which refer to the soul itself” (*Passions* I, art.25, AT XI 348 : CSM I 337)]—may indicate that Descartes is simply following certain common usage rather than trying to give a definite account (he never uses “they refer to” or “they refer us to”).

In fact, the criteria he follows in order to justify this “we refer to” seem to change depending on the type of perceptions. Explaining the first type—“perceptions we refer to objects outside us”—Descartes says they are “caused by these [external] objects, at least when our judgments are not false” [*sont causées (au moins lors que nostre opinion n’est point fausse) par ses objets*] (*Passions* I, aer.23; AT XI 346 : CSM I 337; my italics), and this seems to be the reason why “we refer” these passions to the external objects.¹¹⁰ And when he explains the perceptions which “we refer to our body”—which are “hunger, thirst, and other natural appetites,” as well as “pain, heat and the other states we feel as being in our limbs and not as being in objects outside us”—the emphasis seems to be as much on the cause (changes in the body are supposedly the cause of “natural appetites”) as on the apparent object of the perceptions (they are, we can say, about the body as a whole—natural appetites—or about particular limbs—pain, heat and

¹¹⁰ “The perceptions we refer to things outside us, namely to the objects of our senses, are caused by these objects, at least when our judgements are not false.” (*Passions* I, art. 23; AT XI 346 : CSM I 337)

similar “states”). Finally, when he explains “the perceptions we refer to our soul” in *Passions* I, art.25, he writes that “the perceptions we refer to the soul are those *whose effects* we feel as being in the soul itself, and for which we do not normally know any proximate cause to which we can refer them” (*Passions* I, art.25; AT XI 347 : CSM I 337; my italics). Thus in one case—for sensations and appetites--Descartes uses “we refer to” as meaning “caused by” or “are about,” and in the other—for the passions of the soul-- as meaning “subject of its effects”.

But it is, however, possible to read this “we refer to” consistently in the three cases as being equivalent to “they are about” in a representational sense. Thus, whereas sensations would be *about* external objects, and appetites *about* the body, passions would be *about* the soul. But, in a sense, all perceptions (passions in a general sense), as Descartes says, are passions “with respect to our soul”:

Now all our perceptions, both those we refer to objects outside us and those we refer to the various states of our body, are indeed passions with respect to our soul, so long as we use the term ‘passion’ in its most general sense; nevertheless we usually restrict the term to signify only perceptions which refer to the soul itself. And it is only the latter that I have undertaken to explain here under the title ‘passions of the soul’. (*Passions* I, art. 25; AT XI 347-48 : CSM I 337-38)

Since all our passions are perceptions, all of them are “of the soul” in its genitive sense, that is, insofar as they *belong to* the soul. But when Descartes says he is going to use the expression “passions of the soul” to refer to passions in its restricted sense, that is to refer to joy, fear, jealousy and so on, we could understand he is using the phrase as an abbreviation of the longer expression “passions of the soul (i.e. which the soul has) *that we refer to* the soul,” that is as opposed to other *passions* in the general sense, i.e. other passions the soul has but which we do *not* refer to the soul (such as sensations and appetites). In other words, Descartes’ adoption of “passions of the soul” as an appropriate phrase to refer to passions in the restricted sense (as opposed to passions of external objects or passions of our body, for example) seems to be a confirmation that he understands the original “we refer to the soul” as some form of “they are *about* the soul”—and not just as they *belong to the soul*, which would be of much value since it would include also sensations and appetites. Like other perceptions of the soul, these are also perceptions *of (about) something*, and that something is the soul.

Thus, Descartes’ classification in three types (external bodies, body and soul) would be consistent with the idea that we can divide them according to *that towards which they point*, or that *about which* they are. This idea is quite explicit somewhere else: “the various perceptions or modes of knowledge

present in us may be called its passions, in a general sense, for it is often not our soul which makes them such as they are, and the soul always receives them *from the things that are represented by them*” (*Passions* I, art. 17, AT XI 342 : CSM I 335; my italics). Together with the idea that they are *about the soul*, this would mean that our soul is that which is *represented* by our passions. In which sense this is so is a much more complicated question and we need to know more about the theory before addressing it. But notice, in any case, that this obviously is not so simply because passions are thoughts--sensations are thoughts which are *not* about the soul; and that to say that passions are about the soul would *not* be equivalent to saying that our sensations are about the motions of the spirits that make them possible. Our passions are, at least in a sense, about the soul as the *object* represented by them.

This conclusion also avoids the classification of passions (in the general sense) with respect to causes and effects. Talking, as Descartes does in the third case, about *that where the effect takes place* does not seem to help to establish distinctions because that is, by definition, the soul in the three cases. And talking about *three different causes*-- external objects, our body and soul--would force us to say, for example, that anger is caused by the soul—which can be true, but only indirectly, and, in any case, does not exhaust the possible causes of the passions Descartes himself admits (see *Passions* II, art. 51). Furthermore, Descartes implicitly denies that the cause of passions (in the strict sense) is the soul by saying that (1) our perceptions are of two sorts: “some have the soul as their cause, others the body” (*Passions* I, art. 19; AT XI 343 : CSM I 335), and (2) “those having the soul as their cause are the perceptions of our volitions and of all the imaginings or other thoughts which depend on them” (*Passions* I, art. 19; AT XI 343 : CSM I 335). In other words, passions in the strict sense are *not* among the passions “having the soul as their cause”.

This leaves us with still another reason why they are called “passions of the soul”—and not say “passions of the body” or “passions of the mind-body union”—even if the name does not seem to capture all the essence of the object in any case. Descartes does make clear in a number of places that body and mind are joined, that passions are an instance of the body “act[ing] directly” on the soul (“we are not aware of any subject which acts more directly upon our soul than the body to which it is joined” [*Passions* I, art. 2; AT XI 328 : CSM I 328]), and his account of the passions—as we will see throughout this exposition--leaves no doubt about the simultaneous role of both the body and the soul in the generation and maintenance of the passions. However, when it comes to names, “names are always determined by whatever is most noble” (*Passions* I, art.19; AT XI 343 : CSM I 336). Thus, in the relationship body-soul—as it is manifest (or as it takes place) in the passions--the body is “only the lesser

part,” which means “we should consider the passions chiefly in so far as they belong to the soul” (*Passions* II, art.139; AT XI 432 : CSM I 377). This is a particularly relevant observation in order to avoid the conclusion that saying that “passions of the soul” are *about* the soul means they are *only* about the soul. In the article titled “Definition of the passions of the soul” (*Passions* I, art. 27), he seems to leave open this possibility: they are “perceptions, sensations or emotions of the soul which we refer *particularly* to it [i.e. the soul]” [*qu’on raporte particulièrement à elle*] (*Passions* I, art. 27, AT XI 349 : CSM I 338; my italics). As we will see in Chapter 3 passions of the soul can, in fact, also be said to be about *external objects* in a different sense--without being in conflict with the sense in which they are about the soul; or about the mind-body union.

But why should we assume that Descartes is using “we refer to” in a uniform way in the three cases? If this expression is, as suggested above, equivalent to “we *usually* refer to” and this expression indicates that Descartes is simply trying to talk as we usually do, then it seems to be compatible with a variety of criteria—at least with as many as we may *usually* apply, implicitly or explicitly, when we “refer” to something. That Descartes might consciously be using the expression “we usually refer” very vaguely is supported by a similar one in the same sentence—i.e. “for which we do not *normally* know any proximate cause” (my italics)—and, indirectly, by the different sense in which, in the case of sensations, “we refer” pain or thirst to our body. Thus, let us read again the reason why “we refer to the soul” our passions: “The perceptions we refer only to the soul are those *whose effects* we feel as being in the soul itself, and for which we do not normally know any proximate cause to which we can refer them” (*Passions* I, art.25, AT XI 347 : CSM I 337; my italics). Notice that Descartes is not saying that the perceptions in this case *are* effects in the soul, but rather that the perceptions “whose effects we feel as being in the soul” [*dont on sent les effets comme en l’ame mesme*] are the ones we can call passions of the soul. That is, this would mean that we refer those perceptions (passions) to the soul not because they are *about* the soul but because “we feel” their effects in the soul. Which effects are those?

Fifteen articles later, Descartes talks about “The principal effect of the Passions” (*Passions* I, art. 40). There he says that “the principal effect [*principal effet*] of all the human passions is that they move and dispose the soul to want the things for which they prepare the body” [*incident & disposent leur ame à vouloir les choses ausquelles elles preparent leur corps*] (*Passions* I, art. 40, AT XI 359 : CSM I 343). Thus, if we understand that Descartes is thinking about this disposition of the soul when he talks about the “effects” of our passions, then, we can read those effects as the reason to say that “we refer our passions to the soul”. The passions of the soul appear, thus, as fundamentally different from sensations and

appetites in that when they occur “we feel” a certain disposition of the soul. This does not mean, in any case, that we cannot also talk about the *aboutness* of the passions, but it means that Descartes’ usage of “we refer to” is probably not intended to be a good guide to explore it. Descartes would be rather using the expression to point out *the* crucial difference between these and the other two types of passions.

Notice also that, unlike the other two types, of the passions “we refer to the soul,” “we do not normally know any proximate cause to which we can refer them” (*Passions* I, art.25, AT XI 347 : CSM I 337). We could read this by putting the emphasis on the “normally” [*communement*] above, and take the doubts about the “proximate” cause of the inclination, not as doubts Descartes has but as doubts *people usually have*. But we do not need to avoid Descartes’ implication. We can say that, although we *do* know the “ultimate and *most* proximate cause” of the passions (e.g. *Passions* II, art. 51, AT XI 371 : CSM I 349 [my italics])—which is a “particular movement of the spirits” (*Passions* I, art. 37, AT XI 357 : CSM I 342)—we still do not usually identify their “proximate cause” with *one* type of object. Since this problem arises after Descartes has introduced the distinction between actions and passions of the soul, this suggests that the expression “we refer” can be read literally. It could be a way of expressing that the attribution of certain objects to certain representations is an action of the mind. And as the mind usually “refers” certain representations to certain external objects, and others to our own body, it still has other representations that it does not “usually” refer to only one type of object. Descartes’ use of “we judge” as almost equivalent to “we refer to” in his explanation of the second case—“the perceptions we refer to our body”—is further support for this reading (*Passions* I, art. 24, AT XI 347 : CSM I 337). And so is a similar expression within the explanation of “the perceptions we refer to objects outside us”: “we refer these sensations to the subjects we suppose to be their causes in such a way that we think that we see the torch itself and hear the bell, and not that we have sensory perception merely of movements coming from these objects” (*Passions* I, art. 23, AT XI 346 : CSM I 337).

Let us proceed then with the definition and characterization of the passions *in the restricted sense*. This is the full passage of the article devoted to the definition—which Descartes clarifies in subsequent ones:

After having considered in what respects the passions of the soul differ from all its other thoughts, it seems to me that we may define them generally as those perceptions, sensations or emotions of the soul which we refer particularly to it, and which are caused, maintained and strengthened by some movement of the spirits. (*Passions* I, art. 27, AT XI 349 : CSM I 338-39)

Thus, passions in the restricted sense differ in, at least, four important ways from other perceptions. First, passions are perceptions “if we use this term [i.e. perceptions] generally to signify all the thoughts which are not actions of the soul or volitions, but not if we use it to signify only evident knowledge” [*mais non point losr qu'on ne s'en sert que pour signifier des connoissances evidentes*] (*Passions* I, art. 28, AT XI, 349 : CSM I 339). That passions should not be taken to deliver “evident knowledge” seems to follow from the fact that “the passions are to be numbered among the perceptions which the close alliance between the soul and the body renders confused and obscure” (*Passions* art. 28, AT XI 349-50 : CSM I 339).¹¹¹ Thus, the participation of the body is supposedly the reason for the *confusion* and *obscurity* of the passions.¹¹²

Second, despite being confused and obscure, there is a sense in which passions are the most reliable perceptions we can have. We may make erroneous judgements about the world based on our perceptions, that is, we may refer certain perceptions to the wrong object. In fact, “everything the soul receives by means of the nerves may also be represented to it through the fortuitous course of the spirits.” The representations formed by the latter motion of spirits—i.e. by the “fortuitous course of the spirits”—“is sometimes so similar to the thing it represents that it may mislead us regarding the perceptions which refer to objects outside us, or even regarding those which refer to certain parts of our body” (*Principles* I, art. 26, AT XI 348 : CSM I 338). But when we are “moved” by a passion, as Descartes says, “we cannot be misled in the same way,” at least in a sense: we cannot not refer them to the soul. “[W]e cannot be misled in the same way regarding the passions, in that they are so close and so internal to our soul that it cannot possibly feel them unless they are truly as it feels them to be. [...] [E]ven if we are asleep and dreaming, we cannot feel sad, or moved by any other passion, unless the soul truly has this passion within

¹¹¹ “[E]xperience shows that those who are the most strongly agitated by their passions are not those who know them best, and that the passions are to be numbered among the perceptions which the close alliance between the soul and the body renders confused and obscure.” (*Passions* art. 28, AT XI 349-50 : CSM I 339) This is very similarly expressed in the *Principles*: “I am here thinking of these simply as emotions or passions of the soul, that is, as confused thoughts, which the mind does not derive from itself alone but experiences as a result of something happening to the body with which it is closely conjoined. These emotions are quite different in kind from the distinct thoughts which we have concerning what is to be embraced or desired or shunned.” (*Principles of Philosophy* IV, art. 190, AT VIII A 317 : CSM I 281)

¹¹² Although not made explicit at this point, in the case of the passions of the soul, besides the possible *distortions* caused by physiological changes, the body is also responsible for the *uniqueness* of each individual experience of a passion, which is an obstacle to guarantee the universality proper of evident knowledge. The physiological study of the passions is precisely the study of how each *unique* passion is aroused in each mind-body union. As we will see, certain passions are generated when certain motions of the spirits in the brain cause certain motions in the gland that, in turn, generate particular representations in the soul which are naturally associated to certain passions. Not only we can expect individual differences in the experience of joy, for example, due to our different constitution, but also factors such as past experiences and our will can alter those natural associations and explain why, under similar circumstances, we experience different passions. “[A]lthough the movements (both of the gland and of the spirits and the brain) which represent certain objects to the soul are naturally joined to the movements which produce certain passions in it, yet through habit the former can be separated from the latter and joined to others which are very different.” (*Passions* I, art. 50, AT XI 369 : CSM I 348)

it” (*Passions* I, art.27, AT XI 348-49 : CSM I 338). This seems to refer, primarily, to what he called the “effects” of the passions, that is, the disposition they bring about in the soul. But we could be wrong, of course, about the cause of the passion, about whether, for example, it has been triggered by a “perception we refer to external objects” or not.¹¹³ We can then say that passions are at the same time both *confused and obscure* (regarding their cause) and *reliable* (regarding their effects).

Thirdly, passions (in the restricted sense) differ also from other perceptions in that they can be also considered “sensations” (*Passions*, art.27, AT XI, 349 : CSM I 338). Passions are sensations if we take into account how they “are received into the soul” and how “they are known by the soul”: “[w]e may also call them ‘sensations’, because they are received into the soul in the same way as the objects of the external senses, and they are not known by the soul any differently” (*Passions*, art. 28, AT XI 349 : CSM I 339). What does it mean to say that passions “are received into the soul in the same way as the objects of the external senses” [*sont receuës en l’ame en mesme façon que les objets des sens exterieurs*]? Taken literally, this comparison (of the “objects of the external senses” with the “passions”) is a bit strange since, on one hand, all passions (in the general sense) can be said to be *received* by the soul (by definition of *passion*), and, on the other, although the “objects of the external senses” can also be said to be *received* in the soul (insofar as they generate a motion that ends up moving the soul) we would probably not say that our passions themselves are *received* in the same sense in the soul. The expression is unproblematic if we just take it as a general comparison of sensations and passions of the soul insofar as they are both changes in which the soul is moved. However, as we will see, although the “objects which stimulate the senses” happen to be the “principal and most common causes” of the passions (*Passions* II, art. 51, AT XI 371 : CSM I 349), the soul is moved differently in each case.

And fourth, passions are different from other perceptions in that they are “changes which occur in the soul” and which “agitate and disturb” it more strongly than any other changes that take place in the soul (*Passions*, art.28, AT XI 349 : CSM I 339). For these reasons, “emotions” is according to Descartes the best one-word name for “passions of the soul”:

But it is even better to call them ‘emotions’ of the soul, not only because this term may be applied to all the changes which occur in the soul—that is, to all the various thoughts which come to it—but more particularly because, of all the kinds of thought which the

¹¹³ “Thus often when we sleep, and sometimes even when we are awake, we imagine certain things so vividly that we think we see them before us, or feel them in our body, although they are not there at all. But even if we are asleep and dreaming, we cannot feel sad, or moved by any other passion, unless the soul truly has this passion within it.” (*Passions* I, art. 26, AT XI 348-49 : CSM I 338)

soul may have, there are none that agitate and disturb it so strongly as the passions. (*Passions*, art. 28, AT XI, 349 : CSM I 339)

Descartes will use “emotions” throughout the treatise but not to refer to passions in the strict sense. He uses it to refer to two special cases in which the body is not a causal factor in their arousal: intellectual (see e.g. *Passions* II, art. 93) and internal emotions (*Passions* II, art. 147).

This emphasis on the *agitation* and *disturbance* of the soul seems to entail that Descartes takes this to be a quite defining feature of passions (especially when contrasted to perceptions in general). But since every thought can be said to be a *motion* of the soul, why is this feature so important? Descartes might be thinking about the type of motion of the soul which might be said to be unique of the passions of the soul: the disposition or inclination to act (i.e. the main “effect” of the passions [*Passions* I, art. 40, AT XI 359 : CSM I 343]). That the term ‘emotion’ mainly refers to this inclination to act in Descartes’ usage is supported by his own application of the term to volitions—saying that “these too may be called ‘emotions of the soul which refer to it’” with the difference that volitions “are caused by the soul itself” (*Passions*, art. 29, AT XI 350 : CSM I 339). As we will see, it is also insofar as passions bring about this inclination to act that the study of the nature of passions leads Descartes to a discussion on what we should do when we experience a passion.

2.1. THE CAUSAL PROCESS: PRELIMINARIES

Passions are also different from other perceptions (other agitations) if we take into account how they are caused. As we read above, passions are “caused, maintained and strengthened by *some* movement of the spirits” (*Passions*, art. 27, AT XI 349 : CSM I 338; my italics),¹¹⁴ that is, by a movement of the spirits proper to them—and which distinguishes them, on one hand, from volitions (caused by the soul itself) and, on the other, from sensations in general.¹¹⁵

¹¹⁴ “[W]e may define them [the passions] generally as those perceptions, sensations or emotions of the soul which we refer particularly to it, and which are caused, maintained and strengthened by some movement of the spirits (*Passions*, art. 27, AT XI 349 : CSM I 338)].

¹¹⁵ “I also add that they [the passions] are caused, maintained and strengthened by some movement of the spirits, both in order to distinguish them from our volitions (for these too may be called ‘emotions of the soul which refer to it’, but they are caused by the soul itself), and also in order to explain their ultimate and most proximate cause, which distinguishes them once again from other sensations.” (*Passions*, art. 29, AT XI, 350 : CSM I 339)

Thus, the distinction between passions and other perceptions—i.e. sensations in particular—is not in that the latter are not also somehow caused by a motion of the spirits.¹¹⁶ The difference is in that the motion of the spirits is different in both cases—something he already outlined in the 1645 letters. In the case of the passions, this is what Descartes means by “some particular movement” of the spirits:

[T]hey [the passions] are caused chiefly by the spirits contained in the cavities of the brain making their way to nerves which serve to expand or constrict the orifices of the heart, or to drive blood towards the heart in a distinctive way from other parts of the body, or to maintain the passion in some other way. This makes it clear why I included in my definition of the passions that they are caused by *some particular* movement of the spirits. (*Passions* I, art. 37, AT XI 357 : CSM I 342)

But recall that this motion of the spirits is only the “ultimate and most proximate cause” [*derniere & plus prochaine cause*] of the passions. He repeats the same expression later on: “the ultimate and most proximate cause [*derniere & plus prochaine cause*] of the passions of the soul is simply the agitation by which the spirits move the little gland in the middle of the brain” (*Passions* II, art. 51, AT XI 371 : CSM I 349). As the original French indicates by “ultimate and most proximate cause” Descartes is referring to the very *last* and, consequently, *most proximate*, cause *in the body* before the passion properly speaking occurs. That *specific* motion of the spirits moves the gland and, since the latter is “the principal seat of the soul” (e.g. *Passions* I, art. 32), a thought occurs simultaneously in the soul. In other words, the motion of the gland caused by that specific agitation of the spirits is “ordained by nature” to make the soul feel passions (*Passions* I, art. 36, AT XI 357 : CSM I 342). Thus the special agitation of the spirits is *cause* in a limited sense: only insofar as it is a motion that is *necessary* and *sufficient* for the passions to arouse. It is also the only causal factor that can be said to be *common* to all passions.

We have seen then so far three important differences between passions (in the restricted sense) and sensations: (1) whereas “we refer” sensations to external objects or to our body, “we refer” passions

¹¹⁶ This is his account of how the spirits intervene in the formation of our sensations: “Thus, for example, if we see some animal approaching us, the light reflected from its body forms two images, one in each of our eyes; and these images form two others, by means of the optic nerves, on the internal surface of the brain facing its cavities. Then, by means of the spirits that fill these cavities, the images radiate towards the little gland which the spirits surround: the movement forming each point of one of the images tends towards the same point on the gland as the movement forming the corresponding point of the other image, which represents the same part of the animal. In this way, the two images in the brain form only one image on the gland, which acts directly upon the soul and makes it see the shape of the animal” (*Passions* I, art. 35, AT XI 355-56 : CSM I 341-42).

to the soul; (2) although the motion of the spirits is necessary in both cases, that motion is of a different type in each;¹¹⁷ and (3) a fundamental “effect” of passions is that they incline the soul to act.

But to say that passions are caused by the motion of the spirits is not enough in order to provide a causal account. What triggers that specific motion of the spirits (proper of passions)? At which moment can we say that a passion has occurred? If we are to set meaningful distinctions among the passions, Descartes says, “we must investigate their origins [*sources*] and examine their first causes [*premieres causes*]”. He explicitly enumerates four possible first causes of the agitation of the spirits that eventually results in the passions: (a) “an action of the soul [*l’action de l’ame*],” (b) “the mere temperament of the body [*temperament du corps*],” (my emphasis), (c) “the impressions which happen to be present in the brain” [*impressions qui se rencontrent fortuitement dans le cerveau*], and (d) “objects which stimulate the senses” [*les objets qui meuvent les sens*] (*Passions*, art. 51, AT XI 371 : CSM I 349).¹¹⁸

Notice that, at first sight, these three “causes” seem to be so in quite different senses. Only the first one, “an action of the soul”—understood as the action on the soul as we have volitions—seems to qualify as, properly speaking, *first cause* if by such we are looking for a *first action* or *agent*. The “temperament of the body” and the “impressions in the brain” seem to be rather components of different types of longer causal accounts. As to the “objects which stimulate the senses,” which in appearance are “first causes,” should not qualify as such if this implies to assume that they can *act*. Descartes does not, however, use *cause* throughout the treatise generally as synonymous of *actor* in the sense discussed above. It usually has a much weaker non-technical sense, almost equivalent to *immediate preceding stage in a causal process*.

The “impressions in the brain” and the “temperament of the body” deserve a brief clarification. Descartes talks about the “impressions which *happen to be present* in the brain,” which excludes *new* impressions, at least as *causes* under this case. This is not surprising since, we can assume, in the case of passions that may follow new impressions, we could say the cause of the passion is the cause of the

¹¹⁷ “[W]e may distinguish two kinds of movement produced in the gland by the spirits. Movements of the first kind represent to the soul the objects which stimulate the senses, or the impressions occurring in the brain; and these have no influence on the will. Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions.” (*Passions* I, art. 47, AT XI 365 : CSM I 346)

¹¹⁸ “They [the passions] may sometimes be caused by an action of the soul when it sets itself to conceive some object or other, or by the mere temperament of the body or by the impressions which happen to be present in the brain, as when we feel sad or joyful without being able to say why. From what has been said, however, it appears that all such passions may also be excited by objects which stimulate the senses, and that these objects are their principal and most common causes. From this it follows that, in order to discover all the passions, it suffices to consider all the effects of these objects.” (*Passions*, art. 51, AT XI 371 : CSM I 349)

impression (as, for example, in impressions caused by external objects). As to the “temperament of the body,” the concept is not well defined in the treatise. In at least one place Descartes talks about the “temperament of the body” as opposed to the temperament “of the mind”. Differences in the temperament of the body would explain, for example, why “[c]hildren and old people are more inclined to weep than the middle-aged, but for different reasons” (*Passions* II, art. 133, AT XI 426 : CSM I 374). And differences in the “temperament of the soul” would explain why “those who are so weak that let themselves be utterly overcome by trivial matters involving pain, fear, or pity” also weep more often (*Passions* II, art. 133, AT XI 426 : CSM I 374-75); or why, among children, those “who weep very readily are inclined to love and to pity” (*Passions* II, art. 134, AT XI 427 : CSM I 375).

Although this still may seem far from saying that our temperament can *originate* our passions, it is not so if we consider that the temperament *of our body* is probably as far as we can go in search of an ultimate cause of the “imaginings” generated by the “fortuitous course of the spirits” (*Passions* I, art. 26, AT XI 348 : CSM I 338) which in turn can cause passions.¹¹⁹ Although, by definition, the “fortuitous motions of the spirits” are “fortuitous,” we can attribute them to the “temperament of the body” insofar as our *constitution* could explain them. The “temperament of the body” could also refer to that “normal flow” of the spirits Descartes mentioned in the correspondence with Elizabeth.¹²⁰ And if, as discussed above, we understand this “normal” in opposition to the “disturbance” (of the spirits) that characterizes the passions, the “special agitation” of the spirits proper of the latter would be “special” not only with respect to the agitations proper of other perceptions but also with respect to the “normal” flow of the spirits.¹²¹

Let us then see how passions are aroused in the cases explicitly recognized by Descartes, that is, when they are caused external objects, actions of the soul--i.e. volitions (“those I call its actions are all our volitions” [*Passions* I, 17, AT XI 342 : CSM I 335]), “impressions which happen to be in the brain,” and “temperament of the body”. Since, according to Descartes, “in order to discover all the passions, it

¹¹⁹ According to Descartes those imaginings “cannot be numbered among the actions of the soul, for they arise simply from the fact that the spirits, being agitated in various different ways and coming upon the traces of various impressions which have preceded them in the brain, make their way by chance through certain pores rather than others” (*Passions* I, art. 21, AT XI 344-45 : CSM I 336).

¹²⁰ “[W]hen the normal flow of the spirits is such that it commonly arouses sad or cheerful thoughts or the like, this is not attributed to passion, but to the nature or humour of the person in whom they are aroused; and so we say that one person has a sad nature, another is of a cheerful humour, and so on.” (To Princess Elizabeth, 6 October 1645, AT IV 311 : CSMK 271).

¹²¹ “There are other indispositions which do not trouble one’s senses but merely alter the humours, and make one unusually inclined to sadness, or anger, or some other passion.” (To Princess Elizabeth, 1 September 1645, AT VI 283 : CSMK 263).

suffices to consider all the effects of [the external] objects”—and this is so because ““it appears that all such passions may also be excited by objects which stimulate the senses, and that these objects are their principal and most common causes” (*Passions* II, art. 51, AT XI 371 : CSM I 349)—I will pay special attention to this case and then add the noticeable differences in the other cases.

In the case of passions aroused by external objects, the process through which they are brought about includes, at least, the following stages (see Figures 2 and 3): (1) the external object moves the medium of “transparent bodies” (*Passions* I, art.13), (2) a movement of the nerves, (3) an impression in the brain, (4) a motion of the spirits in the cavities (of the brain), (5) a motion of the gland which is naturally associated to (6) a representation in the soul (the thought which, properly speaking, can be called *passion*), (7) a simultaneous (a) motion of the nerves that go to the heart and to other organs, and, in some cases, (b) flow of spirits towards the muscles (of the limbs),¹²² (8) a double flow of blood from the heart, to the brain and to other body parts (the latter to generate the “external signs” of the passion), (9) another impression in the brain (which maintains and strengthens the passion), (10) a motion of the soul (the inclination of the will that accompanies every passion).

Notice that the three first moments in this series of events would not be different from the stages required to have a representation in the soul of an external object in the case of sensory perceptions (Figure 2). This means that, since the perception of a crocodile coming out of the water does not always arouse fear, understanding *what else* is required for the passion of fear to be aroused is the fundamental question to distinguish, physiologically, sensations from passions.

If caused by “impressions which happen to be present in brain,” the process through which passions are brought about would include, of the stages outlined above, all the ones from the first impression in the brain on. As to those caused by the “temperament of the body,” if we take it to mean by the *normal state of the body*, as suggested above, then we can take the case of the generation of passions from fortuitous motions of the spirits as an example. (1) A first (fortuitous) motion of the spirits, would (2) traverse certain pores of the brain—through which the spirits “com[e] upon the traces of various

¹²² In *Passions* I, art. 36, it seems clear that the motion of the limbs occurs after the motion of the gland. In two other passages, this is not so clear. Descartes says in *Passions* I, art. 47, that “a certain passion in the soul often also produces certain movements in the body, to which the soul makes no contribution” (AT XI 366 : CSM I 346). This could simply mean, however, that no *action* of the soul is involved, not that no thought is required. Similarly in *Passions* III, art. 211: “the objects of the passions produce movements in the blood which follow so rapidly from the mere impressions formed in the brain and the disposition of the organs, without any help at all from the soul [...]” (AT XI 486 : CSM I 403). “Mediation of the soul” clearly means an *action* of the soul in *Passions* I, art.13, AT XI 338-39 : CSM I 333-34: “[i]f someone suddenly thrusts his hand in front of our eyes as if to strike us [...] it is not through the mediation of our soul that they [the eyes] close, since this action is contrary to our volition, which is the only, or at least the principal, activity of the soul.”

impressions which have preceded them in the brain” (*Passions* I, art. 21; AT XI 344-45 : CSM I 336), causing (3) a motion of the gland, and (4) a representation in the soul. The rest of the process would be similar to the case of passions caused by external objects.

Finally, if a passion were generated by our volitions, then the first steps of its generation would be: (1) a volition, (2) a motion of the gland, (3) a motion of the spirits (towards the pores in the brain), (4) an impression in the brain, (5) a (different) motion of the spirits, and (6) a representation in the soul (*Passions* I, arts. 42 and 43) (see Figure 5).¹²³

Before we examine each of these steps in certain detail, a clarification of the role and nature of some of the bodily parts involved in the process seems to be in order, particularly four of them: the gland, the spirits, the cavities in the brain, and the fibres (in the nerves). Their role in the generation of passions is crucial to understand in which sense “the ultimate and most proximate cause of the passions of the soul is simply the agitation by which the spirits move the little gland in the middle of the brain” (*Passions* II, art.51, AT XI 371 : CSM I 349). Since Descartes’ physiology does not seem to have substantially changed throughout his main works, I will from now on occasionally refer to previous physiological views, particularly those in the *Treatise on Man* and *The World*, to fill some gaps or add further clarifications.

The gland is the “principal seat” of the soul “[T]he soul has its principal seat in the small gland” (*Principles* I, art. 34, AT XI 354 : CSM I 341)]. And this means that it is “the part of the body where it [the soul] exercises its functions more particularly than in all the others”; or, maybe more precisely, “the part of the body in which the soul directly exercises its functions” (*Passions* I, art.31, AT XI 352 : CSM I 340). The only explicit reason Descartes provides in the *Passions* to defend the existence of, and the need for, this gland is that “we have only one simple thought about a given object at any one time” and, nonetheless, we might receive simultaneously “two impressions coming from an single object through the double organs of any other sense”. This leads Descartes to conclude that “there must necessarily be some place where the “two impressions coming from an single object through the double organs of any other

¹²³ As an example, this is how Descartes explains “what the passion of love consists in” in a case in which the will can be considered the cause of the passion: “[W]hen the understanding thinks of some object of love, this thought forms an impression in the brain which directs the animal spirits through the nerves of the sixth pair to the muscles surrounding the intestines and stomach, where they act in such a way that the alimentary juices (which are changing into new blood) flow rapidly to the heart without stopping in the liver. Driven there with greater force than the blood from other parts of the body, these juices enter the heart in greater abundance and produce a stronger heat there because they are coarser than the blood which has already been rarefied many times as it passes again and again through the heart. As a result the spirits sent by the heart to the brain have parts which are coarser and more agitated than usual; and as they strengthen the impression formed by the first thought of the loved object, these spirits compel the soul to dwell upon this thought. This is what the passion of love consists in.” (*Passions* II, art. 102, AT XI 404 : CSM I 364)

sense two images coming through the two eyes, or the two impressions coming from an single object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, so that they do not present to it two objects instead of one” (*Passions* I, art. 32, AT XI 352-53 : CSM I 340):¹²⁴

[F]or example, if we see some animal approaching us, the light reflected from its body forms two images, one in each of our eyes; and these images form two others, by means of the optic nerves, on the internal surface of the brain facing its cavities. Then, by means of the spirits that fill these cavities, the images radiate towards the little gland which the spirits surround: the movement forming each point of one of the images tends towards the same point on the gland as the movement forming the corresponding point of the other image, which represents the same part of the animal. In this way, the two images in the brain form only one image on the gland, which acts directly upon the soul and makes it see the shape of the animal. (*Passions* I, art. 35, AT XI 355-56 : CSM I 341-42).

Descartes does not specifically explain why the gland would be necessary in cases in which we are only seeing with one eye, or touching with one hand, or tasting something (for which supposedly we only have one organ). But since he does not either deny the role of the gland in these cases, *unifying* images might not be its only function. I will return to this question below.

An important clarification of the idea that the gland is the “principal seat” of the soul is that this should not be understood as meaning that the soul *resides* in the gland. Such a spatial notion is meaningless since the soul is not extended. All Descartes says in this sense is that the soul is “joined to the whole body”:

[W]e need to recognize that the soul is really joined to the whole body, and that we cannot say that it exists in any one part of the body to the exclusion of the others. [...] And the soul is of such a nature that it has no relation to extension, or to the dimensions or other properties of the matter of which the body is composed: it is related solely to the whole assemblage of the body’s organs. This is obvious from our inability to conceive of a half or a third of a soul, or of the extension which a soul occupies. Nor does the soul become any smaller if we cut off some parts of the body, but it becomes completely

¹²⁴ “Apart from this gland, there cannot be any other place in the whole body where the soul directly exercises its functions. I am convinced of this by the observation that all the other parts of our brain are double, as also are all the organs of our external senses—eyes, hands, ears, and so on. But in so far as we have only one simple thought about a given object at any one time, there must necessarily be some place where the two images coming through the two eyes, or the two impressions coming from an single object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, so that they do not present to it two objects instead of one. We can easily understand that these images or other impressions are unified in this gland by means of the spirits which fill the cavities of the brain. But they cannot exist united in this way in any other place in the body except as a result of their being united in this gland.” (*Passions* I, art. 32, AT XI 352-53 : CSM I 340)

separate from the body when we break up the assemblage of the body's organs. (*Passions* I, art 30, AT XI 351 : CSM I 339-40).

That the soul is not extended is also an implicit reminder that thinking about the relationship gland-soul in terms of a body-body relation, that is in terms of impact, is not appropriate, as he told Elizabeth (To Princess Elizabeth, 21 May 1643, AT III 666 : CSMK 218; and *ibid.* AT III 667 : CSMK 219).¹²⁵ And notice also that by simultaneously defending that the gland is the “principal seat of the soul” and that the soul “is joined to the whole body”--or “related solely to the whole assemblage of the body's organs”--Descartes is denying the possibility that *any* motion in *any* organ could in principle “directly affect” the soul as the gland can—or vice versa, that the soul could directly act on *any* organ. To be the “principal seat” of the soul seems to mean that the gland has a unique mediating role between the body and the soul. The soul “has as many different perceptions as there occur different movements in this gland” (*Passions* I, art.34, AT XI 355 : CSM I 341). If the soul only has “as many” perceptions as motions in the gland, this means not only that we cannot have perceptions without a motion of the gland, but also that every motion of the gland results in a perception. The gland plays a similar mediating role in the other *direction*, when a bodily motion originates in the soul. In these cases, the soul “radiates through the rest of the body” from the gland (*Passions* I, art.34, AT XI 354 : CSM I 341).¹²⁶ For example, if we want to imagine something, the soul *moves* the gland (without intermediaries) to bring about those images. “When we want to imagine something we have never seen, this volition has the power to make the gland move in the way required for driving the spirits towards the pores of the brain whose opening enables the thing to be represented”(*Passions* I, art. 43, AT XI 361 : CSM I 344).

Despite this particular relationship with the soul, the gland itself does occupy a place and is extended. It is “situated in the middle of the brain's substance and suspended above the passage through which the spirits in the brain's anterior cavities communicate with those in its posterior cavities” (*Passions* I, art.31, AT XI 352 : CSM I 340); or somewhere else: “the small gland which is the principal

¹²⁵ “The use of our senses has made the notions of extension, of shapes and of motions much more familiar to us than the others; and the main cause of our errors is that we commonly want to use these notions to explain matters to which they do not pertain. For instance, we try to use our imagination to conceive the nature of the soul, or we try to conceive the way in which the soul moves the body by conceiving the way in which one body is moved by another” (To Princess Elizabeth, 21 May 1643; AT III 666 : CSMK 218); “So I think that we have hitherto confused the notion of the soul's power to act on the body with the power one body has to act on another” (To Princess Elizabeth, 21 May 1643, AT III 667 : CSMK 219).

¹²⁶ “Let us therefore take it that the soul has its principal seat in the small gland located in the middle of the brain. From there it radiates through the rest of the body by means of the animal spirits, the nerves and even the blood, which can take on the impressions of the spirits and carry them through the arteries to all the limbs.” (*Passions* I, art.34, AT XI 354 : CSM I 341)

seat of the soul is suspended within the cavities containing these spirits” (*Passions* I, art. 34, AT XI 354 : CSM I 341). As to the relationship it maintains with the spirits above which it is “suspended,” it is a purely mechanical one: “[t]he slightest movements on the part of this gland may alter very greatly the course of these spirits, and conversely any change, however slight, taking place in the course of the spirits may do much to change the movements of the gland” (*Passions* I, art. 31, AT XI 352 : CSM I 340). It is an instance of body-body interaction. And as the spirits that push the gland are either freely floating in the cavities of the brain or have been agitated by an impression in the brain, the gland itself can move the spirits which are in contact with it by pushing them “towards the pores of the brain”. “[B]y this gland’s being moved in any way by the soul or by any other cause, it drives the surrounding spirits towards the pores of the brain, which direct them through the nerves to the muscles; and in this way the gland makes the spirits move the limbs” (*Passions* I, art. 34, AT XI 355 : CSM I 341).¹²⁷ Descartes says “by the soul or by any other cause”. In this context, however, it is not clear what that “other cause” could be besides the spirits themselves. Nothing else seems to be in *immediate* contact with the gland.

A second bodily part worth exploring is the spirits. The spirits are “merely bodies: they have no property other than that of being extremely small bodies which move very quickly, like the jets of flame that come from a torch” (*Passions* I, art 10, AT XI 335 : CSM I 331-32), and they are produced in the brain from “the most lively and finest parts of the blood which have been rarefied by the heat in the heart” (*Passions* I, art. 10, AT XI 334 : CSM I 331).¹²⁸ They differ from each other in, at least, three respects: motion, texture and size (*Passions* I, arts. 14 and 15).¹²⁹ They are in constant motion (“They never stop in

¹²⁷ “[T]he small gland which is the principal seat of the soul is suspended within the cavities containing these spirits, so that it can be moved by them in as many different ways as there are perceptible differences in the objects. But it can also be moved in various different ways by the soul, whose nature is such that it receives as many different impressions—that is, it has as many different perceptions as there occur different movements in this gland. And conversely, the mechanism of our body is so constructed that simply by this gland’s being moved in any way by the soul or by any other cause, it drives the surrounding spirits towards the pores of the brain, which direct them through the nerves to the muscles; and in this way the gland makes the spirits move the limbs.” (*Passions* I, art. 34, AT XI 354-55 : CSM I 341)

¹²⁸ “[A]ll the most lively and finest parts of the blood, which have been rarefied by the heat, constantly enter the cavities of the brain in large numbers. What makes them go there rather than elsewhere is that all the blood leaving the heart through the great artery follows a direct route towards this place, and since not all this blood can enter there because the passages are too narrow, only the most active and finest parts pass into it while the rest spread out into the other regions of the body. Now these very fine parts of the blood make up the animal spirits. For them to do this the only change they need to undergo in the brain is to be separated from other less fine parts of the blood.” (*Passions* I, art 10, AT XI 334-335 : CSM I 331)

¹²⁹ In the *Treatise on Man* the spirits are defined as follows: “The parts of the blood which penetrate as far as the brain serve not only to nourish and sustain its substance, but also and primarily to produce in it a certain very fine wind, or rather a very lively and pure flame, which is called the *animal spirits* [...]. These parts of the blood, without any preparation or alteration except for their separation from the coarser parts and their retention of the extreme rapidity which the heat of the heart has given them, cease to have the form of blood, and are called the ‘animal spirits’.” (AT XI 129-30 : CSM I 100) An example of how their difference in texture and size can become a relevant factor, in particular, to distinguish resulting passions can be found in Descartes’ account of joy. “[B]ecause the blood then entering the heart has come into the veins from the arteries, and so has passed through the heart many times already, it expands very readily and produces spirits whose parts, being very equal and

any place” [*Passions* I, art 10, AT XI 335 : CSM I 332]), whether they are filling the cavities in the brain or traveling through the nerves. The spirits which travel through the nerves constitute the *rope* between the sense organs and the brain, and those filling the cavities of the brain are responsible from *carrying* the motion conveyed through the nerves to the brain and the gland (*Passions* I, art.32). As they leave the brain the spirits enter directly into the nerves through the pores in the substance of the brain (“as some of them enter the brain’s cavities, others leave it through the pores in its substance. These pores conduct them into the nerves, and then to the muscles” [*Passions* I, art 10, AT XI 335 : CSM I 332]) and thus go to the heart and other organs or move all our limbs (“In this way the animal spirits move the body in all the various ways it can be moved” [*Passions* I, art 10, AT XI 335 : CSM I 332]).¹³⁰

Descartes offers, at least, two general analogies that may help understand how he views the flow of the spirits in our body. One of them is the water fountain analogy. He compares the flow of the spirits to the motion of water through the “pipes” of the fountain, the heart to “the source of water,” the cavities of the brain to the “storage tanks,” and the muscles and tendons of the body to “the various devices and springs which serve to set them [i.e. the pipes/spirits] in motion”:

[Y]ou may have observed in the grottos and fountains in the royal gardens that the mere force with which the water is driven as it emerges from its source is sufficient to move various machines, and even to make them play certain instruments or utter certain words depending on the various arrangements of the pipes through which the water is conducted.

Indeed, one may compare the nerves of the machine I am describing with the pipes in the works of these fountains, its muscles and tendons with the various devices and springs which serve to set them in motion, its animal spirits with the water which drives them, the heart with the source of the water, and the cavities of the brain with the storage tanks. (*Treatise on Man*, AT XI 130-31 : CSM I 100)

In other places, he compares the motion of the spirits to the flow of air through the pipes of a church organ:

fine, are suited for the formation and strengthening of the impressions in the brain which give to the soul thoughts that are cheerful and peaceful.” (*Passions* II, art. 104, AT XI 405 : CSM I 365)

¹³⁰ “They never stop in any place, and as some of them enter the brain’s cavities, others leave it through the pores in its substance. These pores conduct them into the nerves, and then to the muscles. In this way the animal spirits move the body in all the various ways it can be moved.” (*Passions* I, art. 10, AT XI 335 : CSM I 332)

If you have ever had the curiosity to examine the organs in our churches, you know how the bellows push the air into certain receptacles (which are called, presumably for this reason, wind-chests). And you know how the air passes from there into one or other of the pipes, depending on the different ways in which the organist moves his fingers on the keyboard. You can think of our machine's heart and arteries, which push the animal spirits into the cavities of its brain, as being like the bellows of an organ, which push air into the wind-chests; and you can think of external objects, which stimulate certain nerves and cause spirits contained in the cavities to pass into some of the pores, as being like the fingers of the organist, which press certain keys and cause the air to pass from the wind-chests into certain pipes. Now the harmony of an organ does not depend on the externally visible arrangement of the pipes or on the shape of the wind-chests or other parts. It depends solely on three factors: the air which comes from the bellows, the pipes which make the sound, and the distribution of the air in the pipes. In just the same way, I would point out, the functions we are concerned with here do not depend at all on the external shape of the visible parts which anatomists distinguish in the substance of the brain, or on the shape of the brain's cavities, but solely on three factors: the spirits which come from the heart, the pores of the brain through which they pass, and the way in which the spirits are distributed in these pores. (*Treatise on Man*, AT XI 165 : CSM I 104)

The "pipes" of the fountain, or of the organ, are equivalent to the nerves, through which the spirits travel. The nerves are "like little threads or tubes coming from the brain and containing, like the brain itself, a certain very fine air or wind which is called the 'animal spirits'" (*Passions* I, art. 7; AT XI 332 : CSM I 330). Like the pipes, the spirits flowing inside the nerves establish a cord-like relationship between the gland and the sense organs.¹³¹ Within each nerve there are in turn several "tiny fibres" which "come from the innermost region of its brain and compose the marrow of the nerves" (*Treatise on Man*, AT XI 141 : CSM I 101). Each fibre is a thread within the nerve, each connecting the organ and *one* pore in the brain (which means each nerve is actually connected to several pores in the brain) (*Treatise on Man*, AT XI 174 : CSM I 105). External objects "have the power" to "pull" these fibres which, attached to pores on the internal surface of the brain, "open" them, "just as when you pull one end of a string, you cause a bell hanging at the other end to ring at the same time":

Thus, for example [in Fig. I [cf. AT XI 142 : CSM I 102]], if fire A is close to foot B, the tiny parts of this fire (which, as you know, move about very rapidly) have the power also

¹³¹ "First, there is the marrow, or internal substance, which extends in the form of tiny fibres from the brain, where they originate, to the extremities of the parts of the body to which they are attached. Next there are the membranes surrounding the brain and form little tubes in which the fibres are enclosed. Finally, there are the animal spirits which, being carried by these tubes from the brain to the muscles, cause the fibres to remain so completely free and extended that if anything causes the slightest motion in the part of the body where one of the fibres terminates, it thereby causes a movement in the part of the brain where the fibre originates, just as we make one end of a cord move by pulling the other end." (*Passions* I, art.12, AT XI 337 : CSM I 333)

to move the area of skin which they touch. In this way they pull the tiny fibre *cc* which you see attached to it, and simultaneously open the entrance to the pore *de*, located opposite the point where this fibre terminates—just as when you pull one end of a string, you cause a bell hanging at the other end to ring at the same time. (*Treatise on Man*, AT XI 141-42 : CSM I 101)

Strictly speaking, the external objects move the fibres by moving first the medium. They *pull* the nerves “through the medium of the intervening transparent bodies” (*Passions* I, art. 13, AT XI 338 : CSM I 333).¹³² And although Descartes does not provide many details about their constitution, he does point out some of the limitations their physical nature imposes on their capability to “transmit to the brain all the more subtle motions”:

It must be observed, however, that despite the extreme thinness and mobility of these fibres, they are not thin and mobile enough to transmit to the brain all the more subtle motions that take place in nature. In fact the slightest motions they transmit are ones involving the coarser parts of terrestrial bodies. And even among these bodies there may be some whose parts, although rather coarse, can slide against the fibres so gently that they compress them or cut right through them without their action passing to the brain. In just the same way there are certain drugs which have the power to numb or even destroy the parts of the body to which they are applied without causing us to have any sensation of them at all. (*Treatise on Man*, AT XI 145 : CSM I 103)

Since the fibres originate in the cavities of the brain, and the gland is suspended above those cavities (*Passions* I, art.31, AT XI 352 : CSM I 340),¹³³ the (mechanical) continuity of motion from the extremities of the senses until the gland is guaranteed. This is why, in order to express how the spirits impress the gland, quite often Descartes simply explains how those spirits pass through certain pores in the brain rather than through others (e.g. *Passions* I, art. 36).¹³⁴ Passing through the pores seems to be enough to move the gland—or may actually be the same movement—because the latter is above the cavities where those pores can be found. Thus, as the spirits *enter* the pores they simultaneously move the gland. Similarly, this clarifies why a motion of the gland *implies* a motion of those spirits (floating in the

¹³² “I explained in the *Optics* how the objects of sight make themselves known to us simply by producing, through the medium of the intervening transparent bodies, local motions in the optic nerve-fibres at the back of our eyes, and then in the regions of the brain where these nerves originate.” (*Passions* I, art. 13, AT XI 338 : CSM I 333)

¹³³ The gland is “situated in the middle of the brain’s substance and suspended above the passage through which the spirits in the brain’s anterior cavities communicate with those in its posterior cavities” (*Passions* I, art. 31, AT XI 352 : CSM I 340).

¹³⁴ “[M]erely by entering into these pores they produce in the gland a particular movement which is ordained by nature to make the soul feel this passion. And since these pores are related mainly to the little nerves which serve to contract or expand the orifices of the heart, this makes the soul feel the passion chiefly as if it were in the heart.” (*Passions* I, art. 36, AT XI 356-57 : CSM I 342).

cavities) which, in turn, cause an impression in the brain by entering the pores. All this can be understood as occurring simultaneously.

Although the spirits are constantly moving, Descartes talks in different terms about how the motion of the spirits--in the brain, for example--affects the nerves and how it affects the muscles or even the blood. Despite the appearance, the movement of the spirits in the nerves seems to have an effect similar to *pulling*--or a motion which would have an similar effect on the other extreme (such as the effect on the other side of a wave in a cord). This can be inferred from the way Descartes usually describes the effect of the motion of the spirits on the nerves--the opening of the pores on the other extreme of the nerves, either pores in the brain if the motion is caused by external objects, or pores in the heart if the motion of the nerve is caused by the spirits entering the pores in the brain(see e.g. *Passions* I, art.16)—and from the absence of a language that may imply *pushing* by, say, the *flow* of the spirits. This is how he explains the effect of the motion of the spirits on the muscles: “Finally, there are the animal spirits which, being carried by these tubes from the brain to the muscles, cause the fibres to remain so completely free and extended that if anything causes the slightest motion in the part of the body where one of the fibres terminates, it thereby causes a movement in the part of the brain where the fibre originates, just as we make one end of a cord move by pulling the other end” (*Passions* 1, art.12, AT XI 337 : CSM I 333).

As to the effect the motion of the spirits may have on the blood, Descartes talks in several places in terms of *impression*, e.g.:

Let us therefore take it that the soul has its principal seat in the small gland in the middle of the brain. From there it radiates through the rest of the body by means of the animal spirits, the nerves, and even the blood, which can take on the impressions of the spirits and carry them through the arteries to all the limbs. (*Passions* I, art. 34, AT XI 354 : CSM I 341)

The cavities in the brain are of importance to understand the flow of the spirits and the structure of the brain. According to the fountain analogy, these cavities are the “storage tanks” (*Treatise on Man*, AT XI 131 : CSM I 100) of the spirits in the body--if we compare the human body to “grottos” or “fountains in the royal gardens” as Descartes does in the *Treatise on Man*. However, as mentioned above, the spirits, rather than being *stored* in the cavities, are constantly *flowing* through them, that is constantly arriving (from the heart) and leaving--through the pores on their internal surface where the fibres (which “compose the marrow of the nerves” [*Treatise on Man*, AT XI 141 : CSM I 101]) terminate (*Treatise on Man*, AT XI 142 : CSM I 101). “[I]n the same proportion as the animal spirits enter the cavities of the

brain, they pass from there into the pores of its substance, and from these pores into the nerves” (*Treatise on Man*, AT XI 129 : CSM I 100).

Notice that Descartes explicitly distinguishes two moments in the entrance of the spirits into the nerves: they first enter “into the pores of its [the brain’s] substance,” before actually entering into the nerves. This is important to understand how Descartes views the structure of the brain. Whereas fibres terminate in pores, not all pores—if we look at them from inside the cavities of the brain—lead to fibres. There are other pores referred to by Descartes as “gaps lying between the tiny fibres which make up part B of the brain” (*Treatise on Man*, AT XI 177 : CSM I 107). “Part B of the brain” seems to be (according to *Treatise on Man*, Figs. 27-29 AT XI 175 : Fig. 2 in CSM I 105) most of the mass of the brain, except the cavities and the gland. Thus the “pores” or “gaps”—not to be confused with “the cavities”—are openings in the mass of the brain that can also be filled with the spirits. And insofar as the spirits can “trace figures” as they move through them, these gaps play a crucial role in memory. Memory is, in fact, the figures that “are preserved in such a way that the ideas which were previously on the gland can be formed again long afterwards without requiring the presence of the objects to which they correspond”:

[S]uppose that after the spirits leaving gland H have received the impression of some idea, they pass through tubes 2, 4, 6, and the like, into the pores or gaps lying between the tiny fibres which make up part B of the brain. And suppose that the spirits are strong enough to enlarge these gaps somewhat, and to bend and arrange in various ways any fibres they encounter, according to the various ways in which the spirits are moving and the different openings of the tubes into which they pass. Thus they also trace figures in the gaps, which correspond to those of the objects. At first they do this less easily and perfectly than they do on gland H, but gradually they do it better and better, as their action becomes stronger and lasts longer, or is repeated more often. That is why these figures are no longer so easily erased, and why they are preserved in such a way that the ideas which were previously on the gland can be formed again long afterwards without requiring the presence of the objects to which they correspond. And this is what *memory* consists in [...]. (*Treatise on Man*, AT XI 177-178 : CSM I 107)

Let us return to the cavities. Before being filled with spirits, Descartes says, these cavities are actually “almost closed”. “[T]he substance of the brain being soft and pliant, its cavities would be very narrow and almost all closed (as they appear in the brain of a corpse) if no spirits entered them” (*Treatise on Man*, AT XI 173 : CSM I 104). The entrance of the spirits into the cavities has, besides their expansion, another immediate effect: that expansion tightens all the fibres that end on, or come from, the cavities, similarly to how the wind “can inflate the sails of a ship and tighten all the ropes to which the sails are attached”:

But the source which produces these spirits is usually so abundant that they enter these cavities in sufficient quantity to have the force to push out against the surrounding matter and make it expand, thus tightening all the tiny nerve-fibres which come from it (in the way that a moderate wind can inflate the sails of a ship and tighten all the ropes to which the sails are attached). (*Treatise on Man*, AT XI 173 : CSM I 104)

As mentioned above, once in the brain—in particular, once in the cavities--the animal spirits can be in direct contact with the gland—which is “suspended within those cavities”—or enter the nerves.¹³⁵ In the *Treatise on Man* Descartes provides some additional details about how the spirits reach the cavities in the brain and eventually the gland. There he explains that the arteries leaving the heart branch into innumerable smaller arteries that “come together again around” the gland and which “have a great many holes” through which the spirits “flow into this gland”.¹³⁶ Once in the cavities of the brain (the “storage tanks”) the spirits, as we have seen, can also enter the nerves, and thus reach the muscles and the limbs—whose motion depends exclusively on the amount of spirits that enter them. “And depending on the varying amounts which enter (or merely tend to enter) some nerves more than others, the spirits have the power to change the shape of the muscles in which the nerves are embedded, and by this means to move all the limbs” (*Treatise on Man*, AT XI 130 : CSM I 100).¹³⁷

As to which muscles the spirits are directed, this seems to depend on two factors: on their “unequal agitation” and on “differences in their parts”. “The other cause which serves to direct the animal spirits to the muscles in various different ways is the unequal agitation of the spirits and differences in their parts. For when some of their parts are coarser and more agitated than others, they penetrate more deeply in a straight line into the cavities and pores of the brain, and in this way they are directed to

¹³⁵ “[T]he small gland which is the principal seat of the soul is suspended within the cavities containing these spirits, so that it can be moved by them in as many different ways as there are perceptible differences in the objects.” (*Passions* I, art. 34, AT XI 354 : CSM I 341).

¹³⁶ “[T]he arteries which carry blood to the brain from the heart, after dividing into countless tiny branches which make up the minute tissues that are stretched like tapestries at the bottom of the cavities of the brain, come together again around a certain little *gland* situated near the middle of the substance of the brain, right at the entrance to its cavities. The arteries in this region have a great many little holes through which the finer parts of the blood can flow into this gland. [...] These parts of the blood, without any preparation or alteration except for their separation from the coarser parts and their retention of the extreme rapidity which the heat of the heart has given them, cease to have the form of blood, and are called the ‘animal spirits’.” (*Treatise on Man*, AT XI 129 : CSM I 100)

¹³⁷ “Now in the same proportion as the animal spirits enter the cavities of the brain, they pass from there into the pores of its substance, and from these pores into the nerves. And depending on the varying amounts which enter (or merely tend to enter) some nerves more than others, the spirits have the power to change the shape of the muscles in which the nerves are embedded, and by this means to move all the limbs. Similarly you may have observed in the grottos and fountains in the royal gardens that the mere force with which the water is driven as it emerges from its source is sufficient to move various machines, and even to make them play certain instruments or utter certain words depending on the various arrangements of the pipes through which the water is conducted.” (*Treatise on Man*, AT XI 130 : CSM I 100)

muscles other than those to which they would go if they had less force” (*Passions* I, art. 14, AT XI 339 : CSM I 334).

2.2. PASSIONS CAUSED BY EXTERNAL OBJECTS

Having seen the relevant *pieces* of the machine, the next question is to explain how this fountain (or this church organ) is prompted to move and, in particular, which type of motions in it are *part of*, or *result in*, or simply *are*, what Descartes calls passions of the soul. This will also help clarify what exactly distinguishes the passions of the soul from other perceptions, and which relationship must exist between the mind and the body for passions to occur.

We can thus start looking at the process of generation of passions following the temporal order of events as outlined above. Let us start with those passions which originate in the perception of external objects—such as the fear that originates in the perception of a crocodile coming out of the water. As we saw above Descartes considers “the objects which stimulate the senses” to be the “principal and most common causes” of the passions (*Passions* I, art. 51, AT XI 371 : CSM I 349), and thinks that “in order to discover all the passions, it suffices to consider all the effects of these objects” (*Passions* I, art. 51, AT XI 371 : CSM I 349).

2.2.1. Sensations

The sketch of the arousal of a sensation is this. Different agitations of the extremities of the fibres by the (external) objects result in different motions of the spirits (within the fibres) which in turn cause different motions (impressions) in the brain (where the nerves originate). When these impressions in turn cause certain motions in the gland (through a new motion of the spirits) a thought occurs. This thought is, properly speaking, the sensory perception. In other words, the perception would occur as soon as the soul “considers directly” those motions of the gland (*Treatise on Man*, AT XI 176 : CSM I 106). We cannot,

in any case, have perceptions without having a thought--and thus, in these cases, without a previous motion of the gland (see Figure 2).¹³⁸

Cases of involuntary motions triggered by an external object do not question this order of things. They simply point out that the motions of the limbs may depend exclusively on the arrangement of the parts of the body—as, for example, “if someone thrusts his hand in front of our eyes” and we close them (or rather, we should say, the eyes close themselves):

Besides causing our soul to have various different sensations, these various movements in the brain can also act without the soul, causing the spirits to make their way to certain muscles rather than others, and so causing them to move our limbs. I shall prove this here by one example only. If someone suddenly thrusts his hand in front of our eyes as if to strike us, then even if we know that he is our friend, that he is doing this only in fun, and that he will take care not to harm us, we still find it difficult to prevent ourselves from closing our eyes. This shows that it is not through the mediation of our soul that they close, since this action is contrary to our volition, which is the only, or at least the principal, activity of the soul. They close rather because the mechanism of our body is so composed that the movement of the hand towards our eyes produces another movement in our brain, which directs the animal spirits into the muscles that make our eyelids drop. (*Passions I*, art.13, AT XI 338-39 : CSM I 333-34)

The same can be said for “every movement we make without any contribution from our will,” such as breathing, walking or eating, that is, “any action which is common to us and the beasts” (*Passions I*, art.16, AT XI 341-42 : CSM I 335).¹³⁹

This does not mean, however, that a perception of the hand does not occur also. But as to how this perception is related to the involuntary closing of the eyes, it seems that we have two options: either (a) the perception (representation in the mind) precedes and is partially responsible (but only in a passive sense, i.e. as one more causal factor) for the motion of the limbs—without, however, the soul being *active* in the strict sense at any moment of the process (except in the sense in which it might have to be active for the formation of ideas); or (b) the impression caused in the brain by the moving hand is in turn cause, simultaneously but independently, of both the motion of the limbs (without a motion of the gland), and of a motion of the gland which corresponds to a perception (i.e. a *passion*, not an action) in the soul. In the

¹³⁸ The soul “has as many different perceptions as there occur different movements in this gland” (*Passions I*, art. 34, AT XI 355 : CSM I 341).

¹³⁹ “[E]very movement we make without any contribution from our will—as often happens when we breathe, walk, eat, and, indeed, when we perform any action which is common to us and the beasts—depends solely on the arrangement of our limbs and on the route which the spirits, produced by the heat of the heart, follow naturally in the brain, nerves, and muscles. This occurs in the same way as the movement of a watch is produced merely by the strength of its spring and the configuration of its wheels.” (*Passions I*, art.16, AT XI 341-42 : CSM I 335)

latter case, the representation of the moving hand would not be causally responsible for the motion of the limbs. Both cases are compatible with Descartes' insistence in several places that by saying that the soul "contributes" to a certain motion he means the soul is, with respect to that motion, *acting* (in the strict sense).¹⁴⁰ In neither of these cases, the motion of the limbs is the result of a "contribution" of the soul in this sense. Notice also that the second option—simultaneous but independent representation of a moving object, on one hand, and motion of the limbs, on the other--would mean that not every motion of the spirits caused by an impression in the brain would result in a motion of the gland (and thus in a perception). But this would also mean that the perception itself, although a consequence of the impression in the brain, would not be required to explain the involuntary motion of the limbs. It is, however, difficult to deny that the involuntary motion of my eyelids is *not* causally dependent on a prior perception (whether it is of a moving hand, of a moving object in general, of a fast-moving object near our face, etc.), which would support the first option rather than the latter.

An important feature of the above sketch of the causal process of sensations is that even if we must assume a cord-like relation between the object, the brain, and the gland, this does not mean that the original agitation of the fibres by the object is enough to *determine* the representation that will occur in the soul. This is not how we should read expressions such as "the objects produce as much variety in these motions as they cause us to see in the things" (*Passions* I, art 13, AT XI 338: CSM I 333). The brain plays a very important role. It can (passively) determine the motion of the cord in different important ways. "[I]t is not the motions occurring in the eye, but those occurring in the brain, which directly represent these objects to the soul" (*Passions* I, art 13, AT XI 338: CSM I 333). Same impressions will cause different motions of the spirits--and eventually different motions of the gland (and different thoughts)—if they occur in different brains. To talk about different brains means, literally, brains shaped differently. This can be so by their different natural constitution ("brains are not all constituted in the same way" [*Passions* I, art. 39, AT XI 358 : CSM I 343]), by the presence in them of *natural* impressions ("nature [...] has also implanted certain impressions in the brain" [*Passions* II, art. 90, AT XI 395 : CSM I 360]), or by the modifications it has suffered due to past impressions (which leave "folds" in the brain, as we saw in the correspondence).

¹⁴⁰ See *Passions* I, art.13 (AT XI 338-39 : CSM I 333-34); *Passions* I, art. 47 (AT XI 366 : CSM I 346); *Passions* II, art.93 (AT XI 398 : CSM I 361); and *Passions* III, art. 211 (AT XI 486 : CSM I 403).

Let us then start from the beginning. The arousal of a sensation starts with the interaction between the external object and the human body. Generally, external objects can “prompt this machine to move its limbs” (*Treatise on Man*, AT XI 141 : CSM I 101) by “produc[ing] [*excitent*] local motions” (*Passions I*, art 13, AT XI 338: CSM I 333) of the fibres.¹⁴¹ We can say that the external objects “produce” motions this means that they move *insofar as they themselves are moved* by something else, but we cannot, strictly speaking, say they can *act* on the extremities of sensorial nerves.¹⁴² However, following Descartes’ view of the causal process as the motion a “cord” (*Passions I*, art. 12, AT XI 337 : CSM I 333), it is not irrelevant to ask who or what pulls the cord in the first place.

A possible way of viewing this relationship as a mechanical one and at the same time avoiding having to attribute “power to act” to the external objects—which are only passive matter—could be this. The relationship between our mind and the external object could become a mechanical one in Descartes’ sense—that is a relationship in which both extremes (mind and external object) are holding the same cord—at the very moment in which not only the senses but also *the mind turn towards* the object, e.g. in the case of vision at the moment in which we *look at* the object and we *pay attention* to it. From this moment on, the cord can be *pulled* by the motion of matter. Understood in this way, it would be the mind which, strictly speaking, *initiates* the (mechanical) process that results in sensations—and does so by establishing the appropriate rope-like relationship with the object.¹⁴³

The fact that turning our eyes towards the object, looking at it without *seeing* it, is not enough to *perceive* would support this account.¹⁴⁴ The mind is thus the *actor* (the active agent) in the sense that it

¹⁴¹ Cf. *Treatise on Man*: “the tiny fibres [that originate in the brain] are so arranged in each part of the machine that serves as the organ of some sense that they can easily be moved by the objects of that sense.” (*Treatise on Man* AT XI 141 : CSM I 101)

¹⁴² The translation by CSM seems to suggest in a good number of cases that Descartes places an active causal role on the external object. The French does not have that connotation, though:

[T]he objects produce [*excitant*] certain movements in the organs of the external senses and, by means of the nerves, produce [*excitant*] other movements in the brain, which cause [*font que*] the soul to have sensory perception of the objects. (*Passions I*, art. 23, AT XI 346 : CSM I 337)

[A]ll the objects both of our external senses and our internal appetites, [...] produce [*excitent*] some movement in our nerves, which passes through them into the brain. (*Passions I*, art. 13, AT XI 338 : CSM I 333)

The nerve-fibres are so distributed in all parts of the body that when the objects of the senses produce [*qui y sont excitez*] various different movements in these parts, the fibres are occasioned to open the pores of the brain in various different ways. (*Passions I*, art. 34, AT XI 354 : CSM I 341)

¹⁴³ This would agree with the idea of *action* Descartes provides in the correspondence, according to which it can only be predicated of that which “plays the role of a moving force [*parte motoris*]” (To Regius, December 1641, AT III 455 : CSMK 199).

¹⁴⁴ And if a certain object is in front of our open eyes, but we would not admit we are actually *seeing* it, we could say that the cord has not been *tended* between the mind and the object (only the eyes would have turned towards it).

tends the rope to the object, so to speak. And only after the cord has been *tended* in the first place, and has been *hooked up* onto an object, would the mind later on simply react to its motion (which it will experience as soon as the object will *hold* the rope on the other extreme). And since matter is passive *but always in motion*, each object, supposedly, holds the cord in a different way, it would also shake it differently, thus causing a different *impact* (passion) on the soul. If all matter is in motion, then external objects can be said to *determine* motion, but not to *create* it. By attributing the first cause of the motion of matter to God, at most, the objects have now become *parts* of a longer rope but not real agents capable to *act* (to originate motion) in the sense used by Descartes above, neither does it eliminate the need for the action of the mind.

But do we need the action of the mind? And must the objects be *real agents* in order to say that sensation start in them? Not necessarily. The motion in which each external object is—a motion originally caused by God—could be viewed as if the object were tending cords around itself, in the same way that an object thrown in the water may be viewed as responsible for creating waves around itself (i.e. for tending *cords* around itself) but not as a true *agent* (with respect to the creation of those waves). Some of those cords would eventually come into contact with the sense organ and move it—in the same way that some of the waves created by a boat may reach other smaller boats and alter their course. In one place, at least, in the *Treatise on Man*, Descartes talks in these terms. He indicates that the impact of a (visual) object on the eye is mediated by the “the rays coming” from different points in the object (*Treatise on Man*, AT XI 175 : CSM I 105). These rays—which Descartes considers “very fluid matter” (*Optics* I, AT VI 87 : CSM I 154)—could be in this case the *cords*. Once one of these cords—i.e. the waves caused in the water, or the rays of light—*affects* the eye, we can say that both the external object and the eye have entered into a *rope-type* mechanical relation:

[C]onsidering that the light of a luminous body must be regarded as being not so much its movement as its action, you must think of the rays of light as nothing other than the lines along which this action tends. Thus there is an infinity of such rays which come from all the points of a luminous body towards all the points of the bodies it illuminates [...]. (*Optics* I, AT VI 88 : CSM I 155)¹⁴⁵

¹⁴⁵ This is the whole passage: “Consider a wine-vat at harvest time, full to the brim with half-pressed grapes, in the bottom of which we have made one or two holes through which the unfermented wine can flow. Now observe that, since there is no vacuum in nature (as nearly all philosophers acknowledge), and yet there are many pores in all the bodies we perceive around us (as experience can show quite clearly), it is necessary that these pores be filled with some very subtle and very fluid matter, which extends without interruption from the heavenly bodies to us. Now, if you compare this subtle matter with the wine in the vat, and compare the less fluid or coarser parts of the air and the other transparent bodies with the bunches of grapes which are mixed in with the wine, you will readily understand the following. The parts of wine at one place

It would not be difficult to understand hearing, taste, smell, or touch in a similar way.

An important problem with this alternative, in which we can say the mind would be purely *passive*, is that *affecting the sense organs* does not seem to be enough to have perceptions. In other words, it is not enough that a *wave* of matter reaches the sense organ for us to have a particular perception. If we bring an object to contact with a hand at rest--rather than the opposite, i.e. the *examining* hand to the object--the sensory impression will result in a different perception. Having our eyes open in front of an object does not necessarily imply perceiving it and seeing ovals on top of glasses usually results in perceiving circles. The active role of the mind seems necessary. Descartes says in the *Passions* that regarding sensations he is following the views “already explained” in the *Optics* (*Passions* I, art. 12, AT XI 337 : CSM I 333). When he provides there details about the interaction between the external objects and the sense organs he compares the differences in colours to those who can see with the “the differences a blind man notes between trees, rocks, water and similar things by means of his stick”. And he concludes that “in all those bodies the differences are nothing other than the various ways of moving the stick or resisting its movements” (*Optics* I, AT VI 85 : CSM I 153).¹⁴⁶ Should this comparison then not imply that, for those who can see, their eyes correspond to the stick and that the mind would correspond to the hand moving the stick? If so, Descartes would be here supporting the account proposed above, according to which the mind, not the object, would be the active side of their interaction.

tend to go down in a straight line through one hole at the very instant it is opened, and at the same time through the other hole, while the parts at other places also tend at the same time to go down through these two holes, without these actions being impeded by each other or by the resistance of the bunches of grapes in the vat. This happens even though the bunches support each other and so do not tend in the least to go down through the holes, as does the wine, and at the same time they can even be moved in many other ways by the bunches which press upon them. In the same way, all the parts of the subtle matter in contact with the side of the sun facing us tend in a straight line towards our eyes at the very instant they are opened, without these parts impeding each other, and even without their being impeded by the coarser parts of the transparent bodies which lie between them. [...] In the same way, considering that the light of a luminous body must be regarded as being not so much its movement as its action, you must think of the rays of light as nothing other than the lines along which this action tends. Thus there is an infinity of such rays which come from all the points of a luminous body towards all the points of the bodies it illuminates, just as you can imagine an infinity of straight lines along which the ‘actions’ coming from all the points of the surface of the wine tend towards one hole, and an infinity of others along which the ‘actions’ coming from the same points tend also towards the other hole, without either impeding the other.” (*Optics* I, AT VI 87-88 : CSM I 154-55)

¹⁴⁶ “You may perhaps even be prepared to believe that in the bodies we call ‘coloured’ the colours are nothing other than the various ways in which the bodies receive light and reflect it against our eyes. You have only to consider that the differences a blind man notes between trees, rocks, water and similar things by means of his stick do not seem any less to him than the differences between red, yellow, green and all the other colours seem to us. And yet in all those bodies the differences are nothing other than the various ways of moving the stick or resisting its movements.” (*Optics* I, AT VI 85 : CSM I 153)

It is true, however, that although he sees “the action in our eyes which is directed towards them [the external objects]” is necessary, he still talks also about another necessary “action” of the object upon the eye:

For, just as our blind man can feel the bodies around him not only through the action of these bodies when they move against his stick, but also through the action of his hand when they do nothing but resist the stick, so we must acknowledge that the objects of sight can be perceived not only by means of the action in them which is directed towards our eyes [*par le moyen de l'action qui, estant en eux, tend vers les yeux*], but also by the action in our eyes which is directed towards them [*par le moyen de celle qui, estant dans les yeux, tend vers eux*]. Nevertheless, because the latter action is nothing other than light, we must note that it is found only in the eyes of those creatures which can see in the dark, such as cats, whereas a man normally sees only through the action which comes from the objects. (*Optics I, AT VI 86 : CSM I 154*)

But this does not have to be incompatible with the above reading. Although the external object might be in motion (*l'action estant en eux*) it would not be able to move the fibres of the nerves if the mind was not *paying attention*, or—as the analogy of the blind man’s stick suggests—if the mind did not act upon the impression (passion) caused by the external object. In other words, the external object might *determine* the motion of the cord between itself and (ultimately) the mind, but, strictly speaking, only the mind would be able to establish the rope-type interaction with the object necessary to have perceptions. Other passages where Descartes apparently attributes that active role to the object, not to the mind, could also be read within this interpretation.¹⁴⁷

¹⁴⁷ In the *Treatise on Man* it is also quite clear that the objects of the senses are the ones which *pull the rope*:

Next, to understand how the external objects which strike the sense organs can *prompt this machine to move* its limbs in numerous different ways, you should consider that the tiny fibres (which, as I have already told you, come from the innermost region of its brain and compose the marrow of the nerves) are so arranged in each part of the machine that serves as the organ of some sense that *they can easily be moved by the objects of that sense*. (*Treatise on Man AT XI 141 : CSM I 101*; my italics)¹⁴⁷

In the particular case of a person standing too close to a fire, Descartes provides a causal account of the sensation of heat in which, explicitly, the “tiny parts” of fire “pull” the fibres of the nerves:

Thus, for example [in Fig. I [cf. AT XI 142 : CSM I 102]], if fire A is close to foot B, the tiny parts of this fire (which, as you know, move about very rapidly) have the power also to move the area of skin which they touch. In this way they pull the tiny fibre *cc* which you see attached to it, and simultaneously open the entrance to the pore *de*, located opposite the point where this fibre terminates—just as when you pull one end of a string, you cause a bell hanging at the other end to ring at the same time./ When the entrance to the pore or small tube *de* is opened in this way, the animal spirits from cavity *F* [i.e. cavity in the brain] enter and are carried through it—some to muscles which serve to pull the foot away from the fire, some to muscles which turn the eyes and head to look at it, and some to muscles which make the hands move and the whole body turn in order to protect it [...]. (*Treatise on Man, AT XI 142 : CSM I 101-102*)

Let us continue with the next step in the motion of the *rope*. We know that when the chain of events (that eventually results in passions) starts in an external object, at least two more intermediate interactions take place between the moment in which the fibres are *held* (i.e. pulled) by the external objects and the motion of the gland caused by the spirits: (1) certain movements (impressions) on the “organ of the external senses”, followed by (2) certain movements (impressions) on the brain. “[T]he objects produce certain movements in the organs of the external senses and, by means of the nerves, produce other movements in the brain, which cause the soul to have sensory perception of the objects” (*Passions* I, art. 23, AT XI 346 : CSM I 337).

The changes caused in the brain are called by Descartes “impressions in the brain” and “images” (*Passions* I, arts. 32 and 35)—or “figures” in other places (e.g. *Treatise on Man*, AT XI 176 : CSM I 106). After going through the pores, and leaving traces (impressions) in the brain, the spirits move the gland by filling the cavities of the brain (upon which the gland is floating). At this moment a perception occurs—recall that the soul “has as many different perceptions as there occur different movements in this gland” (*Passions* I, art. 34, AT XI 355 : CSM I 341). This would be the basic *structure* of the generation of a sensation. Recall that, in any case, the *physical* rope ends in the gland and from that moment on we cannot talk any more about *parts pushing parts*. The relationship between the gland and the soul is not based on mechanical principles. Movements of the gland and thoughts are “joined by nature” (*joint par la nature*) (*Passions* I, art. 50), that is, when one occurs the other also does.

Similarly, in the case of vision Descartes refers in the *Optics* to the light of the bodies as “very rapid and lively action, which passes to our eyes”:

I would have you consider the light in bodies we call ‘luminous’ to be nothing other than a certain movement, or very rapid and lively action, which passes to our eyes through the medium of the air and other transparent bodies, just as the movement or resistance of the bodies encountered by a blind man passes to his hand by means of his stick. (*Optics* I, AT VI 84 : CSM I 153).

More generally, Descartes compares in the *Treatise on Man* the “external objects” to “visitors” who enter the “grottos of fountains” and “unwittingly cause the movements which take place before their eyes”. These visitors “cannot enter without stepping on certain tiles which are so arranged that if, for example, they approach a Diana who is bathing they will cause her to hide in the reeds” (*Treatise on Man*, AT XI 131 : CSM I 101). This seems to imply that, similarly, we cannot think of the external objects (visitors) in the presence of a human (grotto) without the former *pushing* the latter:

External objects, which by their mere presence stimulate its sense organs and thereby cause them to move in many different ways depending on how the parts of its brain are disposed, are like visitors who enter the grottos of these fountains and unwittingly cause the movements which take place before their eyes. For they cannot enter without stepping on certain tiles which are so arranged that if, for example, they approach a Diana who is bathing they will cause her to hide in the reeds, and if they move forward to pursue her they will cause a Neptune to advance and threaten them with his trident; or if they go in another direction they will cause a sea-monster to emerge and spew water onto their faces; or other such things according to the whim of the engineers who made the fountains. And finally, when a *rational soul* is present in this machine it will have its principal seat in the brain, and reside there like the fountain-keeper who must be stationed at the tanks to which the fountain’s pipes return if he wants to produce, or prevent, or change their movements in some way. (*Treatise on Man*, AT XI 131 : CSM I 101)

Regarding how sensations occur, Descartes only provides in the *Passions* specific details of visual perception—and specifically indicates he is following his own *Optics* on the issue (*Passions* I, art.13, AT XI 338 : CSM I 333).¹⁴⁸ In this case the images formed on the brain are preceded by two other images, one in each of our eyes, generated by the motion of the nerves *caused* by the external object. “[I]f we see some animal approaching us, the light reflected from its body forms two images, one in each of our eyes; and these images form two others, by means of the optic nerves, on the internal surface of the brain, facing its cavities” (*Passions* I, art.35, AT XI 355 : CSM I 342). The *Treatise on Man* offers details about how those first images in each of our eyes are formed, but leaves certain aspects not fully clarified.¹⁴⁹

A different way of pulling the rope (i.e. pulling the fibres within nerves between the sense organ and the brain), would cause a different *image* on the sense organs, which in turn would mean a different impression in the brain later. “[T]he objects produce certain movements in the organs of the external senses and, by means of the nerves, produce other movements in the brain, which cause the soul to have sensory perception of the objects” (*Passions* I, art. 23, AT XI 346 : CSM I 337). The general “movement in our nerves” that Descartes talks about—i.e. the impression of the external object on the optic nerve in the case of vision—would be the equivalent of the sensorial image being *carried* to the brain. “[A]ll the objects both of our external senses and our internal appetites, [...] produce some movement in our nerves, which passes through them into the brain” (*Passions* I, art. 13, AT XI 338 : CSM I 333); “if anything causes the slightest motion in the part of the body where one of the fibres terminates, it thereby causes a

¹⁴⁸ Although Descartes does not give equivalent examples about other senses besides vision in the *Passions of the Soul*, he does not either indicate that vision is an exception. Furthermore, he explicitly extends his conclusions to other sensations, e.g.: “the two impressions coming from a singled object through the double organs of any other sense” (*Passions* I, art.32, AT XI 353 : CSM I 340). And since the “images” formed in the brain do not have to be understood as images in any visual sense but rather as *impressions* or *figures* that serve to generate a *representation* in the soul—that is “visual” is only that which we eventually perceive *as visual*, which is the *representation* of that *image* in the soul—there is no reason not to think that other sensations are not preceded by similar impressions in the brain—following accordingly similar impressions in our ears, nose, tongue, or the surface of our skin. “[W]e must hold that it is the movements composing this picture which, acting directly upon our soul in so far as it is united to our body, are ordained by nature to make it have such sensations” (*Optics* 6, AT VI 130 : CSM I 167).

¹⁴⁹ “Now assume that these fibres are so arranged that if the rays coming, for example, from point A of the object happen to press upon the back of the eye at point 1, they pull the whole of fibre 1 2 [one of the fibres that make up the optic nerve] and enlarge the opening of the tiny tube marked 2. In the same way, the rays which come from point B enlarge the opening of the tiny tube 4, and likewise for the others. We have already described how, depending on the different ways in which the points 1, 3, 5 are pressed by these rays, a figure is traced on the back of the eye corresponding to that of the object ABC. Similarly, it is obvious that, depending on the different ways in which the tiny tubes 2, 4, 6 are opened by the fibres 12, 34, 56, etc., a corresponding figure must also be traced on the internal surface of the brain.” (*Treatise on Man*, AT XI 175 : CSM I 105) Descartes does not explain, for example, (1) what it means to say that the “rays coming from point A” affect the eye—that is, how those rays actually “come” and in which sense they come “from” the object; (2) why those rays “press upon the back of the eye” but not upon the very external surface of the eye first—or both; (3) whether, and why, if those rays pressed upon both surfaces—on the back of the internal one and on the front of the external one—only the back of the eye is relevant in order to have visual perceptions, and how the impression on the external surface would relate to the figure formed on the back of the eye; or (4) whether the term *figure* implies more than a *collection of punctual marks (impressions)* on the back of the eye and, if so, what else it implies. Does talking about *figure* imply, in particular, that the different punctual impressions are somehow *unified* on the back of the eye?

movement in the part of the brain where the fibre originates, just as we make one end of a cord move by pulling the other end” (*Passions* I, art.12 ; AT XI 337 : CSM I 333). As mentioned above, notice that Descartes talks rather about the nerves as a whole (the rope)--and their motion as the motion of a rope being pulled—than about the spirits being pushed.

Once the brain has undergone the impression caused by the nerves being pulled—that is once an “impression” or an “image” has been formed in it--those images “radiate” towards the gland through the spirits that fill the cavities of the brain. “Then, by means of the spirits that fill these cavities, the images radiate towards the little gland which the spirits surround” (*Passions* I, art.35; AT XI 355 : CSM I 342). “Radiate” here seems to be equivalent to *transports*. Descartes might be using the term deliberately though—in fact we have seen it above in similar expressions regarding how the motions of the soul affect the gland (*Passions* I, art.34)—to point out that it (the impression) is *carried* by the spirits which are floating in the cavities of the brain—in a way, again, similar to how the motion of the water caused by a the motion of a boat may said to “radiate” across the surface of the water. That “radiation” is, in any case, a mechanical interaction.

As we saw above unifying the images caused on the internal surface of the brain is the main task of the gland. But, since the gland is a body, this task should still be part of the motion of the rope that is pulled by the external object. That is, the “radiation” of the images from the brain should not be different, insofar as we are referring it to the same agitation of the rope, from the *unifying* task of the latter.¹⁵⁰ *Radiation* from the point of view of the brain would be *unification* from the point of view of the gland:

We can easily understand that these images or other impressions are unified in this gland by means of the spirits which fill the cavities of the brain. But they cannot exist united in this way in any other place in the body except as a result of their being united in this gland (*Passions* I, art.32, AT XI 353 : CSM I 340).¹⁵¹

¹⁵⁰ “[B]y means of the spirits that fill these cavities, the images radiate towards the little gland which the spirits surround: the movement forming each point of one of the images tends towards the same point on the gland as the movement forming the corresponding point of the other image, which represents the same part of the animal. In this way, the two images in the brain form only one image on the gland, which acts directly upon the soul and makes it see the shape of the animal” (*Passions* I, art.35; AT XI 355 : CSM I 342). Thus, “as the blind man does not judge a body to be double although he touches it with his two hands, so too, when both our eyes are disposed in the manner required to direct our attention to one and the same place, they need only make us see a single object there, even though a picture of it is formed in each of our eyes.” (*Optics* 6, AT VI 137 : CSM I 170)

¹⁵¹ This is the whole passage: “[I]n so far as we have only one simple thought about a given object at any one time, there must necessarily be some place where the two images coming through the two eyes, or the two impressions coming from a singled object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, so that they do not present to it two objects instead of one. We can easily understand that these images or other impressions are unified in this gland by means of the spirits which fill the cavities of the brain. But they cannot exist united in this way in any other place in the body except as a result of their being united in this gland.” (*Passions* I, art.32, AT XI 353 : CSM I 340)

Notice this last sentence: “they [the two images] cannot exist united in this way in any other place *in the body* except as a result of their being united in this gland” (my italics). The emphasis on “in the body” underlines, not only that we are still talking about the body (gland), but also the fact that Descartes seems to be looking for a *unified* image *in the body*. Why is this so? Why cannot that unification take place in, or be undertaken by, the soul and avoid the need for the gland (if it is true that unifying is the sole reason for its existence [*Passions* I, art. 32])? The answer could be in the nature of both the gland and the soul and in the relationship they maintain. Not only we know that the gland is body, but also that “the soul has as many different perceptions as there occur different movements in the gland” (*Passions* I, art.34, AT XI 355 : CSM I 341). We also know, from the correspondence with Elizabeth, that the gland and the soul rather than holding the same rope are two sides of the same coin, so to speak, of which one side is mental and the other corporeal. For each movement of the gland there is a *thought* (movement) in the soul. Now, since one of the movements that occur in the gland is *unifying* the images that radiate from the brain, we can expect then a corresponding (already unified) movement in the soul. In the *Passions* this movement of the soul—in the case of perceptions in general—is a representation, which should be understood as a passion (as opposed to an action of the soul) (*Passions* I, art. 47). In other places, however, Descartes seems to attribute to the soul a more active role: the figure in the gland (its movement) is “considered directly” (*Treatise on Man*, AT XI 177 : CSM I 106) or “contemplated” (*Optics* 5, AT VI 114 : CSM I 166) by the soul. Assuming then that the *unifying* task performed by the gland is the movement in the soul we should properly call thought, we have according to these two readings two general options. Whereas under the *passive* reading, the unification *occurs* (passively) in the gland—and consequently the soul is *moved* (“the soul has as many different perceptions as there occur different movements in the gland”)—under the *active* one, the unification would be the task of *contemplating* by the soul. I will return to this question once we know a bit more about the process.

The need of the mediation of the gland (between the brain and the soul) in order to have perceptions implies that when Descartes says in the *Passions* that the “motions” in the brain “directly represent” objects to the soul (“[I]t is not the motions occurring in the eye, but those occurring in the brain, which directly represent these objects to the soul” [*Passions* I, art 13, AT XI 338: CSM I 333]) we could well assume that Descartes is somehow abbreviating what should be a longer account (including, at least, the mediation of the spirits and the role of the gland). Leaving aside the questions of what “represent” may mean here and whether that is something we can attribute to the brain and in which

sense, and given what we know about the “the principal seat of the soul,” the gland is in principle the only organ that can *immediately* affect the soul.¹⁵²

The expression (“directly represent”) suggests that Descartes is probably trying to distinguish the type of image formed in the eyes from the type of image formed in the brain. The latter is not only the one that most immediately determines the motion of the gland, but also the first image in this process that “represents.” Whereas the images formed on the back of our eyes *resemble* the external objects, the images formed in the brain or on the gland *represent* them. Descartes claims to have observational evidence to support that “the objects we look at do imprint quite perfect images of themselves on the back of our eyes” (*Optics* 5, AT VI 114 : CSM I 166).¹⁵³ On the other hand, the fact that a blind man can perceive using a stick--which only “sets in motion the nerves in his hand” (*Optics* 4, AT VI 114 : CSM I 114); or that “our mind can be stimulated by many things other than images—by signs and words, for example, which in no way resemble the things they signify” (*Optics* 4, AT VI 113 : CSM I 165);¹⁵⁴ or

¹⁵² A similar expression in the *Optics* indicates, although very vaguely, that there is a missing stage between the brain and the soul: “[I]t is the movements [in the brain] composing this picture which, acting directly upon our soul in so far as it is united to our body, are ordained by nature to make it have such sensations” (*Optics* 6, AT VI 130 : CSM I 167). We could then say that the impressions of the brain affect the soul “in so far as it is united to our body,” i.e. by moving the gland.

¹⁵³

[B]y ‘figure’ I mean not only *things which somehow represent the position* of the edges and surfaces of objects, but also *anything which, as I said above, can give the soul occasion to perceive movement, size, distance, colours, sounds, smells and other such qualities*. And I also include *anything that can make the soul feel pleasure, pain, hunger, thirst, joy, sadness and other such passions*. (*Treatise on Man* AT XI 176 : CSM I 106; my italics)

The context of this passage is a bit ambiguous; it is not clear whether he is talking also about figures in the brain or only about figures on the gland. We can, at least, assume it applies to the gland because we know the soul can *only* “consider directly” the figures on the gland (*Treatise on Man*, AT XI 177 : CSM I 106), not those on the brain (which should follow from his explanation of what it means to say that the gland is “the seat of the soul”). But in other places Descartes explicitly says that the images in the brain are not either different from “movements” occurring in it and that they do not need to resemble the objects for perceptions to occur:

And if, in order to depart as little as possible from accepted views, we prefer to maintain that the objects which we perceive by our senses really send images of themselves to the inside of our brain, we must at least observe that in no case does an image have to resemble the object it represents in all respects, for otherwise there would be no distinction between the object and its image. It is enough that the image resembles its object in a few respects. Indeed the perfection of an image often depends on its not resembling its object as much as it might. (*Optics* 4, AT VI 113 : CSM I 165)

[W]hen our blind man touches bodies with his stick, they certainly do not transmit anything to him except in so far as they cause his stick to move in different ways according to the different qualities in them, thus likewise setting in motion the nerves in his hand, and then the regions of his brain where these nerves originate. This is what occasions his soul to have sensory perception of just as many different qualities in these bodies as there are differences in the movements caused by them in his brain. (*Optics* 4, AT VI 114 : CSM I 114)

¹⁵⁴ “We should [...] recall that our mind can be stimulated by many things other than images—by signs and words, for example, which in no way resemble the things they signify. And if, in order to depart as little as possible from accepted views, we prefer to maintain that the objects which we perceive by our senses really send images of themselves to the inside of our brain, we must at least observe that in no case does an image have to resemble the object it represents in all respects, for otherwise there would be no distinction between the object and its image. It is enough that the image resembles its object in a few respects. Indeed the perfection of an image often depends on its not resembling its object as much as it might. You can see this in the case of engravings: consisting simply of a little ink placed here and there on a piece of paper, they represent to us forests, towns, people, and even battles and storms; and although they make us think of countless different qualities in these objects, it is only in

that “people struck in the eye seem to see countless sparks and flashes before them, even though they shut their eyes or are in a very dark place”—which shows that “this sensation can be ascribed only to the force of the blow, which sets the optic nerve-fibres in motion as a bright light would do” (*Optics* 6, AT VI 132 : CSM I 168)¹⁵⁵—indicate that resemblance is not necessary to have representations.¹⁵⁶

Thus, as Descartes clearly puts it, “the problem is to know simply how they [the images] can enable the soul to have sensory perceptions of all the various qualities of the objects to which they correspond—not to know how they can resemble these objects” (*Optics* 4, AT VI 113 : CSM I 166). This is how Descartes explains in the *Treatise on Man* what actually occurs in the brain and the gland at the moment in which we have a sensory perception:

Suppose next that the spirits which tend to enter each of the tiny tubes 2, 4, 6, and the like, do not come indifferently from all points on the surface of gland H, but only from certain of these points: those coming from point *a* on this surface, for example, tend to enter tube 2, those from points *b* and *c* tend to enter tubes 4 and 6, and likewise for the others. As a result, at the same time that the openings of these tubes expand, the spirits begin to leave the corresponding points on the gland more freely and more rapidly than they did previously. Thus, just as a figure corresponding to that of the object ABC is traced on the internal surface of the brain according to the different ways in which tubes 2, 4, 6 are opened, likewise that figure is traced on the surface of the gland according to the ways in which the spirits leave from points *a*, *b*, *c*. (*Treatise on Man*, AT XI 175-76 : CSM I 105-106)

respect of shape that there is any real resemblance. And even this resemblance is very imperfect, since engravings represent to us bodies of varying relief and depth on a surface which is entirely flat.” (*Optics* 4, AT VI 113 : CSM I 165)

¹⁵⁵ “You will readily grant this if you note that people struck in the eye seem to see countless sparks and flashes before them, even though they shut their eyes or are in a very dark place; hence this sensation can be ascribed only to the force of the blow, which sets the optic nerve-fibres in motion as a bright light would do. The same force might make us hear a sound if it affected the ears or feel pain if it affected some other part of the body. This is also confirmed by the fact that whenever you force your eyes to look at the sun, or at some other very bright light, they retain its impression for a short time afterwards, so that even with your eyes shut you seem to see various colours which change and pass from one to another as they fade away. This can only result from the fact that the optic nerve-fibres have been set in motion with extraordinary force, and cannot come to rest as soon as they usually can. But the agitation remaining in them when the eyes are shut is not great enough to represent the bright light that caused it, and thus it represents the less vivid colours. That these colours change as they fade away shows that their nature consists simply in the diversity of the movement, exactly as I have already suggested. And finally this is evidenced by the frequent appearance of colours in transparent bodies, for it is certain that nothing can cause this except the various ways in which the light-rays are received there. One example is the appearance of a rainbow in the clouds, and a still clearer example is the likeness of a rainbow seen in a piece of glass cut on many sides.” (*Optics* 6, AT VI 132 : CSM I 168)

¹⁵⁶ That resemblance is irrelevant in order for the soul to have representations is repeated by Descartes a good number of times in the *Optics*: “[T]he soul does not need to contemplate any images resembling the things which it perceives” (*Optics* 5, AT VI 114 : CSM I 166); “we must not think that it is by means of this resemblance that the picture causes our sensory perception of these objects—as if there were yet other eyes within our brain with which we could perceive it” (*Optics* 6, AT VI 130 : CSM I 167); “there need be no resemblance between the ideas which the soul conceives and the movements which cause these ideas” (*Optics* 6, AT VI 131 : CSM I 167). And this is so even for the purpose of judging shape in objects: “we judge shape by the knowledge or opinion that we have of the position of the various parts of an object, and not by the resemblance of the pictures in our eyes. For these pictures usually contain only ovals and rhombuses when they make us see circles and squares” (*Optics* 6, AT VI 140 : CSM I 172).

Notice, first of all, that, as Descartes puts it, the figure on the gland is traced, not by pressure of the spirits on it but “according to the ways in which the spirits leave from points *a*, *b*, *c* [on the surface of the gland].” And notice also that this occurs “just as a figure corresponding to the external object is traced on the internal surface of the brain”. There are two particularly unclear aspects of this account. One is whether there is any relevant relationship between certain “points” on the surface of the gland and the specific features of the spirits that “come from” them (i.e. why “those [spirits] coming from point *a* on this surface, for example, tend to enter tube 2”). And the other, which is particularly unclear, is the relationship between the “openings of [the] tubes” and the departure of the spirits from the gland (“at the same time [the tubes open]...spirits begin to leave [the gland]”). A related question is the significance of the latter movements.

As to the first question, we can assume that the relevant points on the gland are those which unify the images produced in the brain. And, thus, the motion of the spirits towards the pores would *correspond* to that image and not to a different one:

[T]he movement forming each point of one of the images tends towards the same point on the gland as the movement forming the corresponding point of the other image, which represents the same part of the animal. In this way, the two images in the brain form only one image on the gland, which acts directly upon the soul and makes it see the shape of the animal. (*Passions* I, art. 35, AT XI 355-56 : CSM I 341-42)

The second question-- relationship between the “openings of [the] tubes” and the departure of the spirits from the gland--can help clarify a good number of ideas. Assuming, as we should in principle, that the departure of the spirits from the gland is a mechanical effect, the two most immediate explanations of how exactly this occurs are probably either that the openings of the pores (leading to the tubes-nerves) *pull* the spirits--by, for example, applying suction to them--or that the spirits are *pushed* by the gland into those pores. The first option agrees with Descartes’ different accounts of how the spirits move in the brain and the role the nerves and the pores play in that motion. It fits also well his physiological explanation of how and when ideas occur.

In the *Treatise on Man* Descartes explains the effect the motion of the nerves has on the pores in the brain by saying that they “pull the fibre” and thus “open the entrance to the pore”.¹⁵⁷ He writes in

¹⁵⁷ “Thus, for example [in Fig. I [cf. AT XI 142 : CSM I 102]], if fire A is close to foot B, the tiny parts of this fire (which, as you know, move about very rapidly) have the power also to move the area of skin which they touch. In this way they pull the tiny fibre *cc* which you see attached to it, and simultaneously open the entrance to the pore *de*, located opposite the point where this fibre terminates—just as when you pull one end of a string, you cause a bell hanging at the other end to ring at the same time.” (*Treatise on Man*, AT XI 142 : CSM I 101); “[W]hen they [the

similar terms in the *Passions*: “merely by entering into these pores they [the spirits] produce in the gland a particular movement which is ordained by nature to make the soul feel this passion. And since these pores are related mainly to the little nerves which serve to contract or expand the orifices of the heart, this makes the soul feel passion chiefly as if it were in the heart” (*Passions* I, art. 37, AT XI 357 : CSM I 342); or: “When we want to imagine something we have never seen, this volition has the power to make the gland move in the way required for driving the spirits towards the pores of the brain whose opening enables the thing to be represented (*Passions* I, art. 43; AT XI 361 : CSM I 344); or, in the case of perceptions that trigger motions of the limbs:

The nerve-fibres are so distributed in all parts of the body that when the objects of the senses produce various different movements in these parts, *the fibres are occasioned to open the pores of the brain in various different ways*. This, in turn, causes the animal spirits contained in these cavities to enter the muscles in various different ways. In this manner the spirits can move the limbs in all the different ways they are capable of being moved. And all the other causes that can move the spirits in different ways are sufficient to direct them into different muscles. (*Passions* I, art. 34, AT XI 354 : CSM I 341; my italics)

Notice that the opening of the pores, *caused* by the external object (through the agitation of the fibres), is the *cause* of both the impression on the gland and of the entrance of spirits into nerves which go to organs, heart, and muscles, as if the motion generated by the object had an effect on the spirits similar to suction.¹⁵⁸

A passage in the *Treatise of Man* is quite significant to understand how ideas are formed:

Now among these figures, it is not those imprinted on the external sense organs, or on the internal surface of the brain, which should be taken to be ideas—but only those which are traced in the spirits on the surface of the gland H (*where the seat of the imagination and the ‘common’ sense is located*). That is to say, it is only the latter figures which should be taken to be the forms or images which the rational soul united to this machine will consider directly [*que l’ame raisonnable considerera immediatement*] when it imagines some object or perceives it by the senses. (*Treatise on Man* AT XI 176-177 : CSM I 106)

“tiny fibres which come from the innermost region of its brain”) are moved, with however little force, they simultaneously pull the parts of the brain from which they come, and thereby open the entrances to certain pores in the internal surface of the brain.” (*Treatise on Man*, AT XI 141 : CSM I 101)

¹⁵⁸ “Through these pores the animal spirits in the cavities of the brain immediately begin to make their way into the nerves and so to the muscles which serve to cause movements in the machine quite similar to those we are naturally prompted to make when our senses are affected in the same way.” (*Treatise on Man*, AT XI 141 : CSM I 101)

And note that I say ‘imagines or perceives by the senses’. For I wish to apply the term ‘idea’ generally to all the impressions which the spirits can receive as they leave gland H. These are to be attributed to the ‘common’ sense when they depend on the presence of objects; but they may also proceed from many other causes [...], and they should then be attributed to the imagination. (*Treatise on Man* AT XI 177 : CSM I 106)

Notice (1) that by referring to “imagination and perception” Descartes seems to be including both actions and passions of the soul (both would occur at the moment in which the soul “considers directly” the figures “traced in the spirits on the surface of the gland H” [*qui se tracent dans les esprits sur la superficie interieure du cerveau*]); and (2) the physiological *definition* of what an idea is in terms of “impressions which the spirits can receive as they leave gland H” [*toutes les impressions que peuvent recevoir les esprits en sortant de la glande*].

The formation of an idea requires thus, first, a figure “traced *in the spirits* on the surface of the gland” (my italics). Ideas themselves “all the impressions which *the spirits* can receive as they leave gland H” (my italics). Since the gland is always in contact with the spirits (as it is suspended above them), any motion of the gland would imply an *impression* on them, that is, a figure “in the spirits on the surface of the gland”. We could understand this in a way similar to how a boat would trace a figure on the water as it moves on its surface (or even as it rests on it and only the water waves under it).

Notice again, against the first alternative suggested above, that Descartes does not say the gland *pushes* the spirits; only that they “leave” (the French verb is *sortir*), a term he also uses in other similar contexts (see e.g. *Treatise on Man*, AT XI 177 : CSM I 107). Thus, the spirits “receive” the “impressions” as they leave the gland (“*impressions* which the spirits can *receive* as they *leave* gland H”) [my italics]). This would be perfectly compatible with the possibility, sketched above, that the spirits may be *pulled* from the surface of the gland by the opening of the pores where the nerves originate. In this way the spirits could simultaneously be pulled and *impressed* by the gland as they move away from it—as the water under a toy boat would still be impressed by the boat if we tried to bring the boat closer to us by agitating the water towards us (as children usually do to recuperate objects from the water) regardless of whether we manage to displace the boat or not.¹⁵⁹

¹⁵⁹ According to Jean-Marie Beysade “[e]ven when the inward-going spirits come to hit the gland, the thought or consciousness is not directly incited by them. It is always the outward-going motor flow that constitutes the final sensory moment” (“On Sensory-Motor Mechanisms in Descartes.” In Wilson, Byron, and André Gombay, eds. *Passion and Virtue in Descartes* [Amherst, NY: Humanity Books, 2003], p. 140). A major problem with this account is that it would imply that one of the motions of the gland does not produce a thought, thus violating the terms of the natural association between mind and body (or gland and soul).

This reading can also consistently account for other passages which, at first sight, might indicate that *leaving the gland* and *receiving the impression* are two independent events, for example: “suppose that after the spirits leaving gland H *have received the impression of some idea*, they pass through tubes 2, 4, 6, and the like...” (*Treatise on Man*, AT XI 177 : CSM I 107 [my italics]). The original French clarifies that the *impression* is caused *on* the gland--and, supposedly *by* the gland as proposed above: “après que les esprits qui sortent de la gland H, y ont reçu l’impression de quelque idée, ils passent de là par les tuyaux 2, 4, 6 & semblables, dans les pores ou interualles qui sont entre les petits filets dont cette partie du cerueau, B, est compose” (*Treatise on Man*, AT XI 177). The spirits are, thus, *impressed* as they *leave* the gland.

We can now probably explain also the expression “impression of some idea” (*l’impression de quelque idée*) in the quotation above. It could, in principle, be read at least in two ways: (a) as “impression *caused by* some idea” or (b) as “impression *which itself is* an idea”. The latter would fit better in the above general definition of idea—“impressions which the spirits can receive as they leave gland H”--and would also support the reading that the departure of the spirits and the impression they receive occur at the same time.¹⁶⁰ But the former interpretation—“impressions *caused by* some idea”—would not seem to so far-fetched if we read it together with a passage in the *Treatise on Man* where, as Descartes is providing an account of how memory comes about, he refers to “the ideas *which were previously on the gland*” [*les idées qui ont esté autrefois sur cette glande*] (*Treatise on Man*, AT XI 178 : CSM I 107; my italics). We could understand this “were previously on the gland” as implying that, since ideas can physiologically be understood as “figures” *on the spirits* on the surface of the gland, they can not only *be* previously on the gland but also *leave* the gland as the spirits themselves leave the gland. And so, it would be appropriate to say that ideas can *cause* impressions.

The formation of the figure on the gland, the motion of the spirits towards the nerves within the cavities, and the entrance of the spirits into the pores of the brain appear not just as occurring simultaneously, but as being the same motion. And since this is the moment in which a thought occurs,

¹⁶⁰ Certain other expressions used by Descartes also seem to support this reading. A few lines before he has written that “traces of these ideas pass through the arteries,” and that other “traces” are “imprinted on the limbs of the child being formed in her [i.e. the mother’s] womb”: “Here I could add something about how the traces of these ideas pass through the arteries to the heart, and thus radiate through all the blood; and about how certain actions of a mother may sometimes even cause such traces to be imprinted on the limbs of the child being formed in her womb. But I will content myself with telling you more about how the traces are imprinted on the internal part of the brain which is the seat of the *memory*” (*Treatise on Man*, AT XI 177 : CSM I 106). “If ideas are indeed *impressions* on the spirits, it is not problematic to see that “traces” of them--that is traces of those impressions--may or may not be transmitted to other parts of the body as the spirits travel through them.

Descartes cannot be said to be inconsistent by referring to any of these *motions* to express the same event in the soul. Thus, in the in the *Treatise on Man*:

Now among these figures, it is not those imprinted on the external sense organs, or on the internal surface of the brain, which should be taken to be ideas—but only those which are traced in the spirits on the surface of the gland H (*where the seat of the imagination and the ‘common’ sense is located*). That is to say, it is only the latter figures which should be taken to be the forms or images which the rational soul united to this machine will consider directly when it imagines some object or perceives it by the senses. (*Treatise on Man* AT XI 176 : CSM I 106)

That motion of the spirits towards the pores appears to be the “particular movement of the spirits” Descartes considers in some passages the chief cause of human passions:

They [the passions] are caused chiefly by the spirits contained in the cavities of the brain making their way to nerves which serve to expand or constrict the orifices of the heart, or to drive blood towards the heart in a distinctive way from other parts of the body, or to maintain the passion in some other way. This makes it clear why I included in my definition of the passions that they are caused by some particular movement of the spirits. (*Passions* I, art. 37, AT XI 357 : CSM I 342)

Similarly, regarding sensations in the *Treatise on man*:

Now I maintain that when God unites a rational soul to this machine... he will place its principal seat in the brain, and will make its nature such that the soul will have different sensations corresponding to the different ways in which the entrances to the pores in the internal surface of the brain are opened by means of the nerves. (*Treatise on Man*, AT XI 143 : CSM I 102)

Furthermore, the traces left in the brain by that particular motion are what Descartes calls *memory*, which is retrievable *thoughts*:

[S]uppose that after the spirits leaving gland H have received the impression of some idea, they pass through tubes 2, 4, 6, and the like, into the pores or gaps lying between the tiny fibres which make up part B of the brain. And suppose that the spirits are strong enough to enlarge these gaps somewhat, and to bend and arrange in various ways any fibres they encounter, according to the various ways in which the spirits are moving and the different openings of the tubes into which they pass. Thus they also trace figures in the gaps, which correspond to those of the objects. At first they do this less easily and perfectly than they do on gland H, but gradually they do it better and better, as their

action becomes stronger and lasts longer, or is repeated more often. That is why these figures are no longer so easily erased, and why they are preserved in such a way that the ideas which were previously on the gland can be formed again long afterwards without requiring the presence of the objects to which they correspond. And this is what *memory* consists in... (*Treatise on Man*, AT XI 177-178 : CSM I 107)

Notice that memory is the traces left in the substance by the “spirits leaving the gland,” that is the traces left in the brain *after* a thought has occurred, not before.¹⁶¹

But we might still say that ideas are not only figures on the gland or impressions on the spirits. This is their physiology, which is Descartes’ main interest in the book where he provides those details (*Treatise on Man*). Ideas are thoughts and, therefore, not fully explicable in terms of corporeal motions--as Descartes argues at the beginning of the *Passions*. What is then the role of the soul in the formation of ideas?

As we have seen, in the *Treatise on Man* Descartes says that the soul must “directly consider” [*l’ame raisonnable considerara immediatement*] the figure on the gland in order for ideas to be formed (*Treatise on Man*, AT XI 177).¹⁶² But given the nature of the book—which is about the “machine” of the body and leaves the role of the soul aside—he does not pursue further the issue.¹⁶³ In the *Optics* he

¹⁶¹ Since these traces are an actual physical alteration of the brain, the latter is, so to speak, *reshaped* with each new thought. This is particularly important in order to understand why different persons—or one same person at different moments--might feel different passions under similar circumstances, or why a child may not feel fear the first time he is in front of a lion (see e.g. *Passions* I, art. 39). A differently shaped brain can explain why the same external object may produce a different thought.

¹⁶² This active role of the soul is suggested also by the statement that immediately follows the expression we are discussing: “For I wish to apply the term ‘idea’ generally to all the impressions which the spirits can receive as they leave the gland H. *These are to be attributed to the ‘common’ sense* when they depend on the presence of objects; but they may also proceed from many other causes (as I shall explain later), and they should then be attributed to the imagination” (*Treatise on Man*, AT XI 177 : CSM I 106; my italics).

¹⁶³ The treatise is an attempt to show how much can be explained *without the soul*. But this does not mean a soul is not, or cannot be, added to this machine: “when a *rational soul* is present in this machine...” (*Treatise on Man*, AT XI 131 : CSM I 101); “when God unites a rational soul to this machine...” (*Treatise on Man*, AT XI 143 : CSM I 102). The last paragraph of the *Treatise on Man* provides a summary of the actions and faculties Descartes thinks to have explained without the soul:

I should like you to consider, after this, all the functions I have ascribed to this machine—such as the digestion of food, the beating of the heart and arteries, the nourishment and growth of the limbs, respiration, waking and sleeping, the reception by the external sense organs of light, sounds, smells, tastes, heat and other such qualities, the imprinting of the ideas of these qualities in the organ of the ‘common sense’ and the imagination, the retention or stamping of these ideas in the memory, the internal movements of the appetites and passions, and finally the external movements of all the limbs (movements which are so appropriate not only to the actions of objects presented to the senses, but also to the passions and the impressions found in the memory, that they imitate perfectly the movements of a real man). I should like you to consider that these functions follow from the mere arrangement of the machine’s organs every bit as naturally as the movements of a clock or other automaton follow from the arrangement of its counter-weights and wheels. In order to explain these functions, then, it is not necessary to conceive of this machine as having any vegetative or sensitive soul or other principle of movement and life, apart from its blood and its spirits, which are agitated by the heat of the fire burning continuously in its heart—a fire which has the same nature as all the fires that occur in inanimate bodies. (*Treatise on Man*, AT XI 202 : CSM I 108)

indicates that the soul “contemplates” (*Optics* 5, AT VI 114 : CSM I 166) the images on the gland. Similarly, in the *Passions* Descartes says, although only in one occasion, that the soul can “see [voir] the shape of the animal” (*Passions* I, art. 35, AT XI 356 : CSM I 342).¹⁶⁴

These expressions can create two immediate potential problems. If they mean that the formation of ideas requires the active role of the soul, do we have to conclude that all our ideas result from *actions of the mind*, including our passions—against Descartes explicit denial throughout the *Passions*?¹⁶⁵ On the other hand, it is true that, as we have seen above, the active role of the mind should be expected even in the formation of perceptions if we do not want to accept that the motion of the fibres in the nerves by external objects is enough to produce sensory perceptions. However, the only actions of the soul, explicitly acknowledge by Descartes, are our volitions (*Passions* I, art. 17). And to say that our perceptions are actions in this sense would be to deny one of the most fundamental principles for, at least, his theory of mind and his theory of passions (i.e. the distinction and opposition of actions and passions of the soul). Thinking about certain actions of the soul which are not thoughts themselves could be an alternative. Although Descartes does not talk about any such actions (“there is nothing in us which we must attribute to our soul except our thoughts” [*Passions* I, art. 17, AT XI 342 : CSM I 335]), if we had to choose between giving up the activity of the soul or the idea that all its activity is thinking, giving up the latter seems to cause less damage to the system. This would allow us to take into account the possibility

Notice that Descartes avoids referring to the *formation* of ideas as one more among the activities and functions he can attribute merely to the “arrangement of the machine’s organs”. All the actions he refers to in which ideas somehow take part are actions which imply ideas *already formed*, namely, “the imprinting of the ideas of these qualities in the organ of the ‘common sense’ and the imagination, the retention or stamping of these ideas in the memory, the internal movements of the appetites and passions”.

¹⁶⁴ “[...] les deux images qui sont dans le cerveau n’en composent qu’une seule sur la glande, qui, agissant immédiatement contre l’ame, luy fait voir la figure de cette animal .” (*Passions* I, art.33, AT XI 356)

¹⁶⁵ Not only in the *Passions* but also in the *Treatise on Man*, for example, Descartes talks about passions as something *occurring* to the soul, rather than its actions:

Now I maintain that when God unites a rational soul to this machine ... he will place its principal seat in the brain, and will make its nature such that the soul will have different sensations corresponding to the different ways in which the entrances to the pores in the internal surface of the brain are opened by means of the nerves.

Suppose, firstly, that the tiny fibres which make up the marrow of the nerves are pulled with such force that they are broken and separated from the part of the body to which they are joined, with the result that the structure of the whole machine becomes somehow less perfect. Being pulled in this way, the fibres cause a movement in the brain which gives occasion for the soul (whose place of residence must remain constant) to have the sensation of *pain*.

Now suppose the fibres are pulled with a force almost as great as the one just mentioned, but without their being broken or separated from the parts to which they are attached. Then they will cause a movement in the brain which, testifying to the good condition of the other parts of the body, will give the soul occasion to feel a certain bodily pleasure which we call ‘titillation’. This, as you see, is very close to pain in respect of its cause but quite opposite in its effect.

Again, if many of these tiny fibres are pulled equally and all together, they will make the soul perceive that the surface of the body touching the limb where they terminate is *smooth*; and if the fibres are pulled unequally they will make the soul feel the surface to be uneven and *rough*. (*Treatise on Man*, AT XI 143-144 : CSM I 102-103)

of a (non-thinking) action of the mind--supposedly needed for perceptions to occur in the soul-- and what Descartes takes to be, properly speaking, *actions* of the soul, i.e. volitions.

We could say, following Descartes' own language (the soul can "see the shape of the animal" [*Passions* I, art.35, AT XI 356 : CSM I 342]), that the soul *sees* the motion (the figure) in the gland (in the formation of a representation), but unlike in vision, in this case we cannot say the soul could have done otherwise—that is we cannot say it could not have *seen* (the figure on the gland). Since the soul is active by nature we can say the soul is always seeing, or better, it is always (actively) paying attention to the gland. Thus, whenever there is a figure, the soul sees it—and, we can add, it cannot *miss* it. This is perfectly compatible with the order of nature (by the natural association of thoughts and motions of the gland: to each motion of the gland one motion in the soul), which *requires* that the soul sees *any* figure formed in the gland. Thus seeing, properly speaking, occurs because, and exactly when, a figure has been formed on the gland, and not as the result of a new action started by the soul. It occurs at that precise moment because that is when the soul has an object to see (if there is no figure on the gland, the soul does not see anything), not because the soul is not (actively) *attentive* otherwise. This would allow us to say that the soul is (always) *active* without saying that by seeing the figure in the gland it is *acting* in the (true) sense of having volitions (in the sense of acting taken *as thought*). As to those cases of *looking* at something but not *seeing*, we could say that an impression in the brain occurs but not a figure in the gland.

This could also probably help explain other ideas, specially why the unification should occur in the gland, not in the soul. I suggested above that the "movement" that corresponds to the *unification* the gland undertakes (unification of the images formed first in the brain), could be understood, on the other side, as what Descartes refers to as the "direct consideration" (*Treatise on Man* AT XI 176-77 : CSM I 106) of the soul. The peculiar nature of the gland could also help reconcile the potential conflict between action and passion. Although the gland is *in the body*, and it is *body*, it is also the "principal seat" of the soul (*Passions* I, art.34). This, we could assume, would confer to it a unique double role: *passive* insofar as it is body and *active* insofar as it is the "seat" of the soul. The gland would thus be the only body part which can be active or, more precisely, the only body part *through which* the soul can act.¹⁶⁶ Insofar as it is body, though, it can be *acted on* as any other body can—something we cannot say of the soul in the

¹⁶⁶ E.g. :“Let us therefore take it that the soul has its principal seat in the small gland located in the middle of the brain. *From there it radiates through the rest of the body* by means of the animal spirits, the nerves, and even the blood, which can take on the impressions of the spirits and carry them through the arteries to all the limbs” (*Passions* I, art. 34, AT XI 354 : CSM I 341; my italics).

same way. This could explain the need of a *unified* image *in the body* before a representation can occur in the soul. “[T]he two images in the brain form only one image on the gland, which acts directly upon the soul and makes it see the shape of the animal” (*Passions* I, art. 35, AT XI 355 : CSM I 342). This must occur in the body because the soul would not be able to *unify* those images.¹⁶⁷ As to why the soul could not do both the unification *and* then the *contemplation*, one possible explanation would be that this could not be accounted for by the *one-motion-of-the-soul-for-each-motion-of-the gland* law. This law does not guarantee that a motion in the soul (say unification) should also cause a second movement in the soul (say contemplation), and in particular it would not guarantee that the unification (in the soul) should be followed by a contemplation (in the soul). All the law guarantees is one movement in the soul per figure on the gland. Two figures, as Descartes says, produce two thoughts in the soul.

In support of the idea that, regardless of whether a figure is or not formed on the gland, the soul is always (actively) seeing it, is also the fact that, even if only one image is produced in the brain, the gland is still necessary because, by the constitution of the mind-body union, the soul cannot see an image in the brain. The soul can only, to use Descartes’ own terms, *consider directly* the motions (figures) on the gland.

2.2.2. Passions

As mentioned, in the *Passions* Descartes refers to the moment in which a perception takes place in the soul, i.e. simply as representations. These representations are of two possible types depending on the “movement in the gland caused by the spirits”: sensations and passions (in the restricted sense):

[W]e may distinguish two kinds of movement produced in the gland by the spirits. Movements of the first kind represent to the soul the objects which stimulate the senses, or the impressions occurring in the brain; and these have no influence on the will. Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions. (*Passions* I, art. 47, AT XI 365 : CSM I 346)

¹⁶⁷ Without the unification, there would be two movements in the soul, and thus two perceptions, as Descartes says : “there must necessarily be some place where the two images coming through the two eyes, or the two impressions coming from a singled object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, *so that they do not present to it two objects instead of one*” (*Passions* I, art.32, AT XI 353 : CSM I 340; my italics).

Although this passage might leave some room for doubt, that the second type of “movements” of the soul are also representations is clear from the general definition of “perceptions” (*Passions* I, art. 17) and from the definitions of specific passions (see e.g. *Passions* II, arts. 91 and 93). Descartes does not, however, offer in the *Passions* many details about which type of event a *representation* is.¹⁶⁸ But from his usage of the term we can say at least two things: representations are (a) passions (i.e. movements in the soul which follow a “movement in the gland caused by the spirits” [*Passions* I, art. 41, AT XI 359 : CSM I 343]), which (b) we (the mind) attribute to (“refers to”) what we take to be its cause (*Passions* I, arts. 23-25). Volitions are also a movement of the soul but, insofar as they are actions, they do not follow motions of the spirits.¹⁶⁹

The language Descartes uses to express the moment in which the representation occurs is in certain passages confusing. For example, “[m]ovements [in the gland] of the first kind represent to the soul the objects which stimulate the senses ...” (*Passions* I, art. 47, AT XI 365 : CSM I 346) could mean that (a) a representation occurs when the soul *receives* somehow the movements of the gland (the “figure” on it), but also (b) that the *representing* is (an action) done by the gland *to* the soul,¹⁷⁰ or (c) that a *representation* is a particular pair of *joined* movements of the gland and the soul. As we have seen, the second interpretation should be discarded or rephrased to avoid considering the gland as an *actor*. The

¹⁶⁸ The most detailed account in the treatise is probably the one Descartes gives while trying to offer reasons why the gland is “the principal seat of the soul” and an example to illustrate it. And even so, we do not find much more than a phrase. The gland, Descartes says, “acts directly upon the soul and makes it see”: “[I]n so far as we have only one simple thought about a given object at any one time, there must necessarily be some place where the two images coming through the two eyes, or the two impressions coming from a singled object through the double organs of any other sense, can come together in a single image or impression before reaching the soul, so that they do not present to it two objects instead of one. We can easily understand that these images or other impressions are unified in this gland by means of the spirits which fill the cavities of the brain. But they cannot exist united in this way in any other place in the body except as a result of their being united in this gland” (*Passions* I, art.32, AT XI 353 : CSM I 340). Or: “Thus, for example, if we see some animal approaching us, the light reflected from its body forms two images, one in each of our eyes; and these images form two others, by means of the optic nerves, on the internal surface of the brain, facing its cavities. Then, by means of the spirits that fill these cavities, the images radiate towards the little gland which the spirits surround: the movement forming each point of one of the images tends towards the same point on the gland as the movement forming the corresponding point of the other image, which represents the same part of the animal. In this way, the two images in the brain form only one image in the gland, which acts directly upon the soul and makes it see the shape of the animal” (*Passions* I, art.35, AT XI 355 : CSM I 342).

¹⁶⁹ “Of the two kinds of thought I have distinguished in the soul—the first its actions, i.e. its volitions, and the second its passions, taking this word in its most general sense to include every kind of perception.” (*Passions* I, art. 41; AT XI 359 : CSM I 343)

¹⁷⁰ In a good number of instances Descartes does use language that attributes the active role in this process--of transmission of images from the gland to the soul--to the gland, and not to the soul: “[T]he two images in the brain form only one image in the gland, which *acts directly upon the soul* and makes it see the shape of the animal” (*Passions* I, art.35, AT XI 355 : CSM I 342; my italics); or more generally, somewhere else: “[t]he various perceptions or modes of knowledge present in us may be called its passions [i.e. the passions of the soul], in a general sense, for it is often not our soul which makes them such as they are, and the soul always *receives* them from the things that are represented by them” (*Passions* I, art.17, AT XI 342 : CSM I 335; my italics); or “the perceptions which the soul *receives* by means of the nerves” (*Passions* I, art. 21, AT XI 345 : CSM I 336; my italics). In other passages it seems as if both the gland moves the soul and the soul moves the gland. “[The gland] can also be moved in various different ways by the soul, *whose nature is such that it receives as many different impressions*—that is, it has as many different perceptions as there occur different movements in this gland” [*Passions* I, art.34, AT XI 355 : CSM I 341; my italics]). Thus, one way of reading the *actions* attributed by Descartes to the gland is simply as the *motions* of the rope viewed from the side of the gland.

first and third are not incompatible. Properly speaking, to say that the gland “represents to the soul” something—as in “[m]ovements [in the gland] of the first kind represent to the soul the objects which stimulate the senses ...” (*Passions* I, art. 47; AT XI 365 : CSM I 346)--is not different from talking about a motion of the gland which results in a representation *in the soul*, for representations, insofar as they are thoughts, cannot occur in the gland. Descartes’ use of the same expression with a different body part as subject of the same verb (represent) supports the idea that he is not introducing in these passages a new concept of representation: “everything the soul perceives by means of the nerves may also be represented to it by the fortuitous course of the spirits” (*Passions* I, art. 26, AT XII 348 : CSM I 338).

Both sensory representations and *passionate* representations are motions in the soul naturally associated to a “movement produced in the gland by the spirits” (*Passions* I, art.47, AT XI 365 : CSM I 346). Some of those motions in the gland result in “passions or the bodily motions that accompany the passions” (*Passions* I, art.47, AT XI 365 : CSM I 346). This means that for the passion of fear to be aroused when we see the crocodile coming out of the water, a motion different from the one that corresponds to perceptions must occur in the soul:

If, in addition, this shape [that is the shape the soul can see, the representation] is very strange and terrifying—that is, if it has a close relation to things which have previously been harmful to the body—this arouses the passion of anxiety in the soul, and then that of courage or perhaps fear and terror, depending upon the particular temperament of the body or the strength of the soul, and upon whether we have protected ourselves previously by defence or by flight against the harmful things to which the present impression is related. (*Passions* I, art.36, AT XI 356-57 : CSM I 342)

And this in turn means that a different motion of the spirits must have occurred in the brain: “[W]e know that the ultimate and most proximate [*derniere & plus prochaine*] cause of the passions of the soul is simply the agitation by which the spirits move the little gland in the middle of the brain” (*Passions* II, art. 51, AT XI 371 : CSM I 349). Thus, in these cases—fear caused by the presence of a crocodile--we can assume then that two perceptions (or a complex one) may be occurring in the soul: a visual perception and *another* perception (properly called *passion of the soul*).

A fundamental difference of the *passionate* representations is that they “have an influence on the will”: “Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions” (*Passions* I, art 47, AT XI 365 : CSM I 346). This is also, as we saw above, the main “effect” of passions [*Passions* I, art. 40, AT XI 359 : CSM I 343] and

probably a major reason why Descartes says that “we refer [them] to the soul” (*Passions* I, art.25). This influence in the will, as we will see in more detail in Chapter 3, is not different from what Descartes calls the *disposition* “to want the things which nature deems useful for us” (*Passions* I, art. 52, AT XI 372 : CSM I 349). That is the sense in which it “influences” the will.

In the case of visual perception, the representation occurs as the spirits which leave the gland enter the pores in the brain. The process finishes there, or rather once those spirits leave *traces* in the brain or continue through pores that lead to the muscles (as could be the case if we place our hand in hot water).¹⁷¹ In the case of passions, though, this motion of the spirits towards the pores in the brain, besides leaving traces in the brain, we can assume, would originate also a representation of the second type in the soul. This representation, in turn, will be followed by a series of bodily changes not found in the case of other perceptions, and the process would finish with the disposition of the soul.

The representation proper of passions will usually be followed by two flows of spirits: some spirits may flow towards the muscles, and some may *pull* the nerves that go to the heart (*Passions* I, arts. 34, 36 and 37; II, art. 91). “[S]ome of the spirits reflected from the image formed on the gland proceed from there to the nerves which serve to turn the back and move the legs in order to flee. The rest of the spirits go to nerves which expand or constrict the orifices of the heart, or else to nerves which agitate other parts of the body from which blood is sent to the heart, [...]”(*Passions* I, art.36, AT XI 356-57 : CSM I 342). Thus, in the case of wonder, which Descartes says is caused by the representation of something “unusual and extraordinary” but also by the two flows of spirits (one towards the heart and another to the muscles):

Wonder is a sudden surprise of the soul which brings it to consider with attention the objects that seem to it unusual and extraordinary. It has two causes: first, an impression in the brain, which represents the object as something unusual and consequently worthy of special consideration; and secondly, a movement of the spirits, which the impression disposes both to flow with great force to the place in the brain where it is located so as to strengthen and preserve it there, and also to pass into the muscles which serve to keep the sense organs fixed in the same orientation so that they will continue to maintain the impressions in the way in which they formed it. (*Passions* II, art. 70, AT XI 380 : CSM I 353).

¹⁷¹ “The nerve-fibres are so distributed in all parts of the body that when the objects of the senses produce various different movements in these parts, *the fibres are occasioned to open the pores of the brain in various different ways*. This, in turn, causes the animal spirits contained in these cavities to enter the muscles in various different ways. In this manner the spirits can move the limbs in all the different ways they are capable of being moved. And all the other causes that can move the spirits in different ways are sufficient to direct them into different muscles.” (*Passions* I, art. 34, AT XI 354 : CSM I 341; my italics)

As to the spirits proceeding to the muscles (of the limbs), they move them, as indicated above, in a purely mechanical way, by entering or leaving them. This produces a “shortening of certain muscles”—that is of those being filled--and “the lengthening of the opposed muscles”—that is the one the spirits are leaving. “In this way, the one they leave becomes longer and more relaxed, and the one they enter, being suddenly swollen by them, becomes shorter and pulls the limb to which it is attached” (*Passions I*, art.11, AT XI 335-36 : CSM I 332).¹⁷² In general, the motion of the spirits towards the muscles “disposes the body to make movements which help us attain” that for which the passions “dispose our soul”.¹⁷³

Notice that this motion (of the muscles) is *not* a basic feature of the passions. It “normally” occurs but, as experience shows, there are passions not accompanied by it. One example is astonishment, in which the

element of surprise causes the spirits in the cavities of the brain to make their way to the place where the impression of the object of wonder is located. It has so much power to do this that sometimes it drives all the spirits there, and makes them so wholly occupied with the preservation of this impression that none of them pass thence into the muscles or even depart from the tracks they originally followed in the brain. As a result the whole body remains as immobile as a statue, making it possible for only the side of the object originally presented to be perceived, and hence impossible for a more detailed knowledge of the object to be acquired. (*Passions II*, art. 73, AT XI 382-83 : CSM I 354)

That the motion of the limbs in these cases does not depend on any volition from the soul, is clear since similar motions can be found in animals (*Passions I*, art.50, AT XI 369 : CSM I 348). In both cases, “the

¹⁷² “What causes one muscle to become shorter rather than its opposite is simply that fractionally more spirits from the brain come to it than to the other. Not that the spirits which come directly from the brain are sufficient by themselves to move the muscles; but they cause the other spirits already in the two muscles to leave one of them very suddenly and pass into the other. In this way, the one they leave becomes longer and more relaxed, and the one they enter, being suddenly swollen by them, becomes shorter and pulls the limb to which it is attached. This is easy to understand, provided one knows that very few animal spirits come continually from the brain to each muscle, and that any muscle always contains a quantity of its own spirits. These move very quickly, sometimes merely eddying in the place where they are located (that is, when they find no passages open for them to leave from), and sometimes flowing into the opposed muscle. In each of the muscles there are small openings through which the spirits may flow from one into the other, and which are so arranged that when the spirits coming from the brain to one of the muscles are slightly more forceful than those going to the other, they open all the passages through which the spirits in the latter can pass into the former, and at the same time they close all the passages through which the spirits in the former can pass into the latter. In this way all the spirits previously contained in the two muscles are gathered very rapidly in one of them, thus making it swell and become shorter, while the other lengthens and relaxes.” (*Passions I*, art.11, AT XI 335-36 : CSM I 332)

¹⁷³ “The function of all the passions consists solely in this, that they dispose the our soul to want the things which nature deems useful for us, and to persist in this volition; and the same agitation of the spirits which normally causes the passions also disposes the body to make movements which help us attain these things” (*Passions II*, art. 52, AT XI 372 : CSM I 349).

body may be moved to take flight by the mere disposition of the organs without any contribution from the soul” (*Passions* I, art. 38, AT XI 358 : CSM I 343).¹⁷⁴

The second flow of the spirits—the one towards the heart—however, has a fundamental role in human passions:

[M]erely by entering into these pores [in the brain] they [the spirits] produce in the gland a particular movement which is ordained by nature to make the soul feel this passion. And since these pores are related mainly to the little nerves which serve to contract or expand the orifices of the heart, this makes the soul feel passion chiefly as if it were in the heart. (*Passions* I, art.36, AT XI 356 : CSM I 342)

[T]he course which the spirits take to the nerves of the heart suffices to induce a movement in the gland through which fear enters the soul. (*Passions* I, art. 38; AT XI 358 : CSM I 342-43)

This agrees with the general physiology of the formation of thoughts we have seen before. The very movement of the spirits *towards the pores* in the brain where the nerves to the heart originate would “suffice” to form the thought that, properly speaking, we can call the passion of fear. However, Descartes seems to be talking here, at least, about another event that follows immediately, i.e. an *accompanying sensation* that “makes the soul feel passion chiefly as if it were in the heart”--“the passions make us feel some change in the heart” (*Passions* I, art. 33, AT XI 353 : CSM I 340). In fact, “they [passions] are nearly all *accompanied* by some disturbance which takes place in the heart and consequently also throughout the blood and the animal spirits” (*Passions* I, art 46; AT XI 363 : CSM I 345; my italics). But the *perception* of this disturbance should not be confused with the passion itself (the original representation of the second type). Neither should the simultaneous perception of the motion of our limbs:

[J]ust as the course which the spirits take to the nerves of the heart suffices to induce a movement in the gland through which fear enters the soul, so too the mere fact that some spirits at the same time proceed to the nerves which serve to move the legs in flight causes another movement in the gland through which the soul feels and perceives this action. (*Passions* I, art 38, AT XI 358 : CSM I 342-43)

¹⁷⁴ “[J]ust as the course which the spirits take to the nerves of the heart suffices to induce a movement in the gland through which fear enters the soul, so too the mere fact that some spirits at the same time proceed to the nerves which serve to move the legs in flight causes another movement in the gland through which the soul feels and perceives this action. In this way, then, the body may be moved to take flight by the mere disposition of the organs, without any contribution from the soul.” (*Passions* I, art 38, AT XI 358 : CSM I 342-43)

According to Descartes, the confusion between the perception of the *cycle* of the spirits to and from the heart with the passion itself is the basis to believe that “the soul receives its passions in the heart” (*Passions* I, art. 34, AT XI 354 : CSM I 341), i.e. that the seat of passions is the heart. “[T]he only reason why this change is felt as occurring in the heart is that there is a small nerve which descends to it from the brain” (*Passions* I, art. 34, AT XI 354 : CSM I 341).¹⁷⁵

The function of this particular second “disturbance” is to “strengthen the impression formed by the first thought” and to “compel the soul to dwell upon this thought” (*Passions* II, art. 102, AT XI 404 : CSM I 364), which is, in turn, one of the main, if not the most important, function of passions—maintaining and strengthening that first thought. “[T]he utility of all the passions consists simply in the fact that they strengthen and prolong thoughts in the soul which it is good for the soul to preserve and which otherwise might easily be erased from it. Likewise the harm they may cause consists entirely in their strengthening and preserving others on which it is not good to dwell.” (*Passions* II, art. 74, AT XI 383 : CSM I 354). In animals these movements do not maintain thoughts (since they do not have them) but only “the movements of the nerves and the muscles which usually accompany the passions.”¹⁷⁶ The thought that originally caused the passion will remain for as long as the “disturbance” lasts. “Until this disturbance ceases they [the passions] remain present to our mind in the same way as the objects of the senses are present to it while they are acting upon our sense organs” (*Passions* I, art 46, AT XI 363 : CSM I 345).

As the nerves leading to the heart are *pulled*, the opening of the orifices (in the heart) will result in a different flow of blood towards the brain. This will produce new spirits (*Passions* I, art. 39), similar to the ones which caused the original thought, and which will “open and re-open the pores of the brain

¹⁷⁵ “As for the opinion of those who think that the soul receives its passions in the heart, this is not worth serious consideration, since it is based solely on the fact that the passions make us feel some change in the heart. It is easy to see that the only reason why this change is felt as occurring in the heart is that there is a small nerve which descends to it from the brain—just as pain is felt as in the foot by means of the nerves in the foot, and the stars are perceived as in the sky by means of their light and the optic nerves. Thus it is no more necessary that our soul should exercise its functions directly in the heart in order to feel its passions there, than that it should be in the sky in order to see the stars there.” (*Passions* I, art. 34, AT XI 354 : CSM I 341).

¹⁷⁶ “[A]lthough they [animals] lack reason, and perhaps even thought, all the movements of the spirits and of the gland which produce passions in us are nevertheless present in them too, though in them they serve to maintain and strengthen only the movements of the nerves and the muscles which usually accompany the passions and not, as in us, the passions themselves. So when a dog sees a partridge, it is naturally disposed to run towards it; and when it hears a gun fired, the noise naturally impels it to run away.” (*Passions* I, art.50, AT XI 370 : CSM I 348).

which direct the spirits into the same nerves,” thus maintaining the passion (*Passions* I, art. 36).¹⁷⁷ Thus, for example, in the case of love:

[W]hen the understanding thinks of some object of love, this thought forms an impression in the brain which directs the animal spirits through the nerves of the sixth pair to the muscles surrounding the intestines and stomach, where they act in such a way that the alimentary juices (which are changing into new blood) flow rapidly to the heart without stopping in the liver. Driven there with greater force than the blood from other parts of the body, these juices enter the heart in greater abundance and produce a stronger heat there because they are coarser than the blood which has already been rarefied many times as it passes again and again through the heart. As a result the spirits sent by the heart to the brain have parts which are coarser and more agitated than usual; and as they strengthen the impression formed by the first thought of the loved object, these spirits compel the soul to dwell upon this thought. This is what the passion of love consists in. (*Passions* II, art. 102, AT XI 404 : CSM I 364)¹⁷⁸

This process of maintaining and strengthening, which is done by the ongoing bodily motions only, may explain why Descartes attributed to the second type of “movement of the gland caused by spirits” the “cause” of both the “passions or the bodily movements which accompany the passions” (*Passions* I, art 47, AT XI 365 : CSM I 346).¹⁷⁹ This does not mean that the external objects may cause the bodily motions (proper of passions, i.e. excluding the motions of the limbs) *without* the passion; it means that, once they have caused the passion, the motion of the spirits *continue* by themselves causing the bodily motions that maintain and strengthen the passion.

Similarly, the fact that the opening of the pores in the brain, the opening of the orifices in the heart and the flow of the blood from the heart towards the brain, are all motions triggered by the motion

¹⁷⁷ “[T]he very same movement of the gland which in some excites fear, in others causes the spirits to enter the pores of the brain which direct them partly into those which agitate the blood and drive it towards the heart in the manner required to produce spirits appropriate for continuing this defence and for maintaining the will to do so.” (*Passions* I, art. 39, AT XI 358-59 : CSM I 343); “The rest of the spirits go to nerves which expand or constrict the orifices of the heart, or else to nerves which agitate other parts of the body from which blood is sent to the heart, so that the blood is rarefied in a different manner from usual and spirits are sent to the brain which are adapted for maintaining and strengthening the passion of fear—that is, for holding open and re-opening the pores of the brain which direct the spirits into the same nerves.” (*Passions* I, art. 36, AT XI 356-57 : CSM I 342)

¹⁷⁸ Another example: “It has also happened at the beginning of our life that the blood contained in the veins was quite suitable for nourishing and maintaining the heat of the heart, and was so plentiful that the heart had no need for any other source of nourishment. This produced the passion of joy in the soul. At the same time it caused the orifices of the heart to be opened wider than usual; and it made the spirits flow abundantly from the brain not only into the nerves which serve to open these orifices but also generally into all the other nerves which drive the flood from the veins to the heart, thus preventing any fresh blood from coming into the heart from the liver, spleen, intestines and stomach. That is why these same movements accompany joy” (*Passions* II, art. 109, AT XI 409 : CSM I 366).

¹⁷⁹ “Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions.” (*Passions* I, art 47, AT XI 365 : CSM I 346)

of the spirits in the brain towards the pores, leads Descartes to say that the cause of *any* of these three motions (which in reality are successive moments of a continuous one), is the *cause* of passions:

[T]hey [the passions] are caused chiefly by the spirits contained in the cavities of the brain making their way to nerves which serve to expand or constrict the orifices of the heart, or to drive blood towards the heart in a distinctive way from other parts of the body, or to maintain the passion in some other way. (*Passions I*, art.37, AT XI 357 : CSM I 342)

This also explains why, in some places, Descartes even says that the heart—together with the other organs that “help produce the blood and hence the spirits”—is cause, but not *the* cause, of the primitive passions (except of wonder):

Unlike the cause of wonder, which is located in the brain alone, their cause [i.e. the cause of the other five passions] is located also in the heart, the spleen, the liver and all the other parts of the body, in so far as they help to produce the blood and hence the spirits. For, although, all the veins conduct the blood to the heart, it sometimes happens that the blood in some veins is driven there with greater force than the blood in other veins; and it also happens that the openings through which the blood enters or leaves the heart are enlarged or contracted to a greater extent at one time than at another. (*Passions II*, art. 96, AT XI 401 : CSM I 362)

In fact, he offers sometimes accounts of the arousal of passions as if the process started precisely in the heart. Thus, when he explains the generation of hatred, he writes:

Sometimes, on the other hand, there came to the heart a juice of an alien nature, which was unsuitable for maintaining heat, or even was capable of extinguishing it. This caused the spirits rising from the heart to the brain *to produce the passion of hatred in the soul.* (*Passions II*, art. 108, AT XI 408 : CSM I 366; my italics)

And regarding joy:

It has also sometimes happened at the beginning of our life that the blood contained in the veins was quite suitable for nourishing and maintaining the heat of the heart, and was so plentiful that the heart had no need for any other source of nourishment. This *produced the passion of joy in the soul.* (*Passions II*, art. 109, AT XI 409 : CSM I 366)

Not only the nerves from the brain to the heart, but also those towards other organs, may be *pulled* by the flow of the spirits from the cavities into the pores. This causes the organs to send blood to the heart (*Passions* I, art. 15), and after being rarefied there, it (the blood) travels to the brain where the “very fine parts of the blood” (which Descartes calls spirits) are separated (*Passions* I, art. 10) so that they can maintain the passion. “[T]he blood is rarefied in a different manner from usual and spirits are sent to the brain which are adapted for maintaining and strengthening the passion.”¹⁸⁰

As to the role of the heart and the different bodily organs in this process, they are mainly responsible for the “inequality of the spirits”. This means they are also responsible for the sort of impression those spirits may cause later on in the brain or, that is, for the way in which they enter certain pores and not others and thus, for maintaining certain passions and not others. The “nerves embedded in the base of the heart which serve to enlarge and contract the openings to its cavities” affect “the strength of its [the blood’s] expansion” and thus “produce spirits having various different dispositions”. Different body parts also may *send* different amounts of, differently “agitated,” blood to the heart. “[D]ifferences in these parts are matched by corresponding differences in the expansion of the blood in the heart, which results in the production of spirits having different qualities” (*Passions* I, art. 15, AT XI 340 : CSM I 334):¹⁸¹

Thus, for example, the blood coming from the lower part of the liver, where the gall is located, expands in the heart in a different manner from the blood coming from the spleen; the latter expands differently from the blood coming from the veins of the arms or legs; and this expands differently again from the alimentary juices when, just after leaving the stomach and bowels, they pass rapidly to the heart through the liver. (*Passions* I, art. 15, AT XI 340-41 : CSM I 334)

¹⁸⁰ [S]ome of the spirits reflected from the image formed on the gland proceed from there to the nerves which serve to turn the back and move the legs in order to flee. The rest of the spirits go to nerves which expand or constrict the orifices of the heart, or else to nerves which agitate other parts of the body from which blood is sent to the heart, so that the blood is rarefied in a different manner from usual and spirits are sent to the brain which are adapted for maintaining and strengthening the passion of fear—that is, for holding open or re-opening the pores of the brain which direct the spirits into the same nerves. For merely by entering into these pores they produce in the gland a particular movement which is ordained by nature to make the soul feel this passion. And since these pores are related mainly to the little nerves which serve to contract or expand the orifices of the heart, this makes the soul feel the passion chiefly as if it were in the heart. (*Passions* I, art.36, AT XI 356-57 : CSM I 342)

¹⁸¹ “Such an inequality of the spirits may also arise from various conditions of the heart, liver, stomach, spleen and all the other organs that help to produce them. In this connection we must first note certain small nerves embedded in the base of the heart, which serve to enlarge and contract the openings to its cavities, thus causing the blood, according to the strength of its expansion, to produce spirits having various different dispositions. It must also be observed that even though the blood entering the heart comes there from every other place in the body, it often happens nevertheless that it is driven there more from some parts than from others, because the nerves and muscles responsible for these parts exert more pressure on it or make it more agitated. And differences in these parts are matched by corresponding differences in the expansion of the blood in the heart, which results in the production of spirits having different qualities.” (*Passions* I, art. 15, AT XI 340 : CSM I 334)

As we continue the causal process, the next *stage* would be the “external signs which usually accompany the passions”. They directly result from the bodily changes which maintain and strengthen the passion. According to Descartes, “[t]he most important such signs are the expressions of the eyes and the face, changes in colour, trembling, listlessness, fainting, laughter, tears, groans and sighs” (*Passions II*, art. 112 AT XI 411 : CSM I 367). Changes in color, for example, result from whether the flow of blood “fills the small veins located near its surface [i.e. the surface of the face] to a greater or lesser extent” (*Passions II*, art.114, AT XI 413 : CSM I 368).¹⁸² As to trembling, there are two possible causes:

There are two distinct causes of trembling. One is that sometimes too few of the spirits in the brain enter into the nerves to be able to close the little passages of the muscles in just the way that, according to the account given in article 11, they must be closed in order to cause the movements of the limbs; and the other is that sometimes too many of the spirits enter into the nerves to be able to do this. (*Passions II*, art.118, AT XI 415-16 : CSM I 369)¹⁸³

Listlessness, “[a]s in the case of trembling, but in a different way,[...] results from too few spirits entering into the nerves” (*Passions II*, art.119, AT XI 416 : CSM I 370).¹⁸⁴ Fainting is caused when “the fire in our heart” is “smothered in such a way that there remain some traces of heat which may afterwards rekindle it” (*Passions II*, art.122, AT XI 418 : CSM I 370-71).¹⁸⁵ Laughter is caused by the way in which blood arrives in the lungs, in particular “when the blood coming from the right-hand cavity of the heart through the arterial vein causes the lungs to swell up suddenly and repeatedly” (*Passions II*, art.124, AT XI 419 :

¹⁸² “It is certain that the colour of the face comes solely from the blood which, flowing continually from the heart through the arteries into the veins and then back into the heart, colours the face more or less, depending on whether it fills the small veins located near its surface to a greater or lesser extent.” (*Passions II*, art.114, AT XI 413 : CSM I 368)

¹⁸³ The passage continues: “The first cause is seen in sadness and fear, and also when we tremble with cold. For these passions, like the coldness of the air, may cause the blood to thicken so much that it does not supply enough spirits to the brain to permit any to be sent to the nerves. The other cause is often seen in those who keenly desire something, or are strongly moved by anger, and also in those who are drunk. For these two passions, as well as wine, sometimes make so many spirits go to the brain that they cannot be directed from there in an orderly way into the muscles.” (*Passions II*, art.118, AT XI 415-16 : CSM I 369)

¹⁸⁴ Descartes explains: “For the cause of trembling is that there are not enough spirits in the brain to carry out the directions of the gland when it drives them to some muscle; whereas listlessness results from the gland’s not directing the spirits to some muscles rather than others.” (*Passions II*, art.119, AT XI 416 : CSM I 370)

¹⁸⁵ “[I]s not far removed from dying, for we die when the fire in our heart is completely extinguished, and we merely fall into a faint when it is smothered in such a way that there remain some traces of heat which may afterwards rekindle it. There are many bodily indispositions which may cause us to fall into a faint; but among the passions it is only extreme joy that we observe to have the power to do this. Here is the way in which I believe it causes this effect. It opens the orifices of the heart so suddenly and so copiously that it cannot be rarefied by the heat in the heat in the heart quickly enough to raise all the little membranes which close the entrances to these veins. In this way the blood smothers the fire which it usually maintains when it enters the heart in moderate amounts.” (*Passions II*, art.122, AT XI 418 : CSM I 370-71)

CSM I 371).¹⁸⁶ Tears are “formed from the vapours that issue from our eyes” (*Passions* I, art.128, AT XI 423 : CSM I 373).¹⁸⁷ And sighs are produced when our lungs are “almost empty” but at the same time “desire agitates all the muscles of the diaphragm and chest, so that air comes rapidly through the mouth into the lungs to fill the place vacated by the blood” (*Passions* II, art.135, AT XI 428 : CSM I 375).¹⁸⁸

External signs, Descartes says, are not easily discernible because the same external signs usually accompany different passions or because they can be willingly altered. “[I]n general the soul is able to change facial expressions, as well as expressions of the eyes, by vividly feigning a passion which is contrary to one it wishes to conceal. Thus we may use such expressions to hide our passions as well as to reveal them” (*Passions*, art. 113, AT IX 412-13 : CSM I 368). External signs are better observed if (1) “several are mingled together” (“are much better observed when several are mingled together, as they normally are, than when they are separated” [*Passions*, art. 112, AT IX 411 : CSM I 367]); or (2) if they are voluntary. Descartes distinguishes between “natural” and “voluntary” external signs (*Passions*, art. 113, AT IX 412 : CSM I 368). The natural ones are (a) difficult to discern, (b) they always *reveal*, never hide, the passions, and (c) are difficult to alter (*Passions*, art. 113, AT IX 412 : CSM I 368).¹⁸⁹

The reason why *natural* signs are not easily alterable—and therefore, they usually *reveal* the passions—is because they “do not depend on the nerves and muscles as do the preceding ones: they proceed more immediately from the heart”:

¹⁸⁶ “Laughter results when the blood coming from the right-hand cavity of the heart through the arterial vein causes the lungs to swell up suddenly and repeatedly, forcing the air they contain to rush out through the windpipe, where it forms an inarticulate, explosive sound. As the air is expelled, the lungs are swollen so much that they push against all the muscles of the diaphragm, chest and throat, thus causing movement in the facial muscles with which these organs are connected. And it is just this facial expression, together with the inarticulate and explosive sound, that we call ‘laughter’.” (*Passions* II, art.124, AT XI 419 : CSM I 371)

¹⁸⁷ “[W]e must observe observe that although lots of vapours continually issue from all parts of our body, there are none from which so many issue as from the eyes. This is caused by the size of the optic nerves and the multitude of little arteries by which the vapours get there. Just as sweat is composed merely of vapours which are converted into water on the surface of the parts from which they issue, so tears are formed from the vapours that issue from our eyes.” (*Passions* I, art.128, AT XI 423 : CSM I 373)

¹⁸⁸ “The cause of sighs is very different from that of tears, even though they are similar in presupposing sadness. For whereas we are moved when our lungs are full of blood, we are moved to sigh when they are almost empty and some imagined hope or joy opens the orifice of the venous artery which sadness had constricted. Then the little blood remaining in the lungs flows down suddenly into the left-hand side of the heart through this artery, where it is driven by the desire to attain this joy. At the same time this desire agitates all the muscles of the diaphragm and chest, so that air comes rapidly through the mouth into the lungs to fill the place vacated by the blood. And that is what we call ‘sighing’.” (*Passions* II, art.135, AT XI 427-28 : CSM I 375)

¹⁸⁹ “[T]he facial expressions which [...] accompany passions [...] differ so little that some people make almost the same face when they weep as others do when they laugh. Of course, some facial expressions are quite noticeable, such as wrinkles in the forehead in anger and certain movements of the nose and lips in indignation and derision; but these seem not so much natural as voluntary.” (*Passions*, art. 113, AT IX 412 : CSM I 368)

We cannot so easily prevent ourselves from blushing or growing pale when some passion disposes us to do so. For these changes do not depend on the nerves and muscles as do the preceding ones: they proceed more immediately from the heart, which may be called the source of the passions in so far as it prepares the blood and the spirits to produce them [...] (*Passions* II, art. 114, AT XI 413 : CSM I 368).

Unlike the motion of the spirits through the nerves to the heart, or the ones to the muscles, Descartes does not assign to the motions that generate the “external signs” any specific function. The fact that he provides a detailed account of why each of them accompanies certain passions, but not a discussion of their *social function* may indicate that he either did not consider the latter relevant or that, as a natural philosopher, he was not supposed to deal with it.

2.2.3. Sensations vs. Passions

From the causal accounts of sensory perceptions and passions we can draw some conclusions regarding their difference. We know, first of all, that a different representation must occur in each case in the soul. In the case of passions, that representation is followed by a series of bodily motions which maintain and strengthen the thought (the representation), prepare the body to act, and eventually has an “influence” on the will. Understanding what makes each representation different, and whether a passion requires only one or rather two representations (somehow) combined--and, if two, how they are related—may help clarify the distinction between sensations and passions.

As we have seen, Descartes does talk about two types of representations, sensations and passions, caused by “two kinds of movement produced in the gland by the spirits”.¹⁹⁰ He is not however very explicit about their relation in the case of passions. The fear that we attribute (“we refer to”) to the *crocodile coming out of the water towards us*, could be explained in terms of a sensory representation (of a crocodile coming out of the water towards us) *plus* another representation (of the second type), which would be the one directly responsible for the passion. This double-representation account could explain why the visual perception of a crocodile coming out of the water is not always followed by the passion of

¹⁹⁰ “[W]e may distinguish two kinds of movement produced in the gland by the spirits. Movements of the first kind represent to the soul the objects which stimulate the senses, or the impressions occurring in the brain; and these have no influence on the will. Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions.” (*Passions* I, art. 47, AT XI 365 : CSM I 346).

fear. It could also account for cases in which a sensation is *cause* of a particular passion *only after a certain time has elapsed*. Seeing two pointy ears behind the bushes might appear *terrifying* only after being informed that wolves usually live in the area, but not before. The perception of the pointy ears by itself, without this new information, might not be enough to trigger the chain of events that result in (the passion of) fear.

But we do not need to assume that in these cases (passions caused by external objects) the second representation must be *added* to the first (to the representation proper of a sensation). We could also understand that only a representation of the second type occurs and that it is one *more complex* initial representation—which would *carry* all that is necessary to trigger passions. But this complexity could be in turn understood as a representation of the first type to which *something is added* without assuming that that this new addition is a different *representation* altogether. That addition would be the sufficient condition for a representation of the second type to occur. This possibility—only one representation—would intuitively be in agreement with the fact that *seeing the crocodile coming out of the water towards us* seems to be sufficient to cause fear, seems to *include* and to be inseparable of the *visual perception* (representation) of the alligator coming out of the water, and our fear does not seem to be mediated by any other event. Under this view, *seeing a crocodile on television* and *seeing it coming to us as we sit by the lake* would simply be two different types of representations.

Descartes indicates in at least one passage that he might be thinking about passions as resulting from certain *addition* to a sensation. It is an important article, however, one where he explicitly provides an “example of the way in which the passions are aroused in the soul” (*Passions* I, art. 36):

If, *in addition* [*et outre cela*], this shape [that is the shape of the animal as represented to the soul] is very strange and terrifying—that is, if it has a close relation to things which have previously been harmful to the body—this arouses the passion of anxiety in the soul, and then that of courage or perhaps fear and terror, depending upon the particular temperament of the body or the strength of the soul, and upon whether we have protected ourselves previously by defence or by flight against the harmful things to which the present impression is related. (*Passions* I, art.36, AT XI 356 : CSM I 342)

The “in addition” at the very beginning of the passage means—if we read it together with the passages that immediately precede this one--in addition to the image on the gland “which acts directly upon the soul and makes it see the shape of the animal” (which is the moment in which a sensation can be said to occur) (*Passions* I, art. 35, AT XI 356 : CSM I 342). Descartes is also unambiguously indicating (a) what

is added to the visual perception of the animal is *strangeness* and *terrifyingness* and (b) this has resulted in a representation of the second type (“this arouses the passion of anxiety in the soul”). But this does not resolve the question of whether we need to understand this as a *second* representation or simply as *something* which makes of an otherwise perceptual representation one of a different kind. It is true that Descartes does not talk of a new representation here. And although we also know from a good number of similar expressions that his language in the treatise is not always fully explicit, this silence, given its relevance, seems to be more significant than others. For the same reason, reading this silence as if he himself did not perceive the need for clarity in this question, or as if its resolution might not represent a key element of his theory, seem less plausible.

What could then be that *something* which might be *added* to the first representation—or to the process of its generation—to constitute a different one? What could make the representation of a *crocodile coming to us* different from the representation of a *crocodile coming out of the water* as we see it on television and where, in the physiologico-mental process, could that addition occur? The simplest answer would be that certain *representations* are “naturally joined” to certain passions and others are not.¹⁹¹ The representation of a “strange and terrifying” animal would simply be a representation of the second type (in particular one naturally associated to fear). But this would not yet serve as an explanation of why the crocodile is represented as “strange and terrifying” in certain occasions but not in others.

But a bit more can be said about the factors that can partially explain the difference between a *perceptual* and a *passional* representation. Two of the factors that in the treatise appear to be particularly relevant in the *alteration* of a representation are the will, and prior impressions in the brain (either caused by past experience or established by “nature”). Descartes mentions three factors in the above quotation: (a) the “temperament of the body,” (b) the “strength of the soul” and (c) “whether we have protected ourselves previously by defence or by flight against the harmful things to which the present impression is related.” The latter seems to fit within our past experience. The “temperament of the body” and the “strength of the soul” are explicitly mentioned by Descartes in the same article as some of the “factors [which] dispose the brain in such a way that some of the spirits reflected from the image formed on the gland proceed from there to the nerves” (*Passions* I, art.36, AT XI 356 : CSM I 342) and thus serve to move the limbs as well as the nerves which go to the heart and other organs. Although it is not clear here,

¹⁹¹ “[T]he movements (both of the gland and of the spirits and the brain) which represent certain objects to the soul are naturally joined to the movements which produce certain passions in it.” (*Passions* I, art.50, AT XI 369 : CSM I 348)

from previous discussions we can say that “the temperament of the body” contributes to that disposition in a different way than the “strength of the soul”. Whereas the former seems to refer to our natural disposition, the strength of the soul seems to refer to the strength gained by the will through habit (“the weakest souls could acquire absolute mastery over all their passions if we employed sufficient ingenuity in training and guiding them” [*Passions* I, art. 50, AT XI 370 : CSM I 348]).

The will can, as we have seen in cases of passions caused by volitions, arouse a specific passion at a particular moment by considering the “reasons, objects or precedents” that, supposedly in that situation, would trigger those passions, that is, by bringing up certain representations *associated* with the desired passion.¹⁹² And through habit, it can establish long-term changes, new *associations* between representations and passions.¹⁹³ Regarding the bodily motions, the will has no direct power over them,¹⁹⁴ but through habit it can establish new associations between the representation of certain objects and the passion they arouse. Habit (of which the will is responsible) means that certain “traces left by [an] object” in the brain become more prominent, and thus the consequent motions of the spirits and the gland (and eventually the representations naturally associated to them) become *more likely* in the presence of the same object.¹⁹⁵

But, for our purpose here—which is to observe what could *alter* the process, in principle, of generation of a sensation—it is particularly relevant that the will can *transform* a sensation into a passion through its *actions*, as we saw in the correspondence (To Princess Elizabeth, 6 October 1645, AT IV 312-

¹⁹² “Our passions, too, cannot be directly aroused or suppressed by the action of our will, but only indirectly through the representation of things which are usually joined with the passions we wish to have and opposed to the passions we wish to reject. For example, in order to arouse boldness and suppress fear in ourselves, it is not sufficient to have the volition to do so. We must apply ourselves to consider the reasons, objects, or precedents which persuade us that the danger is not great; that there is always more security in defence than in flight; that we shall gain glory and joy if we conquer, whereas we can expect nothing but regret and shame if we flee; and so on.” (*Passions* I, art. 45, AT XI 362-63 : CSM I 345)

¹⁹³ “It is useful to note that although the movements (both of the gland and of the spirits and the brain) which represent certain objects to the soul are naturally joined to the movements which produce certain passions in it, yet through habit the former can be separated from the latter and joined to others which are very different. [...] These things are worth noting in order to encourage each of us to make a point of controlling our passions. For since we are able, with a little effort, to change the movements of the brain in animals devoid of reason, it is evident that we can do so still more effectively in the case of men. Even those who have the weakest souls could acquire absolute mastery over all their passions if we employed sufficient ingenuity in training and guiding them.” (*Passions* I, art. 50, AT XI 369-70 : CSM I 348)

¹⁹⁴ “Of the two kinds of thought I have distinguished in the soul—the first its actions, i.e. its volitions, and the second its passions, taking this word in its more general sense to include every kind of perception—the former are absolutely within its power and can be changed only indirectly by the body, whereas the latter are absolutely dependent on the actions which produce them, and can be changed by the soul only indirectly, except when it is itself their cause.” (*Passions* I, art. 41, AT XI 359-60 : CSM I 343)

¹⁹⁵ “These traces consist simply in the fact that the pores of the brain through which the spirits previously made their way owing to the presence of this object have thereby become more apt than the others to be opened in the same way when the spirits again flow towards them. And so the spirits enter into these pores more easily when they come upon them, thereby producing in the gland that special movement which represents the same object to the soul, and makes it recognize the object as the one it wanted to remember.” (*Passions* I, art. 42, AT XI 360 : CSM I 344)

313 : CSMK 271-72). Thus the same visual representation of a group of men coming to the village may result in fear in those who *judge* the situation as dangerous or who *imagine* they are enemies--but not in those who imagine they are, say, a troupe of performers:

For instance, when it is announced in a town that enemies are coming to besiege it . . . [The souls of the inhabitants] can receive the emotion that constitutes the passion only after they have made the judgement, or else at least conceived the danger without making a judgement, and then *imprinted an image of it in the brain*, by another action, namely imagining. When a soul does this *it acts upon the spirits which travel from the brain through the nerves* into the muscles, and makes them enter the muscles whose function is to close the openings of the heart. This retards the circulation of the blood so that the whole body becomes pale, cold and trembling, and the fresh spirits returning from the heart to the brain are agitated in such a way that they are useless for forming any images except those which excite in the soul the passion of fear. All these things happen so quickly one after the other that the whole thing seems like a single operation. Similarly in all the other passions there occurs some special agitation in the spirits leaving the heart. (To Princess Elizabeth, 6 October 1645, AT IV 312-313 : CSMK 271-72; my italics)

Notice that the intervention of the will, through imagination, “imprinted an image in the brain.” In this way the soul “acts upon the spirits which travel from the brain through the nerves”. Although the intervention of the will in this case precludes us from taking it as similar to the one of the crocodile coming out of the water—in which the passion seems to be aroused without the contribution of the will—the above account would mean that the change brought about by the imagination is an impression in the brain. A new impression is added, in this case, to the one caused by the judgment of the information received or to the conception of fear. Judgment and imagination seem, then, to be causally responsible for the fear, and they both occur *after* the perception of the men coming to the village.

Past experiences—which means in particular, any *past* thought--is the other major factor that can alter enough the rope between the object and the mind for the latter to have a passion. Past experience, together with our natural disposition, can account for almost any *individual* difference--not caused by an action of the soul--in the arousal of passions.¹⁹⁶ Of these two factors, past experience would be

¹⁹⁶ “For example, the strange aversions of certain people that make them unable to bear the smell of roses, the presence of a cat, or the like, can readily be recognized as resulting simply from their having been greatly upset by some such object in the early years of their life. Or it may even result from their having been affected by the feelings their mother had when she was upset by such an object while pregnant; for there certainly is a connection between all the movements of a mother and those of a child in her womb, so that anything adverse to the one is harmful to the other. And the smell of roses may have caused severe headache in a child when he was still in the cradle, or a cat may have terrified him without anyone noticing and without any memory of it remaining afterwards; and yet the idea of the aversion he then felt for the roses or for the cat will remain imprinted on his brain till the end of his life.” (*Passions* II, art. 136, AT XI 429 : CSM I 376)

responsible for any differences that may occur *in our lifetime*—including our life in the womb before being born.¹⁹⁷ Thus, different past experience can explain, for example, why whereas the perception of certain physical features may arouse joy or love in some people but may not arouse any particular passion in others--or may arouse a different one. The love of Descartes for girls with a “slight squint” when he was young can be explained in these terms.¹⁹⁸

The influence of past experiences, a *passive* factor, physiologically means new marks, or new “folds,” in the brain--as Descartes calls them in the correspondence with Chanut.¹⁹⁹ Descartes may be referring to these changes in the brain when he writes: “our surprise may so change the *disposition of our brain*” (*Passions* I, art. 50, AT XI 369 : CSM I 348 [my italics]); or “the idea of the aversion he then felt [...] for the cat will *remain imprinted on his brain* till the end of his life” (*Passions* II, art. 136, AT XI 429 : CSM I 376 [my italics]). And, as we have seen, this influence of past experiences is also what Descartes seems to have in mind when he explains that what makes the shape of the animal “terrifying”: its “close relation to things which have previously been harmful to the body” (*Passions* I, art. 36, AT XI 356 : CSM I 342).²⁰⁰

Past experience appears also to be the crucial factor that explains “How one and the same cause may excite different passions in different people”:

The same impression which the presence of a terrifying object forms on the gland, and which causes fear in some people, may excite courage and boldness in others. The reason for this is that brains are not all constituted in the same way [*les cerveaux ne sont pas disposez en mesme façon*]. Thus the very same movement of the gland which in some excites fear, in others causes the spirits to enter the pores of the brain which direct them partly into nerves which serve to move the hands in self-defence and partly into those

¹⁹⁷ “[T]he strange aversions of certain people [...] may even result from their having been affected by the feelings their mother had when she was upset by such an object while pregnant.” (*Passions* I, art. 136, AT XI 429 : CSM I 376)

¹⁹⁸ “For instance, when I was a child I loved a little girl of my own age who had a slight squint. The impression made by sight in my brain when I looked at her cross-eyes became so closely connected to the simultaneous impression which aroused in me the passion of love that for a long time afterwards when I saw persons with a squint I felt a special inclination to love them simply because they had that defect.” (To Chanut, 6 June 164, AT V 57 : CSMK 322).

¹⁹⁹ “The objects which strike our senses move parts of our brain by means of the nerves, and there make as it were folds, which undo themselves when the object ceases to operate; but afterwards the place where they were made has a tendency to be folded again in the same manner by another object resembling even incompletely the original object.” (To Chanut, 6 June 1647, AT V 57 : CSMK 322)

²⁰⁰ “If, in addition, this shape [that is the shape of the animal, the representation-sensation] is very strange and terrifying—that is, if *it has a close relation to things which have previously been harmful to the body*—this arouses the passion of anxiety in the soul, and then that of courage or perhaps fear and terror, depending upon the particular temperament of the body or the strength of the soul, and upon whether we have protected ourselves previously by defence or by flight against the harmful things to which the present impression is related” (*Passions* I, art. 36, AT XI 356 : CSM I 342; my emphasis).

which agitate the blood and drive it towards the heart in the manner required to produce spirits appropriate for continuing this defence and for maintaining the will to do so. (*Passions* I, art. 39, AT XI 358-59 : CSM I 343)

Notice that Descartes attributes these differences to the fact “that brains are not all *disposed* in the same way”. And this is so, not only because we do have different brains, but because our brains have been *impressed* differently in our lifetime, and thus they have been, in fact, differently *shaped* (i.e. they have different folds in them). And as the brain changes with new experiences, it will also be differently affected by external objects. This means that the same object which, in principle, should cause the same representation will not do so if our past experience alters that process. And past experience—insofar as it is folds in the brain—can, in fact, alter it by contributing to cause a different impression in the brain. This does not mean, though, that we need to have any memory of the event that shaped the brain.²⁰¹ The shape of the brain is all that matters. The crocodile may cause fear in some but not in others because it impresses a different brain, that is, the impression it causes comes upon different prior impressions. In the same way that the same shoe causes a different impression depending on whether you step on dry or on wet sand, not depending on the shoe, the same crocodile causes a different impression in someone who has never seen a crocodile and in someone who has been attacked by one in the past. And once the resulting impression is different we can expect the motion of the rest of the rope to be altered: it will imply a different motion of the gland and thus a different representation—to the point that it might be of a different sort (a passion instead of a sensation).

Strong single experiences can have lasting effects for passions similar to those caused by forming new habits: they can establish new associations between thoughts and bodily motions. “[T]his habit can be acquired by a single action and does not require long practice” (*Passions* I, art. 50, AT XI, 369 : CSM I 348).²⁰² For example, the aversion to cats someone may experience could have its origin in the fact that “a cat may have terrified him without anyone noticing and without any memory of it remaining afterwards, and yet the idea of the aversion he then felt [...] for the cat will remain imprinted on his brain

²⁰¹ “[T]he smell of roses may have caused severe headache in a child when he was still in the cradle, or a cat may have terrified him without anyone noticing and without any memory of it remaining afterwards; and yet the idea of the aversion he then felt for the roses or for the cat will remain imprinted on his brain till the end of his life.” (*Passions* I, art. 136, AT XI 429 : CSM I 376)

²⁰² That “our soul and our body are so linked that once we have joined some bodily action with a certain thought, the one does not occur afterwards without the other occurring too” (*Passions* II, art. 136, AT XI 428 : CSM I 375) is, as Descartes reminds, the “principle” “which underlies everything I have written about them [the passions]” and which “can account for any particular phenomenon involving the passions, whether in oneself or in others, which has not been explained here” (*Passions* II, art. 107, AT XI 428-29 : CSM I 375).

till the end of his life” (*Passions* II, art. 136, AT XI 429 : CSM I 376). Or, “when we unexpectedly come upon something very foul in a dish we are eating with relish, our surprise may so change the disposition of our brain that we cannot afterwards look upon any such food without repulsion, whereas previously we ate it with pleasure” (*Passions* I, art. 50, AT XI, 369 : CSM I 348).

Besides the impressions caused by our experiences, Descartes also talks about certain *natural* impressions in the brain which have not been the result of any particular past experience but which seem to play a role similar to it. Two clear examples he gives are our *disposition* to love another human being when we reach “a certain age”—which depends on “certain impressions in the brain” which have been “established by nature”—and our “disgust” after enjoying certain things “for a time”. “[N]ature has established a difference of sex in human beings, as in animals lacking reason, and with this she has also implanted certain impressions in the brain which bring it about that at a certain age and time we regard ourselves as deficient—as forming only one half of a whole, whose other half must be a person of the opposite sex” (*Passions* II, art.90, AT XI 395 : CSM I 360). Similarly, “[w]e are so constituted that most of the things we enjoy are good for us only for a time, and afterwards become disagreeable. This is evident especially in the case of drinking and eating, which are beneficial only so long as we have an appetite, and harmful when we no longer have one” (*Passions* III, art. 208, AT XI 484 : CSM I 402).

Recapitulating, then, what in the causal process seems to be *passively* responsible for having a representation of the second type (a passion) rather than of the first (a sensation)—that is, why the crocodile may cause fear in some but only a visual perception in others? The simple answer is *the shape of our brains*. Some feel fear because *their brains are different*, in the literal sense that they are *shaped* differently. This also means that we could account for the passions with only one impression in the brain. Assuming the crocodile would cause a sensory perception on everybody watching it, regardless of whether it would also cause fear, we can account for the latter (when it occurs) by the difference in their brains: in the latter the same crocodile would cause a sensation *and* a passion. The same object causing an impression on a different brain would cause both a sensation and a passion. The crocodile coming out of the water would cause *one* impression, but one upon *past traces* (past experiences), which, depending on the person, may or may not result in the representation proper of fear.

To say that only one impression in the brain is necessary suggests that only one figure in the gland might be required. Descartes’ language in the *Treatise on Man* and in the *Passions* indicates that he might be thinking about this possibility. In the *Treatise*, the “figure” formed in the brain may “include anything” that can “make the soul feel [...] joy, sadness and other such passions”:

[B]y ‘figure’ I mean not only things which somehow represent the position of the edges and surfaces of objects, but also anything which, as I said above, can give the soul occasion to perceive movement, size, distance, colours, sounds, smells and other such qualities. And I also include *anything that can make the soul feel* pleasure, pain, hunger, thirst, *joy, sadness and other such passions.*(*Treatise on Man* AT XI 176 : CSM I 106; my italics)

If the figure can already “include” all it is necessary for the soul “to feel” passions, there does not seem to be need of two representations. One complex representation, which would include also all is necessary for a sensation, would be enough. In the *Passions*, the definition of some passions also reflects this idea:

Joy is a pleasant emotion which the soul has when it enjoys a good which *impressions in the brain represent* to it as its own. [...] [T]he good is one which *impressions in the brain represent* as the soul’s own [...] (*Passions* II, art.91, AT XI 396 : CSM I 360; my italics)

Sadness is an unpleasant listlessness which affects the soul when it suffers discomfort from an evil or deficiency which *impressions in the brain represent* to it as its own. (*Passions* II, art. 93, AT XI 398 : CSM I 361; my italics)

2.3. THE THREE OTHER CAUSES CONSIDERED BY DESCARTES

Although the “objects which stimulate the senses,” are the “principal and most common causes” of the passions (*Passions* II, art.51, AT XI 372 : CSM I 349), passions can also be caused by “impressions which happen to be in the brain,” by the “temperament of the body,” and by volitions (i.e. by the soul itself). As suggested above, the second and third causes seem to be closely related.

As we have seen, the movement of the spirits that Descartes identifies with the proper cause of the passions (their “proximate and ultimate” cause) occurs in the cavities as a *continuation* of the original motion of the nerves caused by the external objects. That motion of the spirits, however, can also occur without the stimulation of the nerves by the external objects. This happens, in particular, in the case of the imaginings “which are caused solely by the body”—such as “the illusions of our dreams and also the day-dreams we often have when we are awake and our mind wonders idly without applying itself to anything of its own accord” (*Passions* I, art 21, AT XI 344-45 : CSM I 336). These imaginings are *passions* in the

general sense (and can result in passion in the strict sense). And they are caused by “fortuitous” motions of the spirits, which after having “come upon the traces of various impressions” in the brain, make, again “by chance”, their way “through certain pores rather than others”:

Among the perceptions caused by the body, most of them depend on the nerves. But there are some which do not and which [...] are called ‘imaginings’. These differ from the others, however, in that our will is not used in forming them. [...] Accordingly they cannot be numbered among the actions of the soul, for they arise simply from the fact that the spirits, being agitated in different ways and coming upon the traces of various impressions which have preceded them in the brain, make their way by chance through certain pores rather than others. Such are the illusions of our dreams and also the day-dreams we often have when we are awake and our mind wanders idly without applying itself to anything of its own accord. Now some of these imaginings are passions of the soul, taking the word ‘passion’ in its proper and more exact sense, and all may be regarded as such if the word is understood in a more general sense. Nonetheless, their cause is not so conspicuous and determinate as that of the perceptions which the soul receives by means of the nerves, and they seem to be mere shadows and pictures of these perceptions. (*Passions* I, art. 21, AT XI 344-345 : CSM I 336)

Descartes is opposing, so to speak, *active* to *passive* imaginings—in his terms “imaginings formed by the soul” (*Passions* I, art. 20) to “imaginings which are caused solely by the body” (*Passions* I, art. 21). The former are actions of the soul which occur when the “volition to imagine” move the gland “in the way required”:

When our soul applies itself to imagine something non-existent—as in thinking about an enchanted palace or a chimera—and also when it applies itself to consider something that is purely intelligible and not imaginable—for example, in considering its own nature—the perceptions it has of these things depend chiefly on the volition which makes it aware of them. That is why we usually regard these perceptions as actions rather than passions. (*Passions* I, art. 20; AT XI 344 ; CSM I 336)

When we want to imagine something we have never seen, this volition has the power to make the gland move in the way required for driving the spirits towards the pores of the brain whose opening enables the thing to be represented. (*Passions* I, art.43, AT XI 361 : CSM I 344)

How are *passive* imaginings different from other perceptions and how does this affect the passions that they may arouse? Even if in these cases the spirits are not carried by the nerves, their motions can result in similar representations: “[E]verything the soul perceives by means of the nerves

may also be represented to it through the fortuitous course of the spirits” (*Passions* I, art. 26, AT XI 348 : CSM I 338). In fact, the “picture” generated by these “fortuitous course” of the spirits *may* be as vivid as the one generated by the perception of external objects: “this picture [the one caused by fortuitous motions of the spirits] is sometimes so similar to the thing it represents that it may mislead us regarding the perceptions which refer to objects outside us, or even regarding those which refer to certain parts of our body” (*Passions* I, art. 26, AT XI 348 : CSM I 338). The imaginings generated during sleep are an example: “Thus, often when we sleep and sometimes even when we are awake, we imagine certain things so vividly that we think we see them before us, or feel them in our body, although they are not there at all” (*Passions* I, art.27, AT XI 348-49 : CSM I 338).

But in general, Descartes points out, the representations which result from the fortuitous motion of the spirits differ from those which result from the motion of nerves in that the latter “are normally more lively and more definite” (*Passions* I, art. 26, AT XI 348 : CSM I 338) and calls the former “mere shadows and pictures of these perceptions”:

Now some of these imaginings are passions of the soul, taking the word ‘passion’ in its proper and more exact sense, and all may be regarded as such if the word is understood in a more general sense. Nonetheless their cause is not so conspicuous and determinate as that of the perceptions which the soul receives by means of the nerves, and they seem to be mere shadows and pictures of these perceptions. (*Passions* I, art.21, AT XI 345 : CSM I 336)

As to why perceptions not caused by the flow of the spirits within the nerves are not so “vivid” and their cause not so “conspicuous and determinate,” Descartes does not provide many details. Part of the explanation could be that, unlike proper perceptions, these imaginings depend on previous impressions in the brain, that is, on the *traces* left in the brain by previous perceptions.²⁰³ Thus, the *vividness* of the imagining might depend on the remaining strength and temporal distance of that previous impression.

What we know about the physiological role of nerves and spirits may also support the difference in vividness between *proper* perceptions and imaginings. On one hand, as we have seen above, the nerves form a rope-like relation between the gland and the external objects. Along this rope we know that each impressions in the brain results in a specific motion of the gland. Each motion of the gland is naturally

²⁰³ “[T]hey [imaginings] arise simply from the fact that the spirits, being agitated in various different ways and coming upon the traces of various impressions which have preceded them in the brain, make their way by chance through certain pores rather than others.” (*Passions* I, art.21, AT XI 344 : CSM I 336)

joined to certain representations in the soul.²⁰⁴ This seems to explain why a “conspicuous and determinate” representation would follow when the impression in the brain is caused by the nerves: for each motion there is one representation. But if we understand the “fortuitous” motions of the spirits as, say, a series of *waves* (of spirits) of different strength arriving into the cavities and attempting to leave by entering the pores in the brain, we can assume some of those spirits will enter some of those pores accidentally (by “chance”). This would result in less *definite* particular images or in a larger range of different ones (since they are not confined to certain nerves) overlapping and blurring each other. In other words, the passage *by chance* of the spirits through certain pores could affect their vividness in so far as not as many spirits may come upon traces (as originally caused the sensation), and, at the same time, those spirits may come upon a number of different traces simultaneously. This could also explain in which sense the cause of the passions resulting from the fortuitous motion of the spirits is not equally “conspicuous and determinate”.

Although Descartes does not make explicit each of the remaining steps in the arousal of the passions caused by imaginings, we can assume that, once the spirits “make their way by chance through certain pores rather than others,” they would simultaneously move the gland (which is floating above the cavities where the spirits are constantly entering and leaving), as proposed above, and therefore generate a representation in the soul. When he says that “some of these imaginings are passions of the soul, taking the word ‘passion’ in its proper and more exact sense” (*Passions I*, art. 21, AT XI 344-45 : CSM I 336),²⁰⁵ he might be using the term passion, as in other cases,²⁰⁶ to refer to the *thought* that triggers the process as, properly speaking, the passion itself. In this case, that thought is the imagining itself. From this moment on, provided the spirits move the gland—and thus the soul—in the way required to have passions (i.e. according to the second type of motion), we can expect, the generation of the passion would proceed as in the case of passions originally generated by external objects.

²⁰⁴ “I maintain that when God unites a rational soul to this machine... he will place its principal seat in the brain, and will make its nature such that the soul will have different sensations corresponding to the different ways in which the entrances to the pores in the internal surface of the brain are opened by means of the nerves.” (*Treatise on Man*, AT XI 143 : CSM I 102)

²⁰⁵ “[T]hey [imaginings] cannot be numbered among the actions of the soul, for they arise simply from the fact that the spirits, being agitated in various different ways and coming upon the traces of various impressions which have preceded them in the brain, make their way by chance through certain pores rather than others. Such are the illusions of our dreams and also the day-dreams we often have when we are awake and our mind wanders idly without applying itself to anything of its own accord. Now some of these imaginings are passions of the soul, taking the word ‘passion’ in its proper and more exact sense, and all may be regarded as such if the word is understood in a more general sense.” (*Passions I*, art. 21, AT XI 344-45 : CSM I 336)

²⁰⁶ E.g. : “just as the course which the spirits take to the nerves of the heart suffices to induce a movement in the gland through which *fear enters the soul*,...” (*Passions I*, art 38, AT XI 358 : CSM I 342-43; my italics); or “merely by entering into these pores they [the spirits] produce in the gland a particular movement which is ordained by nature to make the soul feel this passion.” (*Passions I*, art.36, AT XI 357 : CSM I 342)

The passions *caused* by our volitions are cases in which the soul itself starts the process of arousing a passion by bringing about a thought. Any case in which we may want to arouse a passion in ourselves could be a good example. The physiological structure of these cases would be similar to the one outlined for passions caused by external objects but, obviously, with a different early stages: (1) a volition would cause (2) a movement of the gland (and representation in the soul), which would in turn push (3) the flow of the spirits through the, and so on.

We have seen above the few details Descartes offers about the relationship the soul and the gland maintain. We know that the soul and the gland are “closely joined” (*Passions* I, art. 41, AT XI 359 : CSM I 343). This does not mean the soul is only *joined* to the gland (“we need to recognize that the soul is really joined to the whole body, and that we cannot properly say that it exists in any one part of the body to the exclusion of the others” [*Passions* I, art. 30; AT XI 351 : CSM I 339]), but it does mean that it (the soul) has a more direct relationship with the gland than with other parts of the body. The gland is “the principal seat of the soul,” which means it is the body part where the soul “directly exercises its functions” (*Passions* I, art.32; AT XI 352 : CSM I 340).²⁰⁷ And, very specially, for volitions, this means that “simply by this gland’s being moved in any way by the soul or the by any other cause, it drives the surrounding spirits towards the pores of the brain, which direct them through the nerves to the muscles; and in this way the gland makes the spirits move the limbs” (*Passions* I, art. 34, AT XI 355 : CSM I 341).

As to how the soul moves the gland when it has volitions Descartes only says that this happens “by simply willing something”: “the activity of the soul consists entirely in the fact that simply by willing something it brings it about that the little gland to which it is closely joined moves in the manner required to produce the effect corresponding to this volition” (*Passions* I, art. 41, AT XI 359 : CSM I 343). Volitions and motions of the gland are “naturally joined” (*Passions* I, art. 44, AT XI 361-62 : CSM I 344) so that each volition moves the gland “in the manner required to produce the effect corresponding to this volition”. And the motions of the gland also *naturally* (the “mechanism of our body is so constructed that...”) bring about motions of the spirits that will result in either bodily motions or certain thoughts (such as passions).

²⁰⁷ “Apart from this gland, there cannot be any other place in the whole body where the soul directly exercises its functions.” (*Passions* I, art.32, AT XI 352 : CSM I 340)

In general, then, for every action of the soul--i.e. for every volition--there is a corresponding motion of the gland.²⁰⁸ The soul will move the gland in a different way according to each specific volition (“in the manner required to produce the effect corresponding to this volition” [*Passions* I, art. 41, AT XI 359 : CSM I 343]). More precisely, the soul will move the gland in such a way that it will drive the spirits which surround it towards the pores in the brain first--and from there they will be driven to the nerves. “[T]he mechanism of our body is so constructed that simply by this gland’s being moved in any way by the soul or by any other cause, it drives the surrounding spirits towards the pores of the brain, which direct them through the nerves to the muscles; and in this way the gland makes the spirits move the limbs” (*Passions* I, art.34, AT XI 355 : CSM I 341).

Thus, for example, if the effect desired is the motion of a body part, “this volition makes the gland drive the spirits to the muscles which serve to bring about this effect” (*Passions* I, art 43; AT XI 361 : CSM I 344). If the effect we want to bring about is to “imagine something we have never seen” the soul will move the gland so that the spirits surrounding it will be driven towards certain pores of the brain which, in turn, will cause certain representations in the soul. “When we want to imagine something we have never seen, this volition has the power to make the gland move in the way required for driving the spirits towards the pores of the brain whose opening enables the thing to be represented” (*Passions* I, art 43, AT XI 361 : CSM I 344).²⁰⁹ And if we want “to fix our attention for some time on some particular object,” the soul will “keep the gland leaning in one particular direction during that time” (*Passions* I, art 43, AT XI 361 : CSM I 344) and this, supposedly, will also drive the spirits surrounding the gland towards certain pores of the brain for a longer period. And when we want to remember something, the will moves the gland in still a different way: “this volition [to remember] makes the gland lean first to one side and then to another, thus driving the spirits towards different regions of the brain until they come

²⁰⁸ But not vice versa, every motion of the gland results in a perception in the soul, not in a volition. “[I]t [the gland] can [...] be moved in various different ways by the soul, whose nature is such that it receives as many different impressions—that is, it has as many different perceptions as there occur different movements in this gland. And conversely, the mechanism of our body is so constructed that simply by this gland’s being moved in any way by the soul or by any other cause, it drives the surrounding spirits towards the pores of the brain, which direct them through the nerves to the muscles; and in this way the gland makes the spirits move the limbs.” (*Passions* I, art. 34, AT XI 355 : CSM I 341)

²⁰⁹ “If we want to imagine something we have never seen, this volition has the power to make the gland move in the way required for driving the spirits towards the pores of the brain whose opening enables the thing to be represented. Again, when we want to fix our attention for some time on some particular object, this volition keeps the gland leaning in one particular direction during that time. And finally when we want to walk or move our body in some other way, this volition makes the gland drive the spirits to the muscles which serve to bring about this effect.” (*Passions* I, art. 44, AT XI 361 : CSM I 344)

upon the one containing traces left by the object we want to remember” (*Passions* I, art. 42, AT XI 360 : CSM I 343-44).²¹⁰

Notice that, regardless of how we should understand the *interaction* soul-gland—that is, the interaction mind-body *starting* in the mind—the resulting motion of the gland is a physical one (and it cannot be otherwise since it is a body): “this volition makes the gland lean first to one side...” (*Passions* I, art. 42, AT XI 360 : CSM I 343-44); “this volition has the power to make the gland move in the way required for driving the spirits [...]” (*Passions* I, art. 43, AT XI 361 : CSM I 344); “this volition keeps the gland leaning in one particular direction” (*Passions* I, art. 43, AT XI 361 : CSM I 344); or “this volition makes the gland drive the spirits to the muscles” (*Passions* I, art. 43, AT XI 361 : CSM I 344).

However, according to what Descartes tells Elizabeth, on 21 May 1643, regarding the soul-body union, the particular interaction (soul-body) should *not* be understood in the same terms as body-body interactions, that is, in terms of “real contact”.²¹¹ This *interaction* should probably not even viewed as such, i.e. as an *action* of something on something. In fact, it does not occur through a medium—which is precisely the reason why the problem is to understand their “union” not how one acts on the other.²¹² I suggested above viewing it as the two *sides* of a coin, for example, one of which is mental and the other corporeal, may be more appropriate. But even if we accept that this is all that can be said about the interaction, we know a bit more about one side of this *interaction*, i.e. the gland, than about the other. Both the *effect* caused on the gland by the action of the soul (by volitions) and the motion of the gland that serves as *cause* of a perception in the soul are the sort of events that result in, or initiate, the (mechanical) motion of a body. So, we have (a) an action which, however, as Descartes warns, should not be thought in terms of body-body impact, but (b) in which one of the sides (body) behaves as if this were in fact the case.

²¹⁰ “[W]hen the soul wants to remember something, this volition makes the gland lean first to one side and then to another, thus driving the spirits towards different regions of the brain until they come upon the one containing traces left by the object we want to remember. These traces consist simply in the fact that the pores of the brain through which the spirits previously made their way owing to the presence of this object have thereby become more apt than the others to be opened in the same way when the spirits again flow towards them. And so the spirits enter into these pores more easily when they come upon them, thereby producing in the gland that special movement which represents the same object to the soul, and makes it recognize the object as the one it wanted to remember.” (*Passions* I, art. 42, AT XI 360 : CSM I 343-44)

²¹¹ “[W]hen we suppose that heaviness is a real quality, of which all we know is that it has the power to move the body that possesses it towards the centre of the earth, we have no difficulty in conceiving how it moves this body or how it is joined to it. We never think that this motion is produced by a real contact between two surfaces, since we find, from our own inner experience, that we possess a notion that is ready-made for forming the conception in question.” (To Princess Elizabeth, 21 May 1643, AT III, 667-68 : CSM I 219)

²¹² We simply have a “primitive notion” for forming the conception of the union. “[A]s regards the soul and the body together, we have only the notion of their union, on which depends our notion of the soul’s power to move the body, and the body’s power to act on the soul and cause its sensations and passions.” (To Princess Elizabeth, 21 May 1643; AT III, 665 : CSM I 218)

Notice that since the gland is, in any case, always in contact with the spirits, it can simultaneously be moved by the soul (through a particular volition) and by these spirits.²¹³ This fact is precisely the basis of Descartes' main argument against those who before him had defended that the soul must have parts on the grounds that otherwise we could not explain certain "conflicts" that take place in it—particularly the conflicts between volitions and desires. These conflicts, Descartes thinks, rather than evidence in favour of a soul with parts, should be seen only as support for a soul with different functions:

[T]here is within us but one soul, and this soul has within it no diversity of parts: it is at once sensitive and rational too, and all its appetites are volitions. It is an error to identify the different functions of the soul with persons who play different, usually opposed roles—an error which arises simply from our failure to distinguish properly the functions of the soul from those of the body. It is to the body alone that we should attribute everything that can be observed in us to oppose our reason. So there is no conflict here except in so far as the little gland in the middle of the brain can be pushed to one side by the soul and to the other side by the animal spirits (which, as I said above, are nothing but bodies), and these two impulses often happen to be opposed, the stronger canceling the effect of the weaker. (*Passions* I, art. 47, AT XI 364-65 : CSM I 346)

These conflicts can, thus, be explained in terms of an *action* vs. a *passion* of the soul (see Figure 6). Our volition to defend the city would be opposed by our fear (passion) to die. And this physiologically means two opposed movements on the gland, the one that accompanies an action and the one that accompanies a passion. Since desires are passions for Descartes, any conflict between a desire and a volition is of this sort. These are not, in any case, neither two opposed actions of the same soul nor two opposed passions.

We have seen above that volitions are naturally joined to "some particular movement or other effect" (*Passions* I, art. 44, AT XI 361 : CSM I 344). This does not mean that they will always result in producing the willed effect even if it is the motion of a body part. Whether the volition will be followed by the willed motion or not will depend on whether and how "nature" "has joined certain movements of the gland to certain thoughts" (which are volitions in this case): "Yet our volition to produce some particular movement or other effect does not always result in our producing it; for that depends on the various ways in which nature or habit has joined certain movements of the gland to certain thoughts" (*Passions* I, art. 44, AT XI 361 : CSM I 344). Thus, for example, "when we speak, we think only of the meaning of what we want to say, and this makes us move our tongue and lips much more readily and

²¹³ "[T]he small gland which is the principal seat of the soul is suspended within the cavities containing these spirits, so that it can be moved by them in as many different ways as there are perceptible differences in the objects." (*Passions* I, art. 34, AT XI 354-55 : CSM I 341)

effectively than if we thought of moving them in all the ways required for uttering the same words. For the habits acquired in learning to speak have made us join the action of the soul (which by means of the gland, can move the tongue and lips) with the meaning of the words which follow upon these movements, rather than with the movements themselves” (*Passions* I, art. 44; AT XI 362 : CSM I 344-45). Notice that the union between the “action of the soul” and “the meaning of the words” is not a natural one, but one “acquired in learning to speak”. Learning to speak, supposedly, associates the *will to express a meaning* with the *pronunciation of a word*. Without this previous association the volition to convey a certain meaning does not seem to be enough to generate the adequate motions of the tongue and lips that will produce sounds carrying that meaning.

As we saw above, none of this means that the will, or even the gland, are necessary for our body to move. Involuntary actions—by definition, bodily motions not preceded by a volition—do not require a volition.²¹⁴ If someone thrusts his hand in front of our eyes our eyes *close* (we don’t close them).²¹⁵ Notice, however, an important difference between these involuntary actions and certain bodily motions which are (indirectly) caused by a volition but beyond the direct control of the will. The growth of the pupil that results from the volition to look at a far-distant object is one example. Whereas the decision to look at a far-distant object produces the growth in the pupil, a decision to increase the size of the pupil will not have that effect:

Yet our volition to produce some particular movement or other effect does not always result in our producing it; for that depends on the various ways in which nature or habit has joined certain movements of the gland to certain thoughts. For example, if we want to adjust our eyes to look at a far-distant object, this volition causes the pupils to grow larger; and if we want to adjust them to look at a very near object, this volition makes the pupils contract. But if we think only of enlarging the pupils, we may indeed have such a volition, but we do not thereby enlarge them. For the movement of the gland, whereby the spirits are driven to the optic nerve in the way required for enlarging or contracting the pupils, has been joined by nature with the volition to look at distant or nearby objects,

²¹⁴ “[E]very movement we make without any contribution from our will—as often happens when we breathe, walk, eat, and, indeed, when we perform any action which is common to us and the beasts—depends solely on the arraignment of our limbs and on the route which the spirits, produced by the heat of the heart, follow naturally in the brain, nerves, and muscles. This occurs in the same way as the movement of a watch is produced merely by the strength of its spring and the configuration of its wheels.” (*Passions* I, art. 16, AT XI 341-42 : CSM I 335)

²¹⁵ “If someone suddenly thrusts his hand in front of our eyes as if to strike us, then even if we know that he is our friend, that he is doing this only in fun, and that he will take care not to harm us, we still find it difficult to prevent ourselves from closing our eyes. This shows that it is not through the mediation of our soul that they close, since this action is contrary to our volition, which is the only, or at least the principal, activity of the soul. They close rather because the mechanism of our body is so composed that the movement of the hand towards our eyes produces another movement in our brain, which directs the animal spirits into the muscles that make our eyelids drop.” (*Passions* I, art 13, AT XI 338-39 : CSM I 333-34)

rather than with the volition to enlarge or contract the pupils. (*Passions* I, art. 44, AT XI 361-62 : CSM I 344)

Notice that the association between the volition to see a far-distant object and the growth of the pupil “has been joined by nature”—unlike the association between the volition to express a meaning and the pronunciation of a word which is learned. And, unlike the case in which our eyes close when a hand is thrust in front of us—which only depends on the arrangement of our body—the motion of the pupil does require the contribution of the soul. This explains why the growth of the pupil can be altered by the soul, but *only* indirectly, that is by deciding, for example, to look instead at a nearby object.

Descartes does not explicitly elaborate on the cases of passions caused by the “temperament of the body”. The expression, as suggested above, seems to refer to the causal role of the constitution of the body—which would include the body’s “natural flow” of the spirits he talks about in the correspondence. In this sense the body would be more a *disposition* than a *cause* (in the sense external objects are). The clearest usage of the expression in a causal account in the treatise seems to confirm that this is what Descartes has in mind. Children, for example, “hardly ever weep from joy, but much more often from sadness” because they “always have enough blood to produce a lot of vapours; and these turn into tears when their movement is retarded by sadness”:

Children and old people are more inclined to weep than the middle-aged, but for different reasons. Old people often weep from affection and joy. For when these two passions are combined together they send a lot of blood to the heart, and many vapours from there to the eyes. And the agitation of these vapours is reduced to such an extent by the coldness of their nature that the vapours are easily transformed into tears even without any preceding sadness. And if some old people also weep very readily from vexation, it is not so much the temperament of the body as of their mind which so disposes them. This happens only to those who are so weak that they let themselves be utterly overcome by trivial matters involving pain, fear, or pity. The same thing happens with children, who hardly ever weep from joy, but much more often from sadness, even when it is not accompanied by love. For children always have enough blood to produce a lot of vapours; and these turn into tears when their movement is retarded by sadness. (*Passions* I, art. 133, AT XI 426-427 : CSM I 374-375)

2.4. OTHER CASES PRESENT IN THE *PASSIONS*

I present in this section cases that do not seem to fit well within any of the four causes of the passions Descartes explicitly mentions in *Passions* II, art. 51.

2.4.1. Passions caused by the state of the body.

Pain or pleasure (which are sensations) are may also be cause of passions according to Descartes. “[I]t often happens that we feel sad or joyful without being able to observe so distinctly the good or evil which causes this feeling. And this happens sometimes because it affects only the body [...]” (*Passions* II, art.93, AT XI 398 : CSM I 361).²¹⁶ Descartes discusses this case in the context of giving an account of the possible different causes of two specific passions, joy and sadness. Among the possible causes of these passions, he distinguishes: (1) cases in which “these passions are aroused by goods and evils which concern solely the body” (*Passions* II, art.94)--and in which those goods and evils form an impression in the brain *without* the intervention of the soul; and (2) cases in which joy or sadness are “aroused by goods and evils which the soul does not notice even though they belong to it” (*Passions* II, art. 95). I will discuss the second type in the next section.

The first of these two cases—when joy or sadness are “aroused by goods and evils which concern solely the body”—are those in which “the body’s healthy condition and strength” is the cause of an impression of good or evil in the brain (not preceded by a representation in the soul of a good or an evil):

[W]hen we are in good health and things are calmer than usual, we feel in ourselves a cheerfulness which results not from any operation of the understanding but solely from impressions formed in the brain by the movement of the spirits. And we feel sad in the same way when our body is indisposed even though we do not know that it is. (*Passions* II, art.94, AT XI 398-99 : CSM I 361)

²¹⁶ This is the whole paragraph: “[I]t often happens that we feel sad or joyful without being able to observe so distinctly the good or evil which causes this feeling. And this happens sometimes because it [the object of the passion] affects only the body. and sometimes because, even though it affects the soul, the soul does not consider it as good or evil but views it under some other form whose impression is joined in the brain with that of the good or evil.” (*Passions* II, art.93, AT XI 398 : CSM I 361).

Cheerfulness is for Descartes a “kind of joy”.²¹⁷ Notice that Descartes is not saying that there is no representation in these cases, but rather that this is not a passion “which results from any operation of the understanding”. These are passions caused by the state of our body. According to Descartes certain impressions in the brain are “being ordained by nature to bear witness to the body’s healthy condition and strength” (*Passions* II, art. 94, AT XI 399 : CSM I 362), that is, certain impressions in the brain are impressions of “good” or “evil” regarding the body. Those impressions have a particular origin: a “titillation” caused by the external objects, which is a “movement in the nerves which would be capable of harming them if they did not have enough strength to resist it or if the body was not in a healthy condition” (*Passions* II, art. 94, AT XI 399 : CSM I 362).

In these cases, the impression caused by the external object in the brain seems to cause both of a sensation (of pleasure or pain) and of a passion (of joy or sadness). This also means that the hypothesis, proposed above, that one single impression in the brain may result in two representations, would be clearly expressed in these cases:

[W]hat makes joy ordinarily follow titillation is the fact that what we call ‘titillation’ or ‘pleasurable sensation’ occurs when the objects of the senses produce some movement in the nerves which would be capable of harming them if they did not have enough strength to resist it or if the body was not in a healthy condition. This forms an impression in the brain which, being ordained by nature to bear witness to the body’s healthy condition and strength *represents this to the soul* as a good which belongs to it insofar as it is united with the body; and so this impression produces joy in the soul. (*Passions* II, art. 94, AT XI 399 : CSM I 361-62 [my italics]).

Another peculiarity of these passions is that, since they are *about* the state of the body, they can only result in either joy or sadness—and in fact Descartes only deals with them regarding the origin of these two passions. The “titillations of the senses” or by pain (*Passions* II, art 94, AT XI 399 : CSM I 361) and result in joy or in sadness. Notice that, whereas titillations causes an impression in the brain which “represents this [the body’s healthy condition and strength] to the soul as a good”; in the case of pain the impression in the brain “represents both [the bodily damage suffered from such an action, and the body’s feeble inability to withstand it] as evils which are always unpleasant to the soul”.

²¹⁷ “[W]hat I call ‘cheerfulness’ is a kind of joy which has this peculiarity: its sweetness is increased by the recollection of the evils we have suffered, about which we feel relieved in the same way as when we feel ourselves lightened of some heavy burden which we have carried on our shoulders for a long time.” (*Passions* III, art. 210, AT XI 485 : CSM I 402)

And pain usually produces sadness because the sensation we call ‘pain’ always results from an action so violent that it injures the nerves. This sensation, ordained by nature to indicate to the soul the bodily damage suffered from such an action, and the body’s feeble inability to withstand it, represents both as evils which are always unpleasant to the soul except when they cause some goods which the soul values more highly. (*Passions II*, art.94, AT XI 399-400 : CSM I 362)

Notice that Descartes explicitly says, in the case of joy—and there is no reason not to extend it to sadness—that these passions arouse from a representation of a good or evil not only regarding the body, *but regarding the mind-body union*: “a good which belongs to it [the soul] *insofar as it is united with the body*; and so this impression produces joy in the soul” (*Passions II*, art. 94; AT XI 399 : CSM I 362; my italics). That is, the soul feels joy because the healthy state of the body represents a good for the union--for the soul “insofar as it is united with the body”.

These cases—passions which arise from the same impressions caused in the brain by objects which also cause pleasure or pain—provide the basis to explain all passions *which refer to the body* in relation to original sensations. Since love, hatred and desire—the other basic passions (excluding wonder)--can arouse from joy and sadness, all passions (referred to the body) can ultimately arouse from pain or pleasure:

[I]t is only through a feeling of pain that the soul is immediately advised [*avertie*] about things that harm the body: this feeling produces in the soul first the passion of sadness, then hatred of what causes the pain, and finally the desire to get rid of it. Similarly the soul is immediately advised [*avertie*] about things useful to the body only through some sort of titillation, which first produces joy within it, then gives rise to love of what we believe to be its cause, and finally brings about the desire to acquire something that can enable us to continue in this joy, or else to have a similar joy again later on. (*Passions II*, art.137, AT XI 430 : CSM I 376)

This is consistent also with the brief genealogical account Descartes gives about the first passions we experience in life.²¹⁸ But insofar as we can assume certain differences in the natural constitution of our

²¹⁸ [I]t seems to me that when our soul began to be joined to our body, its first passions must have arisen on some occasion when the blood, or some other juice entering the heart, was a more suitable fuel than usual for maintaining the heat which is the principle of life. This caused the soul to join itself willingly to that fuel, i.e. to love it, and at the same time the spirits flowed from the brain to the muscles capable of pressing or agitating the parts of the body from which the fuel had come to the heart, so as to make them send more of it. These parts were the stomach and the intestines, whose agitation increases the appetite, or else the liver and the lungs, which the muscles of the diaphragm can press. That is why this same movement of the spirits has ever since accompanied the passion of love. (*Passions II*, art. 107, AT XI 407-08 : CSM I 365-66)

bodies, we can also assume these passions not to be phenomenologically universal. A similar sadness (caused by the body), however, should reveal a similar damage (to the body).

This explanation seems also to imply that we could simultaneously experience two passions—one caused by the state of the body and one not—which in appearance might seem *conflictive*. Since, for example, “we feel sad [...] when our body is indisposed even though we do not know that it is” (*Passions* II, art. 94, AT XI 399 : CSM I 361), we may well feel at the same time the joy, for example, of having just found a lost cat. Descartes does not, however, discuss how the two physiological processes may be related in these cases. But we can just assume two simultaneous causal processes: one started with the damage in the nerves by the external object and the other by the thought of having recuperated our cat. As to whether we can experience their bodily changes simultaneously, we could think--taking into account what Descartes says of non-basic passions--either that (a) our thoughts (i.e. the representations proper of each emotion) may switch from one to the other, or that (b) the effect of the stronger may be moderated by the other (resulting in a mild joy). Hope and anxiety, for example, are passions that “although opposed, may nevertheless occur together, namely when we think of reasons regarding the fulfillment of the desire as easy, and at the same time we think of other reasons which make it seem difficult” (*Passions* III, art. 165, AT XI 456 : CSM I 389).²¹⁹

Descartes provides one example which is of this sort, to a certain extent. We can feel sadness and at the same time the joy that we feel by experiencing passions in general: “we naturally take pleasure in feeling ourselves aroused to all sorts of passions—even to sadness or hatred—when these passions are caused merely by the strange happenings we see presented on the stage, *or by other such things which being incapable of harming us in any way, seem to affect our soul by titillating it*” (*Passions* II, art.94; AT XI 399 : CSM I 362 [my emphasis]). Understanding “harming” as harming *our body*--as it seems to be the case considering the article where the example is given (*Passions* II, art.94)--²²⁰ this means that the joy in these cases apparently occurs *only if the passion is aroused by anything “incapable of harming us”*.

²¹⁹ Or “when anxiety is so extreme that it leaves no room for hope, it changes into despair; and this despair, representing the thing desired as impossible, entirely extinguishes desire, which applies only to things that are possible” (*Passions* III, art. 166, AT XI 459 : CSM I 389).

²²⁰ But, as it will be discussed in Chapter 3, Descartes could also be thinking about “harm” in a different sense, harm for the state of the mind-body union. Sadness could be a manifestation of a damaged state of that union, not necessarily insofar as the body is damaged, but also insofar as the *state of perfection* of the union has deteriorated.

Supposing watching a play is here opposed to *real life*, this example could implicitly mean that there is a constitutive difference between the sadness felt, for example, watching a play, and the sadness felt burying a murdered son. Whereas we can expect the former to be accompanied by joy; this might not be the case for the latter. The reason for this, according to the *condition* set by Descartes, would be that the sadness during burial would “harm” us somehow. In fact, sadness generates harmful bodily motions:

In sadness the pulse is weak and slow, and we feel as if our heart had tight bonds around it, and were frozen by icicles which transmit their cold to the rest of the body. But sometimes we still have a good appetite and feel our stomach continuing to do its duty, provided there is no hatred mixed with the sadness. (*Passions* II, art. 100, AT XI 403 : CSM I 363).

But why would real-life sadness be more harmful? Part of the explanation could be in the bodily motions generated in both cases. The context—movie vs. reality—could explain why a different impression is caused in the brain in each case, and therefore a different representation in the soul. These could, in turn, account, if not for a different passion, for a difference in the strength of the bodily motions produced in each case. And since the motions of each passion in themselves can be said to *please* or *harm* the body, a difference in strength could be enough to “indicate” to the soul that in one case the body is harmed but not in the other. In fact, if to these motions we add the ones proper of the hatred a mother could also feel towards the murderer of her son, the damage to her body would be more serious, since

in the case of hatred [...] the pulse is irregular, weaker and often quicker; we feel chills mingled with a sort of sharp, piercing heat in the chest; and the stomach ceases to perform its function, being inclined to regurgitate and reject the food we have eaten, or at any rate to spoil it and turn it into bad humours. (*Passions* II, art. 98, AT XI 402 : CSM I 363)

2.4.2. Passions aroused by “good and evils which the soul does not notice”

Descartes discusses a case in which passions which “affect the soul,” in particular joy and sadness, are apparently not triggered by the representations naturally associated to those passions (i.e. the representation of a good or an evil), but rather by the impression in the brain *associated* to that representation, that is “the good or evil forms its impression in the brain without the intervention of the soul” (*Passions* II, art.93, AT XI 398 : CSM I 361):

[I]t often happens that we feel sad or joyful without being able to observe so distinctly the good or evil which causes this feeling. And this happens sometimes because it affects only the body and sometimes because, even though it affects the soul, the soul does not consider it as good or evil but views it under some other form whose impression is joined in the brain with that of the good or evil. (*Passions* II, art.93, AT XI 398 : CSM I 361)

Descartes gives no more than the following two examples of these cases:

Young people often take pleasure in attempting difficult tasks and exposing themselves to great dangers even though they do not hope thereby to gain any profit or glory. This pleasure arises in the following way. The thought that the undertaking is difficult forms an impression in the brain which, when joined with the impression they could form if they were to think that it is a good thing to feel sufficiently courageous, happy, skilful, or strong to dare take such risks, causes them to take pleasure in doing so. And the satisfaction which old people feel in recollecting the evils they have suffered results from their thinking that it is a good thing to have been able to survive in spite of them. (*Passions* II, art.95, AT XI 400 : CSM I 362)

Notice, in the first example, the separation of (a) the “thought that the undertaking is difficult,” which is a representation in the soul; from (b) “the impression they [young people] could form *if they were to think* that it is a good thing to feel sufficiently courageous, happy, skilful, or strong to dare take such risks” (my emphasis). , which does not imply a prior representation. The latter is, as Descartes puts it, only an “impression”—an impression on the brain, we can assume—equal to the one that *could be caused* by the representation caused by thinking “that it is a good thing to feel sufficiently courageous, happy, skilful, or strong to dare take such risks”. This is a bit confusing. In principle, we should assume that the latter impression is caused by a thought itself (in this case, by the thought we are courageous). This would mean that it is not the first but the *second* thought the one responsible for the passion. The second example explicitly distinguishes these two thoughts--and attributes the passion to the second. He explains the joy that old people experience “in recollecting the evils they have suffered” by saying that their “satisfaction” arises “from their *thinking* that it is a good thing to have been able to survive in spite of them” (my italics). If it arises from their “*thinking* that it is a good thing...” we can assume then that this thought is the *representation of a good* necessary for the arousal of joy.

So, why then does Descartes present these as cases in which there is no “intervention’ of the soul (*Passions* II, art. 93)—which from previous discussion we should understand as *active* intervention? The judgment, in the first example, that attempting difficult tasks is a courageous thing, and in the second the

judgment that it is a good thing (“thinking that it is a good thing”) to have survived, seem to be the representations causally responsible for the passion. Descartes says also that in these are cases of passions “aroused by goods and evils which the soul does not notice even though they belong to it”. It would obviously be difficult to say the soul does not notice its own judgments. A solution to this would then be to take seriously the wording of the first example. The joy, he says, is caused when “the thought that the undertaking is difficult” is “joined with the impression they could form if they were to think that it is a good thing to feel sufficiently courageous, happy, skilful, or strong to dare take such risks”. The first thought would then be joined, not to another judgment (which would be an “intervention” of the soul), but to a *prior* impression in the brain. This would explain why in these cases (a) the soul “does not notice” the good that causes the passion--it does not notice it because it is an *impression* in the brain not a thought; and why (b) the soul “does not consider it [the cause] as good or evil but views it under some other form”—in these two examples, it views it under the form of the thoughts the soul has, namely, either that something difficult has been attempted, and that evils have been overcome.

Notice an important similarity in the explanation Descartes provides of the cases in which joy is caused by the “goods and evils which concern solely the body” and by “goods and evils which the soul does not notice even though they belong to it”. Whereas Descartes explains the first cases by the *association* between certain movements of the nerves and certain impressions in the brain (and between the latter and the motions in the gland, of course), in the second case, there is a similar association, but now between a thought and an existing impression in the brain. But how are the thoughts and the impressions in the brain related in the second cases?

One possible answer could be that we are *naturally constituted* so that, for example, the *experience* of having overcome past evils (and the representation that it may cause) would be naturally associated, not only to the impressions in the brain proper of the arousal of courage, but *also* to an impressions similar to the ones that (usually) accompany the representation of a good we possess (such as the *thought* that it is a good thing to have survived past evils). Recall that these are cases of “goods and evils which the soul does not notice even though *they belong to it*” (my italics). This would be somehow equivalent to saying that certain passions would be naturally associated to certain impressions proper of either joy or sadness (or proper of a representation of a good or an evil). Another possibility is that we may have *associated* both (thought and impression) in the past through a judgment. We may come, through habit, to consider “attempting difficult tasks” to be a good, thus, associating that thought to an impression of the sort that usually accompany the representation of a good.

2.4.3. Internal and intellectual emotions

Descartes talks about two types of “emotions” which differ enough from other *passions of the soul* not to be called such. The reason why they should not be called *passions* is, apparently, because they do not depend on the agitation of the spirits; they only depend on the soul (*Passions* II, art. 147, AT XI 440 : CSM I 381).²²¹ They are called “intellectual” [*intellectuelle*] emotions (e.g. *Passions* II, arts. 91, 92 and 93) and “internal emotions” [*emotions interieures*] (*Passions* II, arts. 147 and 148). Although there are reasons to think--from the way they are both defined, the contexts in which both concepts are introduced, the examples provided, and their apparent interchangeability (according to Descartes’ own usage)—that they are the same, this is not clear.

Whereas among the intellectual emotions, “intellectual joy,” for example, “arises in the soul through an action of the soul alone” (*Passions* II, art. 91, AT XI 397 : CSM I 361), internal emotions “are produced in the soul only by the soul itself” (*Passions* II, art. 147, AT XI 440 : CSM I 381). Descartes only talks, however, about “intellectual joy” and “intellectual sadness” in the treatise (he talked about “intellectual love” in the correspondence) but refers in general to “internal emotions.” If we look more closely at the definitions, other differences arise. “Purely intellectual joy,” Descartes says,

arises in the soul through an action of the soul alone. The latter may be said to be a pleasant emotion which the soul arouses in itself whenever it enjoys a good *which its understanding represents to it as its own*. Of course, while the soul is joined to the body, this intellectual joy *can scarcely fail to be accompanied by the joy which is a passion*. (*Passions* II, art. 91, AT XI 396-97 : CSM I 360-61[my italics])²²²

²²¹ That they are caused by a motion of the spirits was a crucial feature of passions in general: “we know that the ultimate and most proximate cause of the passions of the soul is simply the agitation by which the spirits move the little gland in the middle of the brain” (*Passions* II, art. 51, AT XI 371 : CSM I 349).

²²² “Joy is a pleasant emotion which the soul has when it enjoys a good *which impressions in the brain represent to it as its own*. I say that the soul has this emotion when it enjoys a good, for in fact the soul receives no other benefit from all the goods it possesses; and as long as it derives no joy from them, we may say that it does not enjoy them any more than it would if it did not possess them at all. I add that *the good is one which impressions in the brain represent as the soul’s own*, so as not to confuse this joy, which is a passion, with *the purely intellectual joy that arises in the soul through an action of the soul alone*. The latter may be said to be *a pleasant emotion which the soul arouses in itself whenever it enjoys a good which its understanding represents to it as its own*. Of course, while the soul is joined to the body, this intellectual joy can scarcely fail to be accompanied by the joy which is a passion. For as soon as our intellect perceives that we possess some good, even one so different from anything belonging to the body as to be wholly unimaginable, the imagination cannot fail immediately to form an impression in the brain, from which there ensues the movement of the spirits which produces the passion of joy.” (*Passions* II, art. 91, AT XI 396-97 : CSM I 360-61;[my italics])

Notice that intellectual joy (1) arises by an “action” of the soul, and that action is “understanding”; and (2) it is almost always followed by “the joy which is a passion”.²²³ What is between the “understanding” and the “passion” is important to distinguish these emotions. Intellectual emotions are devoid of *object*. They become passions precisely when the imagination brings one about: “as soon as our intellect perceives that we possess some good, even one so different from anything belonging to the body as to be wholly unimaginable, the imagination cannot fail immediately to form some impression in the brain, from which there ensues the movement of the spirits which produces the passion of joy” (*Passion* II, art. 91, AT XI 397 : CSM I 360-61).

Descartes only provides one example that is explicitly presented as a case of “intellectual joy”. It appears later on, and interestingly enough, among examples of “internal emotions” (in *Passions* II, art.147):

[W]hen we read of strange adventures in a book, or see them acted out on the stage, this sometimes arouses sadness in us, sometimes joy, or love, or hatred, and generally any of the passions, depending on the diversity of the objects which are presented to our imagination. But we also have pleasure in feeling them aroused in us, and this pleasure is an intellectual joy [*ioye intellectuelle*] which may as readily originate in sadness as in any of the other passions. (*Passions* II, art. 147, AT XI 441 : CSM I 381)

On the other hand, internal emotions, “are produced in the soul only by the soul itself” (*Passions* II, art. 147, AT XI 440 : CSM I 381)--and “[i]n this respect they differ from its [the soul’s] passions, which always depend on some movement of the spirits” (*Passions* II, art. 147, AT XI 440 : CSM I 381).²²⁴ However, now Descartes adds a different nuance: “although these [internal] emotions of the soul are often joined with the passions which are similar to them, *they frequently occur with others, and they may even originate in those to which they are opposed*” (*Passions* II, art. 147, AT XI 441 : CSM I 381 [my italics]). So, notice that (1) Descartes not only does *not* specifically say they are aroused by an “action” of the soul, but, in fact, he says that “they may even originate in those [passions] to which they are opposed”; and (2) they are only “often” joined with “the passions which are similar to them”.

²²³ Similarly “intellectual sadness” is usually followed by the passion of sadness: “Sadness is an unpleasant listlessness which affects the soul when it suffers discomfort from an evil or deficiency which impressions in the brain represent to it as its own. There is also an intellectual sadness which, though not the passion, rarely fails to be accompanied by it” (*Passions* II, art. 92; AT XI 397 : CSM I 361).

²²⁴ That they are caused by a motion of the spirits was a crucial feature of passions in general: “we know that the ultimate and most proximate cause of the passions of the soul is simply the agitation by which the spirits move the little gland in the middle of the brain” (*Passions* II, art. 51, AT XI 371 : CSM I 349).

This is the only unambiguous example of an “internal emotion” Descartes provides:

For example, when a husband mourns his dead wife, it sometimes happens that he would be sorry to see her brought to life again. It may be that his heart is torn by the sadness aroused in him by the funeral display and by the absence of a person to whose company he was accustomed. And it may be that some remnants of love or of pity occur in his imagination and draw genuine tears from his eyes. Nevertheless he feels at the same time a secret joy in his innermost soul, and the emotion of this joy has such power that the concomitant sadness and tears can do nothing to diminish its force. (*Passions* II, art. 147, AT XI 441 : CSM I 381)

Is Descartes then talking about two different types of emotions or just using different names? There are two reasons, compatible with the texts, to think he is using different names--“intellectual” in *Passions* II, arts. 91-95 and “internal” in *Passions* II, 147-148—but which do not apply to exclusive types. “Internal” would be a broader class of which “intellectual” would be part.

One reason is that Descartes may have chosen, in each context, the term that could best set the concept in contrast with the distinctions he is trying to establish. “Intellectual joy” and “intellectual sadness” are not introduced with the intention to provide a comprehensive view of “intellectual emotions” in general (a term that, as such, is not used by Descartes) but only in the context of a discussion on the different *causes* of the passions of joy and sadness. Thus, “intellectual” is not only opposed (indirectly) to the passions (properly speaking) of joy and sadness but, more importantly, to the other two possible causes of joy and sadness he discusses in those articles.²²⁵ All the three causes could be called “internal” in a sense, but not all of them seem to fit equally well the adjective “intellectual”. Furthermore, when the expression “internal emotions” is introduced it seems to be aimed at giving a general account of *all* internal emotions. Insofar as they are defined by not being caused by the spirits, only by the soul, the term “internal” would grasp better than “intellectual” this distinctive feature. “Intellectual” would then be reserved only for those internal emotions *caused by the intellect* (by the understanding, in particular).

Another reason is the fact that he uses an example of “intellectual joy” in order to clarify what “internal emotions” are (in *Passions* II, art. 147). This could be an indication to the reader that he is now—by using “internal emotions”—talking in general about those particular cases (intellectual joy and

²²⁵ In fact intellectual joy is one of the usual causes of (the passion of) joy, although not the only one. “When intellectual joy or sadness arouses the corresponding passion, its cause is quite obvious. For we see from the definitions that joy results from the belief that we possess some good, and sadness from the belief that we have some evil or deficiency. But it often happens that we feel sad or joyful without being able to observe so distinctly the good or evil which causes this feeling” (*Passions* II, art. 93, AT XI 398 : CSM I 361).

intellectual sadness) he referred to earlier in the treatise (but at the time only in passing and for other purposes). Notice also that the other example he gives of internal emotions (the case of the mourning husband) does not seem, however, to be a case of “intellectual” emotion.

Let us return to some of the details of how both are aroused. In which sense does intellectual joy arise “in the soul through an *action of the soul alone*”? We have read before that we should understand this *action of the soul* as “understanding,” in particular the understanding that “we possess some good” (“a pleasant emotion which the soul arouses in itself whenever it enjoys a good which its understanding represents to it as its own”). Thus, in the example above, the pleasure of feeling passions aroused in us as we watch a play causes “intellectual joy,” we can assume, at the moment in which we *understand* this capability of having passions is a good belonging to us. But this would require understanding “understanding” in an active sense, which would oppose the *Principles*, where “understanding” is a mode of perception (*Principles* I, art.32, AT VIII A 17 : CSM I 204)-- and therefore a passion, not an action of the soul.²²⁶ But the idea is not necessarily in contradiction with the *Passions* where “when our soul [...] applies itself to consider something which is purely intelligible and not imaginable [...] we usually regard these perceptions as actions rather than passions” (*Passions* I, art. 20, AT XI 344 : CSM I 336).

What is the relationship between intellectual joy and the passion of joy which usually follows it? Descartes could be simply detaching different stages of the genesis of a passion and saying that the “understanding” of a good is all we need to have intellectual joy, but that having a representation of a good without the passion which is naturally associated to it would be a violation of the proper understanding of our human nature. But this would imply that an intellectual joy *must* be followed by the passion joy. In fact, he attributes to the imagination (which is a mode of perception in the *Principles* [*Principles* I, art.32, AT VIII A 17 : CSM I 204] but an action of the soul in the *Passions* [e.g. *Passions* I, art. 20]), the responsibility for arousing the passion of joy (properly speaking). The passion itself depends “on the diversity of the objects which are presented to our imagination.” (*Passions* II, art. 147; AT XI 441 : CSM I 381). “[A]s soon as our intellect perceives that we possess some good [...] the imagination cannot fail immediately to form some impression in the brain, from which there ensues the movement of the spirits which produces the passion of joy” (*Passions* II, art. 91, AT XI 397 : CSM I 361). Although the idea is not developed in the treatise, in the correspondence with Chanut we saw that a reason why the

²²⁶ The *Principles* might not be a good guide to resolve this question. “Imagination” is there taken to be a “mode of perception” and “desire” a “mode of willing”. In the *Passions* there is no doubt that imagination is a volition and desire a passion.

imagination seems necessary is because there is no passion without an *object* or without the appropriate disposition of the body.²²⁷

As to the internal emotions, in the example Descartes provides, the “secret joy” of the husband could, in principle, be aroused, like the intellectual emotions, by the understanding or perception of a good, which in this case could possibly be the perception that living without his wife is *good for him* (i.e. a good he possess) (“Nevertheless he feels at the same time a secret joy in his innermost soul, and the emotion of this joy has such power that the concomitant sadness and tears can do nothing to diminish its force.”). The use of “secret” seems to imply that this joy occurs in a way similar to the joy aroused by the good state of our body: we are not aware of its cause. Similarly also, this “secret joy” would be independent of whether, at the same time, he may or not feel also sadness for other reasons (one of them being that he has also lost a good).

A few extra details Descartes gives about “internal emotions” later seem both to separate the two cases a bit further, and explain the differences between them we have already noticed. In what seems to be a general account of “internal emotions,” there are two very important and related features that Descartes did not mention either when he first introduced the ideas of “intellectual joy” or “intellectual sadness”. One is that “our well-being” depends on them: “our well-being being depends principally on internal emotions” (*Passions* II, art.147, AT XI 440 : CSM I 381). And another is that “these internal emotions affect us more intimately, and consequently have much more power over us than the passions which occur with them but are distinct from them” (*Passions* II, art. 148, AT XI 441-42 : CSM I 381-82).

Descartes does not develop the idea that “our well-being depends principally on internal emotions” in the article where he introduces it. All he says is that:

Here I shall merely add one further consideration which, it seems to me, serves very well to prevent us from suffering any discomfort from the passions. It is that our well-being depends principally on internal emotions which are produced in the soul by the soul itself. (*Passions* II, art. 147, AT XI 440 : CSM I 381)

Recall that Descartes appealed to her “inner joy” to overcome her sadness. That inner joy was a “cheerful heart” or a “secret feeling of cheerfulness” that, if it accompanies our actions, may bring a “happy

²²⁷ “[S]ometimes it happens that the feeling of love occurs in us without our will being impelled to love anything, because we do not come across any object we think worthy of it. It can also happen, on the other hand, that we are aware of a most worthwhile good, and join ourselves to it willingly, without having any corresponding passion, because the body is not appropriately disposed.” (To Chanut, 1 February 1647, AT IV 603 : CSMK 307)

outcome” (To Princess Elizabeth, October or November 1646, AT IV 529-30 : CSMK 296-97). That inner joy could refer to the joy caused simply by acting according to reason.

If we take into account the context of the previous article (art. 146) and the following one, it is clear that Descartes is not thinking now either about the state of our body, but about the sense in which these emotions contribute to our happiness by “preventing us from suffering any discomfort from the passions”. This is precisely what he means in art. 148 about their “power over us”: “[they] have much more power over us than the passions which occur with them but are distinct from them” (*Passions* II, art. 148, AT XI 441-42 : CSM I 381-82). Notice also that this power is, first, “power to make [oneself] happy” (*Passions* II, art. 148, AT XI 442 : CSM I 382). They have this power because they guide the soul regarding the possession of *perfections*. Not only they (1) can confirm this possession—intellectual joy would arouse each time we simply “become aware” of a perfection—but also, insofar as they do so, they (2) can protect the soul from attacks against its perfection. In this sense the greatest perfection, virtue, is also the greatest defense. And our internal joy will reveal that perfection is also the greatest joy:

[I]t is certain that, provided our soul always has the means of happiness within itself, all the troubles coming from elsewhere are powerless to harm it. Such troubles will serve rather to increase its joy; for on seeing that it cannot be harmed by them, it becomes aware of its perfection. And in order that our soul should have the means of happiness, it needs only to pursue virtue diligently. For if anyone lives in such a way that his conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’), he will receive from this a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquility of his soul. (*Passions* II, art. 148, AT XI 442 : CSM I 382)

Notice the condition Descartes imposes: “provided our soul has the means of happiness within itself”. As we saw in the correspondence, not every soul has those means, only those which are “pursuing virtue diligently,” which means living “in such a way that [one’s] conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’)” (*Passions* II, art. 148, AT XI 442 : CSM I 382). The idea that the soul must be properly *equipped* to conquer the passions had already been introduced by Descartes at the end of the first part of the treatise. There he said that only those who “equip it [their will] to fight with its proper weapons” will “conquer the passions” (*Passions* I, art. 48, AT XI 367 : CSM I 347). And the “proper weapons” for such an enterprise are “firm

and determinate judgments bearing upon the knowledge of good and evil, which the soul has resolved to follow in guiding its conduct” (*Passions* I, art. 48, AT XI 367 : CSM I 347).

It is, then, under these conditions—i.e. a soul pursuing virtue, that is a soul “equipped with its own weapons”—that the soul will not only be immune to any “troubles” but it will also experience those troubles as occasions for “satisfaction,” a satisfaction which to its highest degree is happiness (“he will receive from this a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquility of his soul”). Notice that the “troubles”—i.e. the worst troubles--Descartes is talking about are those that are aroused when one can “reproach him[self] for ever failing to do something he judges to be the best,” that is regrets and repentances for not following reason, for not “pursuing virtue”.²²⁸ If we pursue virtue we cannot regret not having followed what is true.

What about the roots of the accompanying “satisfaction”? From the passage quoted earlier, this satisfaction seems to be grounded on the fact that the soul, “on seeing that it cannot be harmed by them [troubles], become[s] aware of its perfection”. Which *perfection* is this? The argument seems to be similar to the one Descartes gave to explain why watching a play may arouse joy even if the performance itself has also aroused in us sadness or hatred: “we naturally take pleasure in feeling ourselves aroused to all sorts of passions—even to sadness and hatred—when these passions are caused merely by the strange happenings we see presented on the stage, or by other such things which, *being incapable of harming us in any way, seem to affect our soul by titillating it*” (*Passions* II, art. 94, AT XI 399 : CSM I 362 [my italics]).²²⁹ But notice that in this case (intellectual joy) Descartes seemed to refer to their incapability to “harm” our body. The troubles Descartes is talking about now (mainly as regrets) will similarly reveal, by failing to actually disturb the soul, that it is a soul in the pursuit of virtue. The awareness of this could also well be the cause of the arousal of joy (insofar as they make the soul aware of its strength).

²²⁸ Descartes had already also expressed this view at the end of the first part: “It is true that very few people are so weak and irresolute that they choose only what their passion dictates. Most have some determinate judgments which they follow in regulating some of their actions. Often these judgments are false and based on passions by which the will has previously allowed itself to be conquered or led astray; but because the will continues to follow them when the passion which caused them is absent, they may be considered its proper weapons, and we may judge souls to be stronger or weaker according to their ability to follow these judgments more or less closely and resist the present passions which are opposed to them. There is, however, a great difference between the resolutions which proceed from some false opinion and those which are based solely on knowledge of the truth. For, anyone who follows the latter is assured of never regretting or repenting, whereas we always regret having followed the former when we discover our error.” (*Passions* I, art. 49, AT XI 367-68 : CSM I 347)

²²⁹ That titillation, in turn, is usually followed by the passion of joy (“[t]his forms an impression in the brain which, being ordained by nature to bear witness to the body’s healthy condition and strength represents this to the soul as a good which belongs to it in so far as it is united with the body; and so this impression produces joy in the soul” [*Passions* II, art. 94, AT XI 399 : CSM I 362]).

We can then understand the perfection whose awareness arouses this internal joy, as equivalent to the *well-being* (for the mind-body union) revealed by the intellectual joy of those watching a play. But in this case (internal emotions) the perfection would not be health or well-functioning but *being in the pursuit of virtue* or *having achieved it*.²³⁰ And in so far as this satisfaction is aroused in the soul by the soul itself we can indeed say that this “satisfaction” is an internal joy, an internal joy not different from *happiness*. One will “receive from this [pursuit of virtue] a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquility of his soul”.

Descartes seems to be deliberately avoiding the term “passion” when he talks about internal emotions. As we have seen, the explicit reason he provides is that, unlike passions, internal emotions do not “depend on some movement of the spirits” (*Passions* II, art. 147, AT XI 440 : CSM I 381). Which movement of the spirits is this? Given the other features of these emotions—mainly that “they are produced in the soul by the soul itself” (*Passions* II, art. 147, AT XI 440 : CSM I 381)—it seems clear that this is the motion of the spirits that moves the gland—and which eventually triggers the other flows of the spirits (towards the heart and limbs). In fact, the name *passion* (as opposed to action) expresses for Descartes that the soul is *moved*, and in any perception the soul is moved at the moment in which the gland is pushed (or imprinted) by the spirits.

However, when Descartes introduced the term “emotion” before, he did so in order to emphasize another aspect of the passions of the soul. “Emotion of the soul,” and not “passions of the soul” is for Descartes the best term to refer to the object of his treatise precisely because this term gives prominence to the idea that passions are *agitations* or *disturbances* of the soul. “But it is even better to call them ‘emotions’ of the soul, not only because this term may be applied to all the changes which occur in the soul—that is, to all the various thoughts which come to it—but more particularly because, of all the kinds of thought which the soul may have, there are none that agitate and disturb it so strongly as the passions”

²³⁰ In a letter to Elizabeth Descartes had explicitly compared the joy that arouses from a perfection of *the body* (“skill,” “strength,” ...) to the joy that arises from a perfection of *the soul* (“performing a virtuous action”):

This is proved by tragedies, which please us more the sadder they make us, and by bodily exercises like hunting and tennis which are pleasant in spite of being arduous—indeed we see that often the fatigue and exertion involved increase the pleasure. The soul derives contentment from such exercise because in the process it is made aware of the strength, or skill, or some other perfection of the body to which it is joined; but the contentment which it finds in weeping at some pitiable and tragic episode in the theatre arises chiefly from its impression that it is performing a virtuous action in having compassion for the afflicted. Indeed in general the soul is pleased to feel passions arise in itself no matter what they are, provided it remains in control of them. (To Princess Elizabeth, 6 October 1645, AT IV 309 : CSMK 270)

(*Passions*, art. 28; AT XI, 349 : CSM I 339). Thus, although this feature—the disturbance of the soul—might not be enough to distinguish “internal emotions” from “passions of the soul” (there is no reason not to think that both could cause a disturbance or agitation of the soul), by choosing this term Descartes could be indicating that these are, in some sense, *more proper* passions of the soul. In which sense?

They could be so in, at least three senses: (1) “they affect us more intimately and consequently have much more power over us than the passions which occur with them but are distinct from them” (*Passions* II, art. 148) and, therefore, we could infer, they *agitate* the soul “more intimately” too; but also, (2) regarding their function, unlike other passions, “our well-being depends principally on internal emotions” which means they fulfill more properly their function than other passions; and (3) they are also better *guides* towards a happy life insofar as, as in the case of the mourning husband, “the troubles coming from elsewhere are powerless to harm it [the soul],” “for on seeing that it cannot be harmed by them, it becomes aware of its perfection” (*Passions* II, art. 148; AT XI 442 : CSM I 382). Interestingly enough these features not only could indeed explain Descartes’ use of *emotion*—in so far as they could be *deeper* agitations of the soul—but they do also seem to provide more reasons to call them *internal*. I will retake the discussion of the function of these emotions in Chapter 3.

III. THE FUNCTION OF THE PASSIONS

INTRODUCTION

From the beginning of *Passions of the Soul*, it is clear that to study the passions for Descartes means to study the *functions* they perform in humans. “There is no better way of coming to know about the passions than by examining the difference between the soul and the body, in order to learn to which of the two we should attribute each of the functions [*fonctions*] present in us” (*Passions* I, art. 2; AT XI 328 : CSM I 328). Their function is the single feature that receives, together with the physiologico-mental account a more detailed attention in the treatise (see spec. *Passions* II, arts. 52, 74-95, 137-143), even more than the ethical questions. Their function serves also as the main criterion to classify them and, consequently, to “enumerate all the principal passions” (*Passions* I, art. 52, AT XI 372 : CSM I 349).²³¹

That passions not only have a function but that it is a beneficial one is somehow assumed throughout the treatise: “I cannot believe that nature has given to mankind any passion which is always vicious [*vitieuse*] and has no good or praiseworthy function [*n’ait aucun usage bon & louable*]” (*Passions* III, art.175, AT XI 462 : CSM I 392).²³² Despite this apparent opposition between “vicious” and “good” passions, the question about the function is, in fact, not addressed by Descartes in moral terms but mainly as a question about the *benefits* they bring about for us (humans), i.e. the sense in which they are *useful for the mind-body union*. Descartes regularly refers to their function (or their usefulness) with terms such as *usage* (e.g. *Passions* I, art. 52, AT XI, 372 : CSM I 349; *Passions* II, art.137, AT XI 429 : CSM I 376; *Passions* II, art.139, AT XI 432 : CSM I 377), *utilité*, or *servir à* (*Passions* I, art. 52, AT XI, 372 : CSM I

²³¹ “[A]n enumeration of the passions requires only an orderly examination of all the various ways having importance for us in which our senses can be stimulated by their objects [*en combine de diverses façons qui nous importent nos sens peuvent estre meus par leurs objets*]. And I shall now enumerate all the principal passions according to the order in which they may thus be found.” (*Passions* I, art. 52, AT XI, 372 : CSM I 349)

²³² Descartes only expresses serious doubts about the usefulness of timidity and fear (*Passions* III, arts. 174-76).

349; *Passions* II, art.74, AT XI 383 : CSM I 354). And since talking about their usefulness is also all Descartes seems to be able to say about *what passions do*—or, rather, what they should do for us if properly guided—we can understand why their “principal effect” [*principal effect*] is expressed by Descartes also in terms of their usefulness (*Passions* I, art.40, AT XI 359 : CSM I 343):

[T]he principal effect [*principal effect*] of all the human passions is that they move and dispose the soul to want [*incitent et disposent leur ame à vouloir*] the things for which they prepare the body [*les choses ausquelles elles preparent leur corps*]. Thus the feeling of fear moves the soul to want to flee [*l’incite à vouloir fuir*], that of courage to want to fight, and similarly with the others. (*Passions* I, art. 40, AT XI, 359 : CSM I 343)

This idea is repeated and slightly expanded in *Passions* II, art. 52, titled “What is their usage, and how we can enumerate them” [*Quel est leur usage, & comment on les peut denombrier*]:

[T]he objects which stimulate the senses do not excite different passions in us because of differences in the objects, but only because of the various ways in which *they may harm or benefit us*, or in general *have importance for us* [*seulement à raison des diverses façons qu’ils nous peuvent nuire ou profiter, ou bien en general ester importants*]. The function [*usage*] of all the passions consists solely in this, that they dispose our soul to want [*disposent l’ame à vouloir*] the things *which nature deems useful for us* [*les choses que la nature dicte nous estre utiles*], and to persist in this volition [*persister en cette volonté*]; and the same agitation of the spirits which normally causes the passions also disposes the body to make movements which help us to attain these things [*dispose le corps aux mouvements qui servent à l’execution de ces choses*]. (*Passions* I, art. 52, AT XI, 372 : CSM I 349; my italics).

Thus, our passions, unlike our senses, (1) serve to discriminate what is “important” or “useful for us”; (2) “dispose our soul to want” that which is “important” for us; (3) make the soul “persist” in that disposition, and (4) “dispose our body” to acquire those things. Understanding in which sense and how passions do all this is the purpose of this chapter.

Before proceeding, some clarifications seem pertinent. Notice, first, that by identifying the “principal effect” of the passions as the disposition of the soul and the persistence of that disposition—which is usually accompanied by the preparation (or disposition) of the body—Descartes seems to be deliberately excluding from the “effects” of passions—and, thus, from the events that, properly speaking, constitute a passion--any *action* which might follow that disposition. This separation between the passion and any subsequent actions is supported by Descartes’ emphasis that the *utility* of the passions is precisely to “*strengthen and prolong thoughts* in the soul which it is good for the soul to preserve and which

otherwise might easily be erased from it” (*Passions* II, art.74, AT XI 383 : CSM I 354; my italics), which occurs at the center of his explanation of their function (in *Passions* II, art.74, titled “How the passions are useful and how they are harmful” [*A quoy servent toutes les passions, & à quoy elles nuisent*])).²³³ Although “thoughts” could here also include volitions (i.e. actions of the soul) we know that the thought “strengthened and prolonged” by a passion (1) must be a thought that has already occurred in the soul; and, from the causal account, (2) that it must precisely be the thought that caused the passion—since the passion maintains the thought that originated it (*Passions* I, art.36). That thought is a representation (a passion), not an action of the soul.

None of this means that there is no relation, for example, between the passion of love and the actions we might take to join the loved object. (I will explore that relation below, under the discussion of the second aspect of the usefulness of the passions mentioned above, the “disposition of the soul to want”.) It means that this posterior action (to join the loved object) is *not* constitutive of the passion of love strictly speaking, that is, it is not a *stage* in the physiologico-mental process of arousal or maintenance of a passion. Those posterior actions--understanding action in Cartesian terms—have, unlike passions, their origin in the soul and, although in a sense they may be “influenced” by the passion that precedes them, they cannot be said to be *caused* by the passion. Defending this separation—between actions and passions--amounts in Descartes’ account to the preservation of the fundamental difference between mind-body unions and animals. Only the former can act, strictly speaking, and only the former can be happy.

A related clarification concerns the *third* effect of the passions—according to the above outline-- i.e. to “persist” in “this volition” [*volonté*] of the soul (“they dispose our soul to want [*disposent l’ame à vouloir*] [...] and to persist in this volition [*persister en cette volonté*]”). From what we know about *volitions*, which are “actions of the soul” (“for we experience them as proceeding directly from our soul and as seeming to depend on it alone” [*Passions* I, art. 17, AT XI 342 : CSM I 335]), we should, in principle, read *volonté* here rather as *willingness* than as *act of will*, that is as disposition rather than as action. In fact, if passions simply *dispose* to want [*disposent l’ame à vouloir*], it is not a “volition” as such what a passion would maintain, but rather the *disposition* of the soul (to want and to persist in that

²³³ “From what has been said it is easy to recognize that the utility [*utilité*] of all the passions consists simply in the fact that they strengthen and prolong [*fortifient & font durer*] thoughts in the soul which it is good for the soul to preserve [*il est bon qu’elle conserve*] and which otherwise might easily be erased from it. Likewise the harm they may cause consists entirely in their strengthening and preserving these thoughts beyond what is required, or in their strengthening and preserving others on which it is not good to dwell.” (*Passions* II, art.74, AT XI 383 : CSM I 354)

volition). I will also return to this question, which is an important one, at certain length in the fourth section of this chapter.

Finally, it is worth noticing that the main function (usefulness) of the passions--strengthening and maintaining certain thoughts (i.e. *disposing* the soul) which is good for us to maintain—is precisely what Descartes had taken to be the defining feature of the passions insofar as they are perceptions, that is, the main feature that distinguishes them from other perceptions, from sensations and appetites in particular. Passions are “perceptions we refer to the soul” and “[t]he perceptions we refer to the soul are those whose *effects* we feel as being in the soul itself” (*Passions* I, art. 25, AT XI 347 : CSM I 337 [my italics]). And since we know that the “main effect” of the passions is the disposition of the soul to want the object represented by the passion (“the principal effect of all the human passions is that they move and dispose the soul to want the things for which they prepare the body” [*Passions* I, art. 40; AT XI, 359 : CSM I 343]), it appears that the reason why we “refer them [the passions] to the soul” is because they dispose *the soul* to want the object they represent.

3.1. REPRESENTATION: WHAT NATURE “DEEMS USEFUL FOR US”

We know from the causal account (Chapter 2) that one of the two possible types of movements that can be “produced in the gland by the spirits” (*Passions* I, art. 47, AT XI 365 : CSM I 346) is “ordained by nature to make the soul feel” a particular passion (*Passion* I, art. 36). The other type of movement of the gland is responsible for sensations.²³⁴ Passions are then the movements caused in the soul (i.e. thoughts) by movements of the gland of the “second kind”. Recall that each movement of the gland is also a change in the soul, a *perception* (the soul “has as many different perceptions as there occur different movements in this gland” [*Passions* I, art. 34, AT XI 355 : CSM I 341]).

²³⁴ “We may distinguish two kinds of movement produced in the gland by the spirits. Movements of the first kind represent to the soul the objects which stimulate the senses, or the impressions occurring in the brain; and these have no influence on the will. Movements of the second kind, which do have an influence on the will, cause the passions or the bodily movements which accompany the passions.” (*Passions* I, art. 47, AT XI 365 : CSM I 346)

We have also seen that the idea that passions are quite often taken by Descartes to be this specific *change* in the soul (this *thought*) is well supported by the text.²³⁵ This explains why Descartes refers to the subsequent stages in the arousal of a passion—the stages which follow this movement of the gland--as either the *maintenance* or the *effects* of the passion.²³⁶

Since passions are perceptions, we also know (1) they are *not* actions of the soul (“we may call them ‘perceptions’ if we use this term to signify all the thoughts which are not actions of the soul or volitions” [*Passions* I, art. 28, AT XI 350 : CSM I 339]; and (2) that they *represent* their objects (“the various perceptions or modes of knowledge present in us may be called its passions, in a general sense, for it is often not our soul which makes them such as they are, and the soul always receives them from the things that are represented by them [*qui sont représentées par elles*]” [*Passions* I, art. 17, AT XI 342 : CSM I 335]). This means that to arouse a passion requires producing a representation, one of a different sort than the representation proper of sensations.²³⁷

Their physiological difference means also that passions do not represent the same *content* sensations do. Passions represent the “importance” their object has for us. “[T]he objects which stimulate the senses do not excite different passions in us because of differences in the objects, but only because of the various ways in which *they may harm or benefit us*, or in general *have importance for us*” (*Passions* II, art. 52, AT XI 372 : CSM I 349 [my italics]). Thus, for example, “[a]ttraction [i.e. “the love we have for beautiful things” (*Passions* II, art.85, AT XI 392 : CSM I 358)] [...] is specially ordained by nature to represent the enjoyment of that which attracts us as the greatest of all the goods belonging to mankind, and so to make us have a burning desire for this enjoyment” (*Passions* II, art. 90, AT XI 395 : CSM I 360). What does it mean to say they represent the “importance” of the object? And how is this “importance” related to the sensory representation of the object?

As we saw in the causal account, the relationship between the sensorial representation of external object and the, so to speak, *passionate* representation it might also cause (that we can call fear), can be

²³⁵ “Merely by entering into these pores they [the spirits] produce in the gland a particular movement which is ordained by nature to *make the soul feel this passion*” (*Passions* I, art. 36, AT XI 357 : CSM I 342; my italics); “just as the course which the spirits take to the nerves of the heart suffices to induce *a movement in the gland through which fear enters the soul* [...]” (*Passions* I, art. 38, AT XI 358 : CSM I 342-43; my italics); or “the very same movement of the gland which in some excites fear [...]” (*Passions* I, art. 39, AT XI 358 : CSM I 343).

²³⁶ Whereas the motion of the spirits from the brain to the heart and from the heart to the brain maintains and reinforces the passion, the movements of the spirits towards the muscles prepare the body.

²³⁷ “[T]he movements (both of the gland and of the spirits and the brain) which represent certain objects to the soul [*qui representent à l’ame certains objets*] are naturally joined to the movements [of the soul] which produce certain passions in it [*naturellement joints avec ceux qui excitent en elle certaines passions*].” (*Passions* I, art. 50, AT XI 369 : CSM I 348)

thought in at least two ways: either as two representations (two thoughts), or as only a complex one. In principle, there is room for both options. Notice, however, that according to the one-thought-per-each-motion-of-the-gland (natural) law, in the case of two representations two motions of the gland must also have occurred before. And this, in turn, would mean that two different previous motions of the spirits, and two different impressions on the brain, must have preceded them. This, however, would be in conflict with the interpretation provided in Chapter 2, according to which passions caused by external objects would be better explained by one single impression. According to this, whereas certain impressions in the brain would cause only sensations, others would cause both sensations and passions. Our past experience and natural constitution would explain why, in front of the same lion, some would feel fear and others would not.²³⁸ A different impression in the brain would be caused in each case.

But if only one single impression on the brain is necessary, then only one subsequent flow of the spirits towards the gland and *one* motion of the gland should follow. But how then explain the production of two different types of thoughts, a sensation and a passion. According to the law of natural association (to *each* motion of the gland one thought), we should only expect one thought resulting from this motion, not two (a sensation and a passion). But we could understand this single motion of the gland as equivalent to the motion that would result if the gland were simultaneously pushed in the two possible ways in which it can be pushed by the spirits. Although he does not explain what counts exactly as *one* motion of the gland or which criteria we should apply to distinguish the two different “types” of motions the gland may have (when pushed by the spirits), we could, for example, understand each of those types as rectilinear motions with different orientation, and the complex one as a curvilinear one compound of both. The motion of the spirits that would follow the impression on the brain would carry this motion (by being itself a *compound* motion of the *rope* made of spirits). Thus, one impression in the brain but a single (complex) motion of the gland could result in either one complex representation or two simultaneous ones (if we read the compound motion as being, in reality, two simple ones).²³⁹

²³⁸ “If, in addition, this shape is very strange and terrifying—that is, if it has a close relation to things which have previously been harmful to the body—this arouses the passion of anxiety in the soul, and then that of courage or perhaps fear and terror, depending upon the particular temperament of the body or the strength of the soul, and upon whether we have protected ourselves previously by defence or by flight against the harmful things to which the present impression is related. Thus in certain persons these factors dispose their brain in such a way that some of the spirits reflected from the image formed in the gland proceed from there to the nerves which serve to turn the back and move the legs in order to flee [...]” (*Passions* I, art. 36, AT XI 356 : CSM I 342).

²³⁹ Notice that even if we think the representation as a complex one of sensation and passion, and thus there is no temporal distance between both thoughts, the passion would still *appears to us* to follow the sensation simply because, as Descartes says, we usually confuse it with the bodily motions that, in fact, follow the representation (of the “second kind”) (see e.g. *Passions* I, art.33).

Let us return to the representations themselves, to the difference in *content* between the representations Descartes calls sensations and the ones he calls passions. The set of “primitive” passions (wonder, love, hatred, joy, sadness, and desire) provides good grounds to draw general conclusions in this sense since all the others [i.e. passions] originate in them [the basic ones]” (*Passions* II, art. 69, AT XI 380 : CSM I 353).²⁴⁰ From the definitions of these passions we can extract the following six general different *primitive* associations between representations and passions (see Figure 4): (1) representations of “objects that seem to it [the soul] unusual and extraordinary” are naturally associated with the passion of wonder (*Passion* I, art. 70, AT XI 380 : CSM I 353); (2) representations of a good that “we regard as belonging to us” is associated to joy; (3) representations of a present evil to sadness (“Consideration of a present good [*consideration du bien present*] arouses joy in us, and consideration of a present evil arouses sadness, when the good or evil is one that we regard as belonging to us [*qui nous est représenté comme nous appartenant*]” [*Passions* II, art. 61, AT XI 376 : CSM I 351; see also *Passions* II, arts. 91 and 92]); (4) representations of a good *worth joining* is associated to love (“Love is an emotion of the soul caused by a movement of the spirits which impels the soul to join itself willingly to objects that appear to be agreeable to it.” [*Passions* II, art. 79, AT XI 387 : CSM I 356]) ; (5) the representation of an evil *from which we should separate ourselves* is associated to hatred (“hatred is an emotion caused by the spirits, which impels the soul to want to be separated from objects which are presented to it as harmful” [*Passions* II, art.79, AT XI 387 : CSM I 356]); and (6) the representation of a *future* good or evil, or one we should preserve, is associated to desire (“[t]he passion of desire is an agitation of the soul caused by the spirits, which disposes the soul to wish, in the future, for the things it represents to itself as agreeable” [*Passions* II, art. 86, AT XI 392 : CSM I 358]).²⁴¹

Thus the representation of a good or evil (potential, present, worth joining or future) is sufficient and necessary for a passion to occur (*Passions* I, art. 47) and, by definition of “primitive” passions we can generalize this to all passions.²⁴² Although Descartes does not define very carefully “primitive passions”

²⁴⁰ “[T]he number of those which are simple and primitive is not very large. Indeed, in reviewing all those I have enumerated, we can easily see that there are only six of this kind—namely, wonder, love, hatred, desire, joy and sadness. All the others are either composed from some of these six or they are species [*especies*] of them.” (*Passions* II, art. 69, AT XI 380 : CSM I 353)

²⁴¹ “[I]t is obvious that this passion always concerns the future. This holds in every case involving desire—not only when we desire to acquire a good which we do not yet possess or to avoid an evil which we judge may occur, but also when we merely wish for the preservation of a good or the absence of an evil.” (*Passions* II, art. 57, AT XI 374-75 : CSM I 373)

²⁴² This does not, of course, mean that more refined distinctions cannot be made if we look for the specific representation that may cause a particular passion. It does not mean either that we should assume all these passions can occur by themselves. If love implies the representation of a good we possess, and hatred of an evil, it seems that these passions should be accompanied by joy or sadness respectively insofar as a representation of a good or an evil are involved (“when we think of something as good with regard to us, i.e. as beneficial to us, [*nous est*

we know that this means, at least, that (1) they are “simple,” and (2) they are “origin” of the rest insofar as all other passions are “composed from” or are “species of” them.²⁴³ Notice also that wonder, whose relation to a “good” or “evil” might not seem so obvious, appears to be a passion that requires, at least, the representation of a *potential* good or evil. The surprise that accompanies it “may happen before we know whether or not the object is beneficial to us” but its occurrence already indicates that it might: “[i]t has no opposite, for, if the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion” (*Passions* II, art. 53, AT XI 373 : CSM I 350). I will return to wonder later in this chapter.

In the case of passions caused by external objects we can then conclude that the representation of a *good or evil* would be the difference in *representational content* with respect to the representation that would result in a sensation. As to what we should understand by “good” and “evil” Descartes says that “we commonly call something ‘good’ or ‘evil’ if our *internal senses* or our reason make us judge it *agreeable or contrary to our nature* [*convenable ou contraire à notre nature*]” (*Passions* II, art.85, AT XI 391 : CSM I 358 [my italics]). “Agreeable to our nature” (e.g. *Passions* II, art.85) is probably the expression Descartes uses more frequently to express what a “good” is. Others are “beneficial to us” (e.g. *Passions* II, art. 56) or “agreeable to the soul” (e.g. *Passions* II, arts. 79 and 81).

But, as mentioned above, we also know that objects excite passions in us depending on their “importance for us”—which explains why “an orderly examination of all the various ways of having importance” should provide us with a complete enumeration of the passions (*Passions* I, art. 52, AT XI, 372 : CSM I 349). We can then assume that representations in terms of “good” and “evil” are, in

représenté comme bonne à notre égard, c’est à dire comme nous estant convenable] this makes us have love for it; and when we think of it as evil or harmful, this arouses hatred in us” [*Passions* II, art. 56, AT XI 374 : CSM I 350]).

²⁴³ Neither “species of”—which is used by Descartes as synonym of “kinds of” (*Passions* II, art.88)—nor “composed of” seems to imply that the rest of the passions can be explained only in terms of *combinations* of “primitive” passions. In some cases at least, “kinds of” and “species of” result from the *addition* of certain judgments to other passions, e.g:

Jealousy is a kind of anxiety which is related to our desire to preserve for ourselves the possession of some good. It does not result so much from the strength of the reasons which make us believe we may lose the good, as from the high esteem in which we hold it. This causes us to examine the slightest grounds for doubt, and to regard them as very considerable reasons. (*Passions* III, art.167, AT XI 459 : CSM I 389).

[W]hen we think of the good or evil as belonging to other people, we may judge them worthy or unworthy of it. When we judge them worthy of it, that arouses in us solely the passion of joy, in so far as we get some benefit from seeing things happen as they ought; and the joy aroused in the case of a good differs from that aroused in the case of an evil only in that the former is serious whereas the latter is accompanied by laughter and derision. But if we judge the others unworthy of the good or evil, in the former case envy is aroused and in the latter case pity—envy and pity being species of sadness. And it should be observed that the same passions which relate to present goods or evils may often also be related to those which are yet to come, in so far as we think of a good or evil as if it were present when we judge that it will come about. (*Passions* II, art. 62, AT XI 377 : CSM I 351)

principle, representations about what is “important” for us. And this “importance” of the objects then—since it is responsible for “exciting different passions”—must then be also somehow *carried by* the representation. It is not clear whether, considering the context in which the term appears (“the objects which stimulate the senses do not excite different passions in us because of differences in the objects, but only because of the various ways in which *they may harm or benefit us*, or in general *have importance for us*” [my italics]), “importance” has a different extension than the “various ways” in which objects “may harm or benefit us”—and if so, what else or less “importance” could imply. But we can, at least, assume that one sense, if not the only one, of “importance” is the value of objects in terms of their benefit or harm for us.

This would not be, in any case, enough to distinguish the objects of the passions from the objects of the senses, which can also be said to represent that which is harmful or beneficial, as Descartes had stated in previous works:

[T]he proper purpose of the sensory perceptions given me by nature is simply to inform the mind of what is beneficial or harmful for the composite of which the mind is a part [...] (Sixth Meditation, AT VII 83 : CSM II 57)

They [sensory perceptions] normally tell us of the benefit or harm that external bodies may do to this combination, and do not, except occasionally and accidentally, show us what external bodies are like in themselves. (*Principles of Philosophy* II, art. 3, AT VIIIA 41-42 : CSM I 224)

A more precise, although still very vague, indication about the meaning of the “importance” represented by the passions is that it is importance regarding what “nature deems useful for us” [*les choses que la nature dicte nous estre utiles*] (*Passions* I, art. 52, AT XI 372 : CSM I 349). Understanding “for us” as *for our nature*—since Descartes is writing as a “natural philosopher”—then the “importance” represented by the passions would be *usefulness* which “nature deems” such for us (for our own nature). Notice, then, two things: (1) the “importance” represented by the objects of the passions is such *with respect to our nature*; but also (2) that importance is “deemed” such by “nature”. The latter seems to imply that we may not be aware of this importance, or even of the objects which *manifest* it, through other means, that is, without the mediation of our passions. Nature would indicate to us this “importance”

through our passions.²⁴⁴ Our passions would then represent the agreement or disagreement of the objects with our nature or, in other words, our passions would discriminate objects regarding their agreement or disagreement with our nature. But this does not seem either enough to distinguish passions from sensations. We need to explore a bit more what this *agreeability* with, or usefulness for, our nature means.

Passions II, arts. 137 and 139 offer further guidance to pursue this inquiry. Referring to five of the six basic passions—wonder is not included—Descartes talks in those two articles about the function of those passions “in so far as they relate to the body” [*en tant qu’elles se rapportent au corps*] (*Passions* II, art.137) and “in so far as they belong to the soul” [*en tant qu’elles appartiennent à l’ame*] (*Passions* II, art. 139). Both cases can, in a sense, be said to be about functions *regarding the soul* since passions “are all ordained by nature to relate to the body, and to belong to the soul only insofar as it is joined with the body” [*Passions* II, art.137, AT XI 430 : CSM I 376]). But whereas the first is so only indirectly (functions that affect primarily the body) the second type—“usefulness in so far as they belong to the soul”—refers to the function primarily for the soul. The latter represent the “chief” utility of the passions because the soul is our “better part”: “This [the function of the passions in so far as they relate to the body] would be sufficient if we had in us only a body, or if the body were our better part. But as it is only the lesser part, we should consider the passions chiefly in so far as they belong to the soul [*nous devons principalement considerer les passions en tant qu’elles appartiennent à l’ame*]” (*Passions* II, art. 139, AT XI 432 : CSM I 377).

Thus, to talk about the function of the passions is for Descartes, primarily, to talk about their function regarding our “better part,” that is, “in so far as they belong to the soul”. But what does it mean to say that they “belong to the soul”? As it will be clearer below, the distinction between “in so far as they relate to the body” [*en tant qu’elles se rapportent au corps*] (*Passions* II, art.137) and “in so far as they belong to the soul” [*en tant qu’elles appartiennent à l’ame*] (*Passions* II, art. 139) seems to be aimed at separating the passions which are useful *primarily for the body*—and which can also be said to be *about* the body—and passions useful *primarily for the soul*, even if such distinction, as Descartes himself acknowledges (“the soul is really joined to the whole body” [*Passions* I, art. 30, AT XI 351 : CSM I 339]) is in a certain sense inadequate.

²⁴⁴ Passions that *reveal* the state of health of our body is probably the clearest case we have seen which would illustrate this (see *Passions* II, art. 94).

With respect to the body, the “five passions [i.e. love, hatred, desire, joy, and sadness] are all very useful” (*Passions* II, art.137; AT XI, 430 : CSM I 376), in particular, in two senses: they help us “to preserve the body or render it in some way more perfect”:

[T]heir natural function [*leur usage naturel*] [i.e. the function of the basic passions except wonder] is to move the soul to consent and contribute to actions which may serve to preserve the body or render it in some way more perfect [*inciter l'ame à consentir & contribuer aux actions qui peuvent servir à conserver le corps, ou à le rendre en quelque façon plus parfait*]. (*Passions* II, art.137, AT XI 430 : CSM I 376)

Thus, regarding the body, passions have a double function or utility: (1) to “preserve the body” or (2) increase its *perfection* (“render it in some way more perfect”). To “render it in some way more perfect” seems to mean “to acquire” things which “add some perfection” (*Passions* II, art. 137, AT XI 430 : CSM I 376). And since “perfection” regarding the body, if we consider the examples Descartes gives to illustrate the idea (i.e. cases of passions “harmful to the body” [see *Passions* II, art. 138, AT XI 431 : CSM I 377]), appears to be its state of health, “add[ing] some perfection” would mean adding *something* which would contribute to maintain or improve that state of health.

How do then passions help preserve or increase the perfection of the body? First, they *inform* the soul about the state of the body (“it is only through a feeling of pain that the soul is immediately advised [*avertie*] about things that harm the body” [*Passions* II, art.137; AT XI 430 : CSM I 376]). But, it could again be said, this is also done by sensations or appetites. Passions do something else. As we have read in the passage above, they “move [*inciter*] the soul to consent and contribute to actions” (*Passions* II, art.137, AT XI 430 : CSM I 376) that may maintain or improve its perfection. As the French term indicates, and the discussion below should help clarify, this does not mean passions are also *actions* of the soul (in Descartes’ sense, which implies movement *initiated* by the soul). They rather *dispose* the soul to act (“consentir et contribuer” [*Passions* II, art.137, AT XI 430])—which is the main effect of *all* the passions as we have seen above. We will see below (in section three) in which sense this disposition can be understood as both “consent” and “contribution” to actions. We know, in any case, that the usefulness of the passions regarding the body is, specifically, to bring about a disposition of the soul to want that which *preserves* or *increases the perfection* of the body, that is, which preserves or increases its state of health.

In Descartes’ account, there is a very narrow relationship between certain sensations (in particular pain and pleasure) and some of the passions that fulfill this function regarding the body (i.e. preservation

of, or increase in, its perfection). Recall, for example, the cases of joy or sadness caused by the body (*Passions* II, art. 94). In those cases, the same impression in the brain that produces a sensation of a (bodily) pleasure seemed to be “ordained by nature to bear witness to the body’s healthy condition and strength” (*Passions* II, art. 94, AT XI 399 : CSM I 362). This impression, in turn, brings about the passion of joy in the soul (that is, “represents this to the soul as a good which belongs to it in so far as it is united with the body” [*Passions* II, art. 94, AT XI 399 : CSM I 362]). In other words, the representation caused by certain bodily motions—a representation which is the *sensation* of pleasure—happens to be also the cause of the representation proper of the passion of joy. Thus, the “feeling” of pleasure both “advises” the soul about things beneficial to it, and “produces” joy in the soul:

[I]t is only through a feeling of pain that the soul is immediately advised [*avertie*] about things that harm the body: this feeling produces in the soul first the passion of sadness, then hatred of what causes the pain, and finally the desire to get rid of it. Similarly the soul is immediately advised [*avertie*] about things useful to the body only through some sort of titillation, which first produces joy within it, then gives rise to love of what we believe to be its cause, and finally brings about the desire to acquire something that can enable us to continue in this joy, or else to have a similar joy again later on. (*Passions* II, art.137, AT XI 430 : CSM I 376)

Notice that it is the passions that occur after the “feelings” of pleasure or pain (i.e. joy or sadness), and not those feelings themselves, the ones that *dispose* the soul, in this case, to desire or not to desire (the object of the passion). Notice also the genealogical order, and the succession, of sensations and passions in these cases (i.e. in cases of passions aroused by pleasure or pain). Pleasure arouses joy, which in turn may arouse love, and the latter desire; and pain arouses sadness, which may produce hatred and then desire. (The titillation in the nerves “first produces joy within it [the soul], then gives rise to love of *what we believe to be its cause*, and finally brings about the desire to *acquire something* that can enable us to continue in this joy, or else to have a similar joy again later on” [my italics]; and the feeling of pain “produces in the soul first the passion of sadness, then hatred of what causes the pain, and finally the desire to get rid of it”). Pain and pleasure maintain, in this sense, a particularly close relationship with passions, in particular with joy and sadness. “[S]adness and joy are the two passions that are first employed [*les deux premieres qui sont employées*]” (*Passions* II, art.137; AT XI 430; CSM translates “have primary application” [CSM I 376]) in our lifetime precisely because they can arise directly from pain or pleasure. They do not depend on past experience or our will, (the two factors--explicitly identified by Descartes—that can alter or determine the arousal of a passion under similar causal circumstances).

Accordingly, some passions are “more necessary” regarding their usefulness for the preservation and perfection of the body. Sadness and joy are more necessary than love or hatred. But we can still be more precise: sadness is “more necessary” than joy and hatred than love:

[S]adness is in some way primary and more necessary [*premiere & plus necessaire*] than joy, and hatred more necessary than love; for it is more important to reject things which are harmful and potentially destructive than to acquire those which add some perfection which we can subsist without. (*Passions* II, art.137, AT XI, 430 : CSM I 376)

Sadness and hatred are more “necessary” than joy and love in this sense because rejection of evils is more important for the *preservation* of the body than addition of goods. However, regarding the *increase* in perfection of the body we should say that joy, love and desire, would be, if not necessary, at least more useful insofar as these are the passions that would dispose the body to *add* goods.

Notice that the causal order in the succession of *chained* passions outlined by Descartes resembles the order in which humans experience passions for the first time. “[W]hen our soul began to be joined to our body, its first passions must have arisen on some occasion when the blood, or some other juice entering the heart, was a more suitable fuel than usual for maintaining the heat which is the principle of life” (*Passions* II, art. 107, AT XI 407 : CSM I 365-66). The presence of this “suitable fuel” caused joy and love. “[I]t has [...] sometimes happened that the blood contained in the veins was quite suitable for nourishing and maintaining the heat of the heart, and was so plentiful that the heart had no need for any other source of nourishment. This produced the passion of joy in the soul” (*Passions* II, art. 109, AT XI 409 : CSM I 366). Similarly the “suitable fuel” must have “caused the soul to join itself willingly to that fuel, i.e. to love it” (*Passions* II, art. 107, AT XI 407 : CSM I 366), or “sometimes, on the other hand, there came to the heart a juice of an alien nature, which was unsuitable for maintaining the heat, or even was capable of extinguishing it. This caused the spirits rising from the heart to the brain to produce the passion of hatred in the soul” (*Passions* II, art. 108, AT XI 408 : CSM I 366). Descartes does not, however, explicitly mention, in these cases (joy and love), the need of a prior pleasurable sensation from which they originate. But there is no reason why pleasure should not immediately accompany the moment in which a “suitable fuel” was joined, we can think Descartes is simply focusing on the first passions themselves rather than implicitly affirming that they are not preceded by pain or pleasure.

Descartes is perfectly aware that certain objects that may harm the body may also “initially” cause joy, and that others that may benefit the body may cause “at first” sadness. “[I]t [this function of the passions] is not always good, in so far as there are many things harmful to the body which cause no

sadness initially [*au commencement*] (or which even produce joy), and in so far as other things are useful to the body, although at first [*d'abord*] they are disagreeable” (*Passions* II, art. 138, AT XI 431 : CSM I 377; trans. slightly modified). Insofar as this original joy and sadness are caused by sensations, these could be cases of passions which are caused by “true errors of nature” similar to the ones Descartes talks about in the Sixth Meditation (AT VII 85 : CSM II 59) regarding sensations, that is, errors which may occur when the body is not in good health.²⁴⁵ The *erroneous* thirst of the man with dropsy might in turn cause, we can say, an *erroneous* sadness that will dispose his soul to acquire water. But this does not seem to be the case Descartes seems to be addressing here, or not the only one.

His emphasis on “initially” and “at first”—which seems to be in opposition to passions which may be aroused later on by the *same* object—indicates that the joy produced by harmful objects, for example, may even occur in a healthy body. The same chocolate cake may, in fact, cause immediate pleasure (and joy), and also stomachache (and sadness) later—and thus a disposition to have (more) cake “at first” would be followed by a disposition to reject it at later moment. These would not then be cases of passions not realizing their proper function—or passions occurring in a damaged body—but rather of objects represented as having different immediate (“initially”) and long-term effects for the body, and thus arousing different passions accordingly. Whereas the original joy will *properly* follow a pleasurable sensation and thus be caused by the representation of a good, the later pain will also *properly* cause the representation of an evil and thus the passion of sadness. This expresses, rather than an “error,” lack of knowledge. “Experience and reason” (*Passions* I, art. 138, AT XI 431 : CSM I 377), the general remedy against the representational distortions of the passions, can correct this. Knowing about the influence of chocolate cakes in the human body may be enough, at least, *not to act* according to the disposition of the soul brought about by the original joy. Through habit, the very presence of chocolate cakes may not only not cause any more the original joy but cause only sadness (*Passions* I, art. 50).²⁴⁶

Let us explore the usefulness of the passions “in so far as they belong to the soul”. Descartes does not offer an explicit general answer, at least not as clearly as in the case of passions “in so far as they relate to the body”. He rather explains the usefulness of each of the basic passions with respect to the

²⁴⁵ “Yet it is much better that it should mislead on this occasion than that it should always mislead when the body is in good health.” (Sixth Meditation, AT VII 89 : CSM I 61)

²⁴⁶ “[A]lthough nature seems to have joined every movement of the gland to certain of our thoughts from the beginning of our life, yet we may join them to others through habit.” (*Passions* I, art. 50, AT XI 368 : CSM I 348)

soul, again except wonder, starting with love—which appears to be the most useful (when based on true knowledge):

I say this love [love based on true knowledge] is extremely good [*extremement bonne*] because by joining real goods to us it makes us to that extent more perfect [*joignant à nous de vrais biens, elle nous perfectionne d'autant*]. I say also that it cannot be too great, for all that the most excessive love can do is to join us so perfectly to these goods [*nous joindre si parfaitement à ces biens*] that the love we have especially for ourselves [*que l'Amour que nous avons particulièrement pour nous mesmes*] must apply to them as well as to us; and this, I believe, can never be bad. And it is necessarily followed by joy, because it represents to us what we love as a good belonging to us. (*Passions* II, art. 139, AT XI 432 : CSM I 377)

If we generalize this idea, usefulness of the passions “in so far as they belong to the soul” means usefulness to increase *our perfection* which is accomplished by “joining real goods”. “Real goods” are goods which are “truly good” (*Passions* II, art. 139; AT XI 432 : CSM I 377)—that is, goods about which we have true knowledge. (I will return to the role reason and knowledge play in the usefulness of the passions below.) “Goods” appear to be, as we have seen above, goods which are “beneficial to us” (e.g. *Passions* II, art. 56) “agreeable to the soul” (e.g. *Passions* II, arts. 79 and 81), or “agreeable to our nature” (e.g. *Passions* II, art.85). “Convenable” is probably the term most often used by Descartes and, insofar as he is writing as a “natural philosopher” (*Passions*, Prefatory Letters, AT XI 326 : CSM I 327), *our nature* is, understandably, the reference. “Our nature” is, however, used in a sense broad enough to include that which is *convenable* to the body, to the soul, or to the mind-body union. The latter (mind-body union) should, insofar as body and soul are joined, be taken as the most relevant sense. “[W]e should consider the passions chiefly in so far as they belong to the soul” (*Passions* II, art. 139, AT XI 432 : CSM I 377) taking the *better part* to talk about that which is proper of the whole (*Passions* II, art.139).

In practice, Descartes also quite often refers to either “the soul” (e.g. *Passions* II, art.74, AT XI 383 : CSM I 354) or to “us” in similar contexts (e.g.: “love [...] make *us* to that extent more perfect” [my italics] [*Passions* II, art.139, AT XI 432 : CSM I 377]; or “useful for us” in [*Passions* I, art. 52; AT XI, 372 : CSM I 349]). Thus “the function of the passions in so far as they belong to the soul” (as in the title of *Passions* II, art.139) can be understood as *usefulness for the mind-body union*, which would mean usefulness for the *increase* of its (the union’s) perfection, i.e. of our perfection *in so far as we are living humans, our natural perfection*.

What counts then as an increase of our human perfection? From the passage quoted above, we can infer that our perfection is *increased* when we *join* a new good—unlike the increase of the perfection of our body, by “acquiring” goods (e.g. *Passions* II, art.137, AT XI, 430 : CSM I 376). Love is in this sense the most useful passion because it disposes us to join that which is “agreeable” to us (“[I]love is an emotion of the soul caused by a movement of the spirits, which impels the soul to join itself willingly to objects that appear to be agreeable to it” [*Passions* II, art. 79; AT XI 387 : CSM I 356]) and by doing this we increase our perfection (“I say this love [love based on true knowledge] is extremely good because *by joining real goods to us* it makes us to that extent more perfect. (*Passions* II, art. 139, AT XI 432 : CSM I 377 [my italics]). Different passions, and even different “species” of love or desire, may dispose us differently to join objects.²⁴⁷ For example, “there are different sorts of attraction [i.e. “the love we have for beautiful things” (*Passions* II, art.85, AT XI 392 : CSM I 358)], and [...] the desires arising from them are not all equally powerful. Thus, for example the beauty of flowers moves us only to look at them, and that of fruits to eat them” (*Passions* II, art. 90, AT XI 395 : CSM I 360).

Although evil is “merely a privation” (*Passions* II, art. 140, AT XI 433 : CSM I 378), and thus it should dispose us towards actions that satisfy or compensate that privation, hatred (which *separates* us from it) is not as useful as love, because “we could always be moved to it [to that action] even more effectively [*encore mieux*] by love of the contrary good—at least when the good and evil are adequately known” (*Passions* II, art. 140, AT XI 433 : CSM I 377). And this is so for two reasons. Since that privation “cannot be conceived without some real subject in which it exists” (a) “the hatred which takes us away from some evil likewise takes us away from the good to which is joined,” and (b) “the privation of this good, being represented to our soul as a fault belonging to it, arouses sadness in it” (*Passions* II, art.140, AT XI 433 : CSM I 378). That the experience of sadness itself, regardless of any action it may dispose us to, is less conducive to our perfection is clear from its physiology: “in sadness the pulse is weak and slow, and we feel as if our heart had tight bonds around it, and were frozen by icicles which transmit their cold to the rest of the body” (*Passions* II, art. 100, AT XI 403 : CSM I 363). But there is another reason *regarding the soul* which could explain this: everything else being equal, “it is always

²⁴⁷ “Attraction [i.e. “the love we have for beautiful things” (*Passions* II, art.85, AT XI 392 : CSM I 358)] [...] is specially ordained by nature to represent the enjoyment of that which attracts us as the greatest of all the goods belonging to mankind, and so to make us have a burning desire for this enjoyment. It is true that there are different sorts of attraction, and that the desires arising from them are not all equally powerful. Thus, for example the beauty of flowers moves us only to look at them, and that of fruits to eat them.” (*Passions* II, art. 90, AT XI 395 : CSM I 360)

much better for us to incline towards the passions which tend to the good” (*Passions* I, art. 142, AT XI 435 : CSM I 378). I will return to this idea below.

Another important idea in the passage we are discussing is that since love can join us “most perfectly” to a good, it can also increase our perfection more than any other passion. What does this *joining a good* then mean and how is it related to our perfection? Descartes compares the idea of *perfectly joining a good* to the love we have for ourselves. “[A]ll that the most excessive love can do is to join us so perfectly to these goods [*nous joindre si parfaitement à ces biens*] that the love we have especially for ourselves [*que l’Amour que nous avons particulièrement pour nous mesmes*] must apply to them as well as to us; and this, I believe, can never be bad (*Passions* II, art. 139, AT XI 432 : CSM I 377).

One important implication of this—i.e. of the idea that to join a good implies that the love we have for ourselves is also love for that good—is that joining a good means constituting a *unity* with it, supposedly similar to the one we currently *are* (the mind-body union). This also seems to imply that we should understand that the love for ourselves *joins* two (or several) things as well, although it is not immediately clear which those two things would be. Understanding it as the love of the soul *for the body* does not seem to capture what *loving ourselves* means. We could understand it, instead, as the love of the soul for the mind-body union of which it is part. Descartes suggests this by saying, not that love makes us consider the good we join as part of ourselves, but that it (love) makes us consider *ourselves as part* of the new union we have formed with that good. “The difference between these three kinds of love [affection, friendship, and devotion] is revealed chiefly by their effects. For in all of them we consider ourselves as joined and united to the thing loved, so we are always ready to abandon the lesser part of the whole that we compose with it so as to preserve the other part” (*Passions* II, art.83, AT XI 390 : CSM I 357). An example of the sort of union with the other that *true* love brings about is, according to Descartes, the love of a father for his children:

[T]he love of a father for his children is so pure that [...] [h]e regards them [...] as other parts of himself, and seeks their good as he does his own, or even more assiduously. For he imagines that he and they together form a whole of which he is not the better part, and so he often puts their interests before his own and is not afraid of sacrificing himself in order to save them. (*Passions* I, art.82, AT XI 389 : CSM I 357)

Thus (1) joining ourselves to a good *is* an increase of our perfection, and (2) we *truly* join a good when we become with it a *unity of greater perfection*—constituted by the union of ourselves and that good. In

this sense the suggestion above that we could understand self-love as the love of the soul for the union—where the soul would be *lesser* with respect to the union--would hold.

An important consequence of the usefulness of love is then that it leads us to form part of different unities of greater perfection through our lifetime. Not all of them, however, Descartes would say, are of equal value regarding the increase in our perfection. There is, in particular, one *highest good*—“the greatest of all goods imaginable”--our (human) passions “advise” us to join once we have reached a “certain age”. That highest good is another human (another mind-body union) of “the opposite sex”:

[N]ature has established a difference of sex in human beings, as in animals lacking reason, and with this she has also implanted certain impressions in the brain which bring it about that at a certain age and time we regard ourselves as deficient—as forming only one half of a whole, whose other half must be a person of the opposite sex. In this way nature represents, in a confused manner, the acquisition of this other half as the greatest of all goods imaginable. Although we see many persons of the opposite sex, yet we do not desire many at any one time, since nature does not make us imagine that we need more than one other half. But when we observe something in one of them which is more attractive than anything we observe at that moment in the others, this determines our soul to feel towards that one alone all the inclination which nature gives it to pursue the good which it represents as the greatest we could possibly possess. (*Passions* II, art. 90, AT XI 395-96 : CSM I 360)²⁴⁸

This means that the greatest usefulness *any* passion may have is to dispose the soul to form a “whole” with a “person of the opposite sex”, which is to become part of the greatest possible unity of perfection which is “agreeable” to our nature. This is the reason why love is the most useful passion.

3.2. REASON

Love, we have read above, is “necessarily followed by joy” (“because it represents to us what we love as a good belonging to us” [*Passions* II, art. 139; AT XI 432 : CSM I 377]). Joy and sadness seem to play a role regarding the soul (i.e. with respect to the state of the soul) similar to the one they played with respect

²⁴⁸ This “inclination” would be the one caused by what Descartes calls “attraction” [“the love we have for beautiful things” (*Passions* II, art.85, AT XI 392 : CSM I 358), which is “specially ordained by nature to represent the enjoyment of that which attracts us as the greatest of all the goods belonging to mankind, and so to make us feel a burning desire for this enjoyment” (*Passions* II, art. 90, AT XI 395 : CSM I 360).

to the state of the body: they result from, but also *confirm* (insofar as they are perceptions of the soul), its state of perfection. As joy arises from the state of health of the body (or from its proper functioning), for a similar reason, it arises from love: it informs the soul about the state of perfection in both cases. Whereas the joy caused by the state of the body (joy that precedes love) would be about the perfection of the union of the mind and the body, the joy that follows love would be about the perfection of the union of that union (mind-body) *and* the world (the union with the world that results from the set of external objects with which it has constituted unions). “In this regard [i.e. “as they belong to the soul”], love and hatred result from knowledge [*viennent de la connoissance*] and precede joy and sadness, except when the latter stand in place of the knowledge of which they are species [*excepté lors que ces deux dernieres tienent le lieu de la connoissance, don’t elles sont des especes*]” (*Passions* II, art. 139; AT XI 432 : CSM I 377 [trans. slightly modified]).²⁴⁹

This latter clarification seems to be an attempt to distinguish the joy and sadness *about the body* and the joy and sadness *about the soul*. Love and hatred aroused by the joy and sadness that result from pain and pleasure are cases of passions which, strictly speaking, do not seem to follow knowledge—if by such we understand knowledge acquired independently of the passion. But notice that Descartes says those passions (joy and sadness) may stand “in place of the knowledge of which they are species”. Although he does not explain it here, we could understand those passions as “species” of knowledge insofar as they are *perceptions* about the state of the body. But knowledge plays another role in the function of the passions.

Descartes had set a quite important *condition* in order to talk about the usefulness of the passions “in so far as they belong to the soul”: they must be based on *true knowledge* (of the object). “I acknowledge that hatred of the evil which is manifested solely by pain is necessary where the body is concerned; but I am speaking here only about the hatred which results from a clearer knowledge, which I refer to the soul alone” (*Passions* II, art.140, AT XI 433 : CSM I 377-78). Thus, whereas love, in general, inclines us towards objects “that *appear to be* agreeable to it [the soul]” (*Passions* II, art. 79, AT XI 387 : CSM I 356 [my italics]), love based on true knowledge inclines us to join “real goods” (*Passions* II, art. 139, AT XI 432 : CSM I 377), that is things that are “truly good” (*Passions* II, art. 139, AT XI 432 : CSM

²⁴⁹ If love and hatred are aroused by the joy and sadness that result from pain and pleasure, for example, these would be cases of passions (love and hatred), strictly speaking, not aroused from knowledge. But notice that Descartes says those passions (joy and sadness) stand “in place of the knowledge of which they are species”. Although Descartes does not explain it here, we could understand those experiences as “species” of knowledge at least insofar as they are perceptions.

I 377). On the other hand, passions based on false knowledge are called by Descartes “unjustified” passions (*Passions* II, art. 142; AT XI 435 : CSM I 379): “love which is unjustified joins us to things which may be harmful, or at least which deserve less consideration than we give them, and this demeans and debases us [*ce qui nous avilit, & nos abaisse*]” (*Passions* II, art. 142; AT XI 435 : CSM I 379). Notice the possible consequences: “demeans” and “debases” us, that is, it makes us *less perfect* because we may *lose* some good, that is, something “agreeable” to our nature.

Passions in principle can only represent *apparent* goods because, like sensations (*Passions* I, arts. 27-28), they are *confused* thoughts--insofar as they depend on the body.²⁵⁰ (“[P]assions are to be numbered among the perceptions which the close alliance between the soul and the body renders confused and obscure” [*Passions* I, art.28, AT XI 350 : CSM I 339]).²⁵¹ True knowledge of the objects of the passions, an issue in itself not addressed by Descartes in the *Passions*, would be knowledge not rendered confused by the body, and following Descartes’ views in other works, we can say, this would be “a perception which can serve as the basis for a certain and indubitable judgment” (*Principles* I, art. 45, AT VIII A 22 : CSM I 207), in this case a judgment about whether to follow the disposition of our passions or not. More precisely, the perceptions of “true goods” should be “clear” and “distinct,” that is “present and accessible to the attentive mind” (clear) and “so sharply separated from all other perceptions that it contains within itself only what is clear” (distinct) (*Principles* I, art. 45, AT VIII A 22 : CSM I 207-208).

We know a bit more about the sense in which passions are obscure. Descartes mentions three types of *distortions* of our perceptions caused by passions: (a) They can make harmful things appear as desirable: “there are many things harmful to the body which cause no sadness initially (or which even produce joy), and [...] other things are useful to the body, although at first they are disagreeable” (*Passions* II, art.138, AT XI 431 : CSM I 377); (b) they can make goods or evils appear greater than they

²⁵⁰ “But we also experience within ourselves certain other things which must not be referred either to the mind alone or the to the body alone. These arise [...] from the close and intimate union of our mind with the body. This list includes, first appetites like hunger and thirst; secondly, the emotions or passions of the mind which do not consist of thought alone, such as the emotions of anger, joy, sadness and love; and finally, all the sensations, such as those of pain, pleasure, light, colours, sounds, smells, tastes, heat, hardness and the other tactile qualities.” (*Principles* I, art. 48, AT VIII A 23 : CSM I 209)

²⁵¹ That the body seems to be responsible for the *confusion* is quite clear also in other places, e.g.: “these sensations of hunger, thirst, pain and so on are nothing but confused modes of thinking which arise from the union and, as it were, intermingling of the mind with the body” (Sixth Meditation, AT VII 81 : CSM II 56); “our mind is unable to keep its attention on things without some degree of difficulty and fatigue; and it is hardest of all for it to attend to what is not present to the senses or even to the imagination. This may be due to the very nature that the mind has as a result of being joined to the body; or it may be because it was exclusively occupied with the objects of sense and imagination in its earliest years, and has thus acquired more practice and greater aptitude for thinking about them than it has for thinking about other things” (*Principles* I, art.73, AT VIII A 37 : CSM I 220).

are: “the passions almost always cause the goods they represent, as well as the evils, to appear much greater and more important than they are” (*Passions* II, art.138, AT XI 431 : CSM I 377); and (c) they might strengthen thoughts “on which it is not good to dwell”: “the harm they [passions] may cause consists entirely in their strengthening and preserving others [i.e. other thoughts] on which it is not good to dwell (*Passions* I, art. 74, AT XI 383 : CSM I 354). The antidote against all these distortions is “experience and reason”: “we must use experience and reason in order to distinguish good and evil and know their true value, so as not to take the one for the other or rush into anything immoderately” (*Passions* II, art. 138; AT XI 431 : CSM I 377).

Notice that this is not an antidote that should help us to have better *knowledge* about the world. It is an antidote to *act* correctly, that is, to *follow* our passions when they incline us to join true goods and when they incline us to avoid true evils. If based on true knowledge love is “incomparably better than hatred” (*Passions* II, art. 139; AT XI 432 : CSM I 377)—because it leads us to join what is truly good.²⁵² Similarly, “for desire, it is obvious that when it proceeds from true knowledge it cannot be bad, provided it is not excessive and that it is governed by this knowledge” (*Passions* II, art. 141; AT XI 434 : CSM I 378). There is then a direct relationship between *true* knowledge and the usefulness of the passions (“in so far as they [passions] belong to the soul”). Knowledge is in the service of passions, not *vice versa*.

This means that the different usefulness of the passions not only depends on the knowledge they are based on but, mainly, on whether they arouse desire in us or not. If this is not the case—if they do not arouse desire—we should determine their usefulness by the *effect* they have in the soul. “It seems to me that if we consider them just as they are in themselves with respect to the soul, we may say that although joy is less secure [*moins solide*], and love less beneficial, than when we have a better foundation [*fondement*], they are still preferable to any sadness or hatred resting on an equally bad foundation” (*Passions* II, art. 142, AT XI 435 : CSM I 378). By the effect “with respect to the soul” Descartes means, once again, the *disposition* they bring about in the soul, i.e. whether they “tend to the good” or not. “[I]n the affairs of everyday life, where we cannot avoid the risk of being mistaken, it is always much better for us to incline towards the passions which tend to the good [*qui tendent au bien*] than for us to incline towards those which relate to evil [*qui regardent le mal*] (even if we do so only in order to avoid it)” (*Passions* II, art. 142, AT XI 435 : CSM I 378). Thus, “[i]t is obvious [...] that joy cannot fail to be

²⁵² “[L]ove and hatred result from knowledge and precede joy and sadness [...]. And when this knowledge is true—that is, when the things it brings us to love are truly good and those it brings us to hate are truly bad—love is incomparably better than hatred.” (*Passions* II, art. 139, AT XI 432 : CSM I 377)

good, nor sadness bad, with respect to the soul” (*Passions* II, art. 141, AT XI 434 : CSM I 378), because “the discomfort which the soul receives from evil consists wholly in the latter [sadness], and the enjoyment of the good belonging to the soul consists wholly in the former [joy]” (*Passions* II, art. 141, AT XI 434 : CSM I 378). Similarly, hatred, as we have seen, is not in itself beneficial because it both “takes us away from the good to which it [the evil] is joined” and this “arouses sadness in it [the soul]” (*Passions* II, art.140, AT XI 433 : CSM I 378).

In sum, if we cannot have true knowledge of the represented object—or a guarantee that we can acquire it—then the usefulness of passions should be determined according to whether those passions “tend to the good” rather than to the evil. “[A] false joy is often more valuable than a sadness whose cause is true” (*Passions* II, art.142; AT XI 435 : CSM I 378), but following false hatred will be more beneficial than following false love:

But I dare not say the same about love in relation to hatred. For when hatred is justified it simply takes us away from a subject containing an evil from which it is good to be separated; whereas a love which is unjustified joins us to things which may be harmful, or at least which deserve less consideration than we give them, and this demeans and debases us. (*Passions* II, art. 142, AT XI 435 : CSM I 378-79)²⁵³

Descartes does not discuss, though, in which sense “tending to the good” is in itself better for the soul. But since he is clearly separating this disposition (caused by the passion) from the desire that may follow, two possible reasons could be that (a) physiologically those passions are more beneficial, and (b) they bring about—regardless of any posterior action—joyful thoughts (beneficial for happiness, as we saw in the correspondence with Elizabeth). In this sense, even a false joy and a false love would always be beneficial for *the soul*.

As mentioned, the comparative usefulness of the passions changes if we consider them insofar as “they govern our behaviour by producing desire in us” (*Passions* II, art. 143, AT XI 436 : CSM I 379). If this is the case, then “it is certain that all those having a false cause may be harmful, while by contrast all having a just cause may be useful” (*Passions* II, art. 143, AT XI 436 : CSM I 379). Assuming “equally bad foundations,” joy would be more harmful than sadness (if they produce desire): “when they rest on equally bad foundations, joy is usually more harmful than sadness, because the latter engenders restraint

²⁵³ Cf. To Chanut, 1 February 1647: “If I attend to the definition of the two passions, I consider that love for an undeserving object can make us worse than hatred for an object we should love, because there is more danger in being joined to a thing which is bad, and in being as it were transformed into this thing, than there is in being separated willingly from a thing which is good” (AT IV 613 : CSMK 312).

and anxiety, and so disposes us in a certain way to prudence, whereas the former make those who abandon themselves to it rash and imprudent” (*Passions* II, art. 143, AT XI 436 : CSM I 379).

The fact that love based on true knowledge is the most useful passion, together with the idea that the usefulness of a passion with respect to the soul (in so far as it is the greater part of the mind-body union) means usefulness to increase the perfection of the mind-body union, implies that the most we can gain in perfection *through our passions* is (1) by following love (2) based on true knowledge, that is by joining ourselves to that which is *truly*--i.e. according to true knowledge--good. And this is why, unlike other passions, an excess of love (caused by true knowledge) cannot be bad.²⁵⁴ An excess of *true* love is not an excess that needs to be *regulated* precisely because it is already under the control of reason (it is based on *true* knowledge).²⁵⁵ And since true knowledge guarantees that following this love should lead us to join a “real good,” “excessive” love can only join us *most perfectly* to that good, that is, it would be the most *useful* love. “[A]ll that the most excessive love can do is to join us so perfectly to these goods [*nous joindre si parfaitement à ces biens*] that the love we have especially for ourselves must apply to them as well as to us; and this, I believe, can never be bad” (*Passions* II, art. 139, AT XI 432 : CSM I 377).

A central pending question then is to discuss what it means to say that passions are “based on” true knowledge. From the role Descartes assigns to it in the discussion on the usefulness of the passions, knowledge seems to play a necessary *regulative* role for passions to properly fulfill their function, that is to “dispose our soul” and “prepare the body” towards the acquisition of *true* goods and the rejection of *true* evils. It seems, though, that passions could be said to be “based on” true knowledge in, at least, two senses: (a) passions which *arise from* objects we truly know (and only after we truly know them), or (b) passions which arise from objects we do not truly know but which, regarding the possible actions towards which we are disposed by the passion, we only *follow* (the passion) *after* we truly know those objects.

Descartes could well be referring to the role of knowledge in both cases—in both, knowledge could lead us to that which is truly good and away from that which is truly bad. But it looks like, for the purpose of increasing our perfection, the former cases—knowing the object *before* the passion is aroused—may not guarantee that we follow beneficially our passions. Reason can *evaluate* the

²⁵⁴ “I say this love is extremely good because by joining real goods to us it makes us to that extent more perfect. I say also that it cannot be too great, for all that the most excessive love can do is to join us so perfectly to these goods that the love we have especially for ourselves must apply to them as well as to us; and this, I believe, can never be bad. And it is necessarily followed by joy, because it represents to us what we love as a good belonging to us.” (*Passions* II, art. 139, AT XI 432 : CSM I 377)

²⁵⁵ “[W]e see that they [the passions] are all by nature good, and that we have nothing to avoid but their misuse or their excess [...]” (*Passions* III, art. 211, AT XI 486 : CSM I 403)

“importance” of the object (for our perfection) only once a passion has been aroused and it has *disposed* us to join that object. In other words, the *problem* of the worthiness of the object is posed to reason by each passion, and posed differently by each of them. It does not precede the passion. We can, of course, make decisions on our actions disregarding our passions--and specifically decisions about which objects to join and not to join. But this is not an issue here. The question is whether passions are beneficial and in which sense reason and knowledge can contribute to guarantee it. Thus, the role of knowledge is *necessary* but *secondary*--for the purposes of increasing our perfection. It is necessary knowledge (a) about the object represented by the passion, and (b) about the possible actions the passion is disposing the soul to. But it takes place after our passions *filter* and *select* the objects which are potentially “important” for us, that is, the objects *worth considering joining*. Reason will later on examine that *first* selection and refine it.

Another idea which emphasizes the secondary character of reason is that, interestingly enough, even if reason is not able to determine whether a good is a true good and a evil a true evil we should not abstain from following our passions. As we have just seen, in these cases we should follow the passions that “tend to the good”. Recall also that in the correspondence with Chanut Descartes explicitly recommended that, since “we cannot love equally all those in whom we observe equal worth” (To Chanut, 6 June 164, AT V 58 : CSMK 323), if reason cannot provide help to make a decision, we should follow our “secret inclinations”: “since the chief good of life is friendship, we are right to prefer those to whom we are joined by secret inclinations, provided we also see worth in them” (To Chanut, 6 June 164, AT V 58 : CSMK 323). Although, as discussed above, it is not clear what these “secret inclinations” are, insofar as they are “inclinations” they seem to be closer to passions than to reasons; and “secret” reinforces the idea that we may not be aware of them--or at least not in the absence of the object that arouses them. In any case, the relevant thing here is that these secret inclinations can have the *last word* regarding the worthiness of the object for our perfection after reason has done its task (“provided we also see worth in them”). In this sense, we can conclude, they seem to reveal something about the importance of the object regarding our perfection which reason may not be able to illuminate.

How can reason contribute to determine which goods are *true* goods and which ones are not? If only our passions can discriminate objects worth considering joining in order to increase our natural perfection, and if only passions reveal the deficiency that can be satisfied by following the disposition they bring about in the soul, how can reason serve as a *guide*? In other words, since reason does not *have* a model of our natural perfection which it can apply to objects and actions, how can it guide us? Descartes

does not say much about this, or he might not have been able to say more. The main role he assigns to reason and knowledge seems, in fact, to be a negative one: to help determine which objects may *not* be good, rather than which ones are. “[T]he chief use of wisdom lies in its teaching us to be masters of our passions and to control them with such skill that the evils which they cause are quite bearable, and even become a source of joy” (*Passions* III, art. 212, AT XI 488 : CSM I 404).

Notice that, consistent with this, Descartes does not define the increase in our perfection in terms of any positive feature of the goods we join, but only as the result of (a) *joining* (b) those goods which are “agreeable” to our nature. All we can expect from reason is to evaluate which objects are “agreeable” to our nature. And for this all it needs to do is to help us determine which ones we can join *without* being harmed. Discerning the objects that may cause harm to the mind-body union is all reason can do. This is also why false joy and false hatred are preferable to false sadness and false love: the two former cannot hurt us, the latter can. In other words we can say that reason is, simply, an aid for us *to read* our nature, and *to follow* it without harm (i.e. perfecting ourselves). And experience is, once again, the second pair of eyes reason can rely on.

3.3. WONDER

Since all passions are one of the six basic ones or either “composed from” or “species of” them (*Passions* II, art. 69), we should be able to draw from this group conclusions about the function of all passions. But Descartes, as noted above, leaves aside wonder in some of the crucial passages dealing with the issue. That wonder has a function does not seem to be doubtful for Descartes:

Of wonder, in particular, we may say that it is useful in that it makes us learn and retain in our memory things of which we were previously ignorant. For we wonder only at what appears to us unusual and extraordinary [...]. But when something previously unknown to us comes before our intellect or our senses for the first time, this does not make us retain it in our memory unless our idea of it is strengthened in our brain by some passion, or perhaps also by an application of our intellect as fixed by our will in a special state of attention and reflection. (*Passions* II, art. 75, AT XI 384 : CSM I 354-55)

Thus, wonder “is useful in that it makes us learn and retain in our memory things of which we were previously ignorant” (*Passions* II, art.75, AT XI 384 : CSM I 354). In this sense it seems to contribute to knowledge, which is necessary to know whether our passions lead us to “real goods”--and not merely to what “appears as a good” as we saw above. Wonder “has as its object not good or evil, but only knowledge of the thing that we wonder at” (*Passions* II, art. 71, AT XI 380-381 : CSM I 353); “it [wonder] makes us disposed to acquire scientific knowledge [*nous dispose à l’acquisition des sciences*]” (*Passions* II, art.76, AT XI 385 : CSM I 355). However, in this sense, we can say that wonder does *not* contribute to either maintain or increase our perfection (as joy, sadness, love, hatred, or desire do). Wonder does *not* specifically, so to speak, isolate objects which are worth *considering* joining (in order to increase our natural perfection); it seems rather to select objects that are worth *knowing*.²⁵⁶ Descartes, however, does not seem to be willing to say as much. The objects of wonder are simply, he says, “worthy of special consideration” [*digne d’estre fort considéré*] (*Passions* II, art.70, AT XI 380 : CSM I 353),²⁵⁷ and this is so because they “merely appear unusual”:

The other passions may serve to make us take note of things which appear good or evil, but we feel wonder at things which merely appear unusual [*mais nous n’avons que l’admiration qui paroissent seulement rares*]. So we see that people who are not naturally inclined to wonder are usually very ignorant. (*Passions* II, art. 75, AT XI 384 : CSM I 355)

The emphasis on “*merely* appear unusual” indicates that we cannot even say that the objects which arouse wonder are “important” in the sense that objects of other passions are, that is, regarding our perfection. And it seems also to suggest that wonder depends more on the *ignorance* of the subject than on the usefulness for him of the object represented. “[W]e wonder only at what appears to us unusual and

²⁵⁶ Wonder is not the only passion which does not seem to be aroused by the representation of a good or an evil. Besides wonder, esteem, contempt, generosity, pride, humility, abjectness, veneration or scorn (*Passions* II, arts. 53-55, AT XI 373-74 : CSM I 350) “may be produced in us without our perceiving in any way whether the object causing them is good or evil” (*Passions* II, art.56, AT XI 374 : CSM I 373). By not “perceiving” it (i.e. whether the object causing them is good or evil means that) Descartes means that we do not “think” of the object as good or evil. “All the other passions” have, according to him, their “origin” in the “consideration of good and evil”. Descartes specifically mentions, among the latter, love, hatred, desire, hope, anxiety, jealousy, confidence, despair, irresolution, courage, boldness, emulation, timidity, terror, remorse, joy, sadness, self-satisfaction, repentance, favour, gratitude, indignation, anger, pride, shame, disgust, regret, and cheerfulness (*Passions* II, arts. 56-67, AT XI 374-78 : CSM I 350-52).

²⁵⁷ “Wonder is a sudden surprise of the soul which brings it to consider with attention the objects that seem to it unusual and extraordinary. It has two causes: first, an impression in the brain, which represents the object as something unusual and consequently worthy of special consideration; and secondly, a movement of the spirits, which the impression disposes both to flow with great force to the place in the brain where it is located so as to strengthen and preserve it there, and also to pass into the muscles which serve to keep the sense organs fixed in the same orientation so that they will continue to maintain the impression in the way in which they formed it.” (*Passions* II, art.70, AT XI 380-81 : CSM I 353)

extraordinary; and something can appear so only because we have been ignorant of it, or perhaps because it differs from things we have known (this difference being what makes us call it ‘extraordinary’)” (*Passions* II, art.75, AT XI 384 : CSM I 354-55).²⁵⁸ In fact, Descartes thinks that, “although it is good to be born with some inclination to wonder,” once we have acquired knowledge, we should “free ourselves from this inclination as much as possible” (*Passions* II, art.76, AT XI 385 : CSM I 355).²⁵⁹ To wonder in excess, rather than result in knowledge, “may entirely prevent or pervert the use of reason” by creating the habit of “blind curiosity”:

[M]ore often we wonder too much rather than too little, as when we are astonished in looking at things which merit little or no consideration. This may entirely prevent or pervert the use of reason. [...] [W]hen it [wonder] is excessive and makes us fix our attention solely on the first image of the objects before us without acquiring any further knowledge about them, it leaves behind a habit which makes the soul disposed to dwell in the same way on every other object coming before it which appears at all novel. This is what prolongs the troubles of those afflicted with blind curiosity, i.e. those who seek out rarities simply in order to wonder at them and not in order to know them. For gradually they become so full of wonder that things of no importance are no less apt to arrest their attention than those whose investigation is more useful. (*Passions* I, art.78, AT XI 386 : CSM I 355-56)

Another peculiarity of wonder, which seems to help Descartes confirm that its usefulness is not, at least, comparable to the one manifested by the other passions, is that it is not accompanied by “any change in the heart or in the blood” (*Passions* II, art.71, AT XI 381 : CSM I 353), like the other basic passions are. This is, according to Descartes, an indication, very specifically, that “the whole well-being of our body” does not depend on wonder:

It is a peculiarity of this passion [i.e. wonder] that we do not find it accompanied by any change in the heart or in the blood, such as occurs in the case of the other passions. The reason for this is that it has as its object not good or evil, but only knowledge of the thing that we wonder at. Hence it has no relation with the heart and blood, on which depends the whole well-being of our body, but only with the brain, in which are located the organs

²⁵⁸ Notice that, similarly, we could say that love depends more on our deficiency than on the “importance” of the object, which would not be inadequate. But that deficiency is precisely a deficiency in our natural perfection, the feature that reveals the usefulness of the passion.

²⁵⁹ “[A]lthough it is good to be born with some inclination to wonder, since it makes us disposed to acquire scientific knowledge, yet after acquiring such knowledge we must attempt to free ourselves from this inclination as much as possible.” (*Passions* II, art.76, AT XI 385 : CSM I 355)

of the senses used in gaining this knowledge. (*Passions* II, art. 71, AT XI 381 : CSM I 353).

Unlike the cause of wonder, which is located in the brain alone, their cause [i.e. the cause of the other five basic passions] is located also in the heart, the spleen, the liver and all the other parts of the body, in so far as they help to produce the blood and hence the spirits. (*Passions* II, art. 96; AT XI 401 : CSM I 362-63) (See II, arts. 97-111 for these motions in each passion).

This means that, unlike the other five basic passions, the state of our body may not arouse wonder—and thus this would question its utility regarding the body. We have seen above how pain and pleasure can indeed arouse joy, sadness, love, hatred and desire. But it means more. From the physiological account we know that the motions of the spirits and blood between the brain and the heart are responsible for *maintaining* and *strengthening* the thoughts that are “good for the soul to preserve,” and which is the main utility in “all the passions” (*Passions* II, art. 74).²⁶⁰ This would make of wonder a quite unique exception.

Descartes considers that wonder does “strengthen and preserve” the “*impression in the brain*, which represents the object as something unusual and consequently worthy of special consideration” (my italics). That impression causes a movement of the spirits “to flow with great force to the place in the brain where it [the impression] is located so as to strengthen and preserve it there, and also to pass into the muscles which serve to keep the sense organs fixed in the same orientation so that they will continue to maintain the impression in the way in which they formed it” (*Passions* II, art. 70, AT XI 380-81 : CSM I 353). But it is not clear that maintaining that impression in the brain does result, as in other passions, in maintaining and strengthening the *representation* (of unusualness in this case). Descartes puts the emphasis rather on the idea that what is maintained is the motion of the muscles that follow (i.e. “keep the sense organs fixed in the same orientation”). And, in any case, it would also be questionable whether maintaining the representation of *unusualness* is “good for the soul to preserve” regarding our natural perfection.

²⁶⁰ “From what has been said it is easy to recognize that the utility [*utilité*] of all the passions consists simply in the fact that they strengthen and prolong [*fortifient & font durer*] thoughts in the soul which it is good for the soul to preserve [*il est bon qu’elle conserve*] and which otherwise might easily be erased from it. Likewise the harm they may cause consists entirely in their strengthening and preserving these thoughts beyond what is required, or in their strengthening and preserving others on which it is not good to dwell.” (*Passions* II, art.74, AT XI 383 : CSM I 354)

Why then is wonder excluded from the discussion on usefulness? One reason that could be that, although wonder is useful, its usefulness is a quite *limited* one. The wonder of the child in front of the lion, may not result in fear, but may incline him to examine it and realize that its teeth are of the same sort of certain other animals he would take to be dangerous. But, according to Descartes, this benefit is not evident. Wonder may not lead the child to “acquir[e] further knowledge” but to “fix [his] attention solely on the first image” of the lion (*Passions* II, art. 78, AT XI 386 : CSM I 355). Although it is true that Descartes presents this as the result of *excessive* wonder—and, as such, we should attempt to control not only wonder but *any* passion (“they [passions] are all by nature good, and [...] we have nothing to avoid but their misuse or their excess” (*Passions* III, art. 211, AT XI 486 : CSM I 403)—it is also true that Descartes recommends “after acquiring knowledge we must attempt to free ourselves from this inclination as much as possible” (*Passions* II, art. 76, AT XI 385 : CSM I 355). This makes of wonder the only passion that is useful only, so to speak, *for a limited time*. Descartes does not specify at which point we should “free ourselves” from this passion. But since he does not say either that we cannot increase our knowledge without wonder, it seems that we should try to free ourselves from it as soon as possible: “we may easily make good its absence through that special state of reflection and attention which our will can always impose upon our understanding when we judge the matter before us to be worth serious consideration” (*Passions* II, art. 76, AT XI 385 : CSM I 355). Notice that our judgment that the “the matter” is “worth serious consideration” is already a much more refined selection of objects than the one wonder does by picking up objects which “merely appear unusual” (*Passions* II, art. 75, AT XI 384 : CSM I 355).

Another reason for the exclusion of wonder could then be that, unlike other passions, knowledge *reduces* the possibility of wonder. In fact, since knowledge is supposed to reveal the *truth* of the object, in this case all it could do is to help us determine whether the object is *truly unusual*. But knowing the object can only reduce its unusualness, and thus the potential usefulness of the passion. “[T]here is no remedy for excessive wonder except to acquire the knowledge of many things and to practice examining all those which may seem most unusual and strange” (*Passions* II, art. 76, AT XI 385 : CSM I 355).²⁶¹

²⁶¹ Another remedy Descartes mentions is forming a higher opinion of our abilities (“those most inclined to it are chiefly people who, though equipped with excellent common sense, have no high opinion of their abilities” [*Passions* II, art. 77, AT XI 386 : CSM I 355]). By the latter Descartes could mean having self-esteem which arises from “the exercise of our free will and the control we have over our volitions” (*Passions* III, art. 152, AT XI 445 : CSM I 384), and which would serve to combat the “blind curiosity” that wonder may produce insofar as the latter is a form of dependence on the unusual. Self-esteem “renders us in a certain way like God by making us masters of ourselves” (*Passions* III, art. 152, AT XI 445 : CSM I 384).

Unusualness is not a feature about the objects that indicates they are more “important” for us--in particular regarding our perfection--than those which exhibit *usualness*. As indicated above, it is not even a feature of the objects, at least, not in the sense that a study of the object could or not confirm it; it is rather a feature of our state of ignorance (which is precisely the reason why an increase in our knowledge reduces the unusualness of the objects, and thus makes wonder unnecessary).

However, if the reason to exclude wonder from the discussion on the usefulness of passions is that its objects are not “important” for our perfection, why then does Descartes still consider it one of the six “primitive” passions (*Passions* II, art.69)? If its general beneficial function is, as it seems, to *select* unusual objects, this may be of relevance for our perfection. Descartes seems to suggest that unusualness is a basic feature of *all* the objects of the passions, even if it is not exclusive of them. “[I]f the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion [*si l’objet qui se presente n’a rien en soy qui nous n’en sommes aucunement émeus, & nous le considerons sans passion*]” (*Passions* II, art. 53, AT XI 373 : CSM I 350). Leaving aside now the lack of further support for this idea, taken it thus presented, we could conclude that wonder performs a selection of objects *prior* to, broader than, and including, the selection the rest of the passions perform. Whereas the objects selected by the other passions would be objects *worth keeping or joining in order to constitute unities of greater perfection*, wonder would select *unusual* objects. The selection wonder performs would then be a *relevant* one (for our perfection) insofar as it isolates all the potential objects of our passions--but it would not select only those. All the objects of our passions would exhibit unusualness, but not all unusual objects are objects of our passions. In this sense we could understand why wonder might be considered “the first of all passions” (*Passions* II, art. 53, AT XI 373 : CSM I 350).²⁶²

Thus, Descartes seems to have reasons to consider wonder a “primitive” passion but also reasons to doubt about its usefulness. We can reconcile these views in at least two ways. First, regarding its usefulness, by placing the emphasis on the representation (of unusualness) that it produces rather than on the *inclination* of the soul that it brings about (and which may lead to “blind curiosity”). And second, by considering its usefulness mainly insofar as wonder is usually “joined with” other passions (“almost all of them”) not insofar as it occurs by itself (*Passions* II, art. 72, AT XI 382 :

²⁶² This is the complete passage: “When our first encounter with some object surprises us and we find it novel, or very different from what we formerly knew or from what we have supposed it ought to be, this causes us to wonder and to be astonished at it. Since all this may happen before we know whether or not the object is beneficial to us, I regard wonder as the first of all the passions. It has no opposite, for, if the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion.” (*Passions* II, art. 53, AT XI 373 : CSM I 350)

CSM I 353). Joined with other passions, wonder “augments almost all of them” (*Passions* II, art. 72, AT XI 382 : CSM I 353). Although this could be read as meaning that wonder might lead to *excesses*, Descartes seems to see it as a beneficial contribution to the *effectiveness* of other passions:

Its strength [i.e. the strength of the “element of surprise” proper of wonder] depends on two things: the novelty and the fact that the movement it causes is at full strength right from the start. For it is certain that such a movement has more effect than one which, being weak initially and increasing only gradually, may easily be diverted. It is also certain that objects of the senses that are novel affect the brain in certain parts where it is not normally affected; and since these parts are more tender or less firm than those hardened through frequent agitation, the effects of the movements produced in them are thereby increased. (*Passions* II, art. 72, AT XI 382 : CSM I 353-54)

In support of this idea--that its main utility seems to reside in the function it performs as an *aid* to other passions—are also Descartes’ reasons to question the usefulness of certain composed passions. If excessive, even as component of other passions, it renders them useless. Of the only two composed passions that Descartes says he “find[s] it very difficult to guess what purpose [they] might serve”--which are timidity and fear (*Passions* III, art.175, AT XI 462-63 : CSM I 392)--one appears to be so insofar as it is a deficiency of other passions—of hope and desire in the case of timidity (*Passions* III, art.175, AT XI 463 : CSM I 392),²⁶³ while the other, fear, is “merely an excess of timidity, wonder, and anxiety” and has surprise as its “principal cause” (*Passions* III, art. 176, AT XI 463 : CSM I 392). Surprise happens to be precisely what defines wonder, which is “a sudden surprise” (*Passions* II, art. 70, AT XI 380 : CSM I 353).²⁶⁴ Excessive wonder within a composed passion seems to have then an effect similar to excessive wonder when it occurs by itself.

²⁶³ “It seems to me that timidity has some use only when it frees us from making efforts which plausible reasons might move us to make if this passion had not been aroused by other, more certain reasons, which made us judge the efforts to be useless. Besides freeing the soul from such efforts, it is also useful for the body in that it slows the movement of the spirits and thereby prevents us from wasting our energy. But usually it is very harmful, because it diverts the will from useful actions. And because it results simply from our having insufficient hope or desire, we need only increase these two passions within us in order to correct it.” (*Passions* III, art. 175, AT XI 462-63 : CSM I 392)

²⁶⁴ “In the case of fear or terror, I do not see that it can ever be praiseworthy or useful. It, too, is not a specific passion, but merely an excess of timidity, wonder, and anxiety—an excess which is always bad, just as boldness is an excess of courage which is always good (provided the end proposed is good). And because the principal cause of fear is surprise, there is no better way to avoid it than to exercise forethought and prepare oneself for any eventuality, anxiety about which may cause it.” (*Passions* III, art. 176, AT XI 463 : CSM I 392)

3.4. PASSIONS “DISPOSE THE SOUL TO WANT”

As we have seen, of the two types of movements that can be “produced in the gland by the spirits” the second one, which generates passions, has “an influence on the will”—a major difference with respect to the motions that result in sensations. “Movements of the second kind, which do have an influence on the will [*effort sur la volonté*], cause the passions or the bodily movements which accompany the passions” (*Passions* I, art 47, AT XI 365 : CSM I 346). More specifically, Descartes considers the “principal effect” of passions that they “move” and “dispose” the soul “to want the things for which they [the passions] prepare the body”: “[T]he principal effect of all the human passions is that they move and dispose [*incitent & disposent*] the soul to want [*vouloir*] the things for which they prepare the body. Thus the feeling of fear moves the soul *to want* [*l’incite à vouloir*] to flee, that of courage *to want* to fight, and similarly with the others” (*Passions* art. 40, AT XI, 359 : CSM I 343 [my italics]).²⁶⁵ This happens to be also the main function of passions.²⁶⁶ Love and hatred are examples of how opposed passions “dispose the soul” differently:

Love is an emotion of the soul caused by a movement of the spirits, which impels the soul to join itself willingly to objects that appear to be agreeable to it. And hatred is an emotion caused by the spirits, which impels the soul to want to be separated from objects which are presented to it as harmful. (*Passions* I, art.79, AT XI 387 : CSM I 356).

In which sense, then, do passions “influence the will”? What does it mean to talk about influence *on the will* if the will is, by definition, *free* (“the will is by its nature so free that it can never be constrained” [*Passions* I, art. 41, AT XI 359 : CSM I 343])? In fact, if “influence” implies a *movement* of the soul, in particular of the will, we will be facing the difficulty of making this movement compatible with the only movements Descartes explicitly attributes to the will, which are volitions. We would have a will *moved* and thus, not free, and not exerting an *action*. Understanding that “influence” on the will as a *disposition* avoids these problems. Descartes’ language supports this, e.g.: “the principal effect of all the

²⁶⁵ We have seen above how passions “prepare the body”: a representation in the soul is the origin of two parallel flows of spirits, one towards the limbs and another towards the heart and other organs. The former flow *disposes* the body to obtain what “the soul wants” by *preparing* to move accordingly (to flee, to cover one’s eyes, to protect our head, etc.), the second maintains and strengthens the passion, and therefore, we can assume, maintains and strengthens the *inclination to act*.

²⁶⁶ “[t]he function of all the passions consists solely in this, that they dispose our soul to want the things which nature deems useful for us, and to persist in this volition; and the same agitation of the spirits which normally causes the passions also disposes the body to make movements which help us to attain these things.” (*Passions* I, art. 52, AT XI 372 : CSM I 349)

human passions is that they move and dispose [*incitent & disposent*] the soul to want [*vouloir*] the things for which they prepare the body. Thus the feeling of fear moves the soul *to want* [*l'incite à vouloir*] to flee, that of courage *to want* to fight, and similarly with the others” (*Passions* art. 40, AT XI, 359 : CSM I 343 [my italics]). What does then mean to say that our passions “dispose the soul to want”? Notice that this expression clearly separates the *disposition* (passion) from the *volition* (action).

Since these are dispositions *to want*, we could think they could share with volitions a similar “influence on the will” but differ from them in their causes. That is, they could be viewed as passions having the same effects on the will that volitions have. Whereas volitions would be caused by the soul, we could think of these dispositions as being caused by the motion of the spirits. But passions are produced by the motion of the gland by the spirits. And there are only two types of motions of the soul that result from “movements produced in the gland by the spirits” (*Passions* I, art. 47, AT XI 365 : CSM I 346), one of those motions results in sensations and the other in passions (in the strict sense). And the dispositions caused by the passions do not seem to fit in any of these two types.

We know we should not consider this disposition as a *desire* because desire is a passion itself, and, like *any* passion, it brings about its own disposition (to want something):

The passion of desire is an agitation of the soul caused by the spirits, which disposes the soul to wish, in the future, [*qui la dispose à vouloir pour l'avenir*] for the things it represents to itself as agreeable. Thus we desire not only the presence of goods which are absent but also the preservation of those which are present. In addition we desire the absence of evils, both those that already affect us and those we believe we may suffer on some future occasion. (*Passions* II, art. 86; AT XI 392 : CSM I 358-59).

However, although a passion itself, desire usually accompanies other passions.

I note only this difference [between desires and other passions], that the desire we have when we are led towards some good is accompanied by love, and then by hope and joy, whereas when we are led to get away from the evil opposed to this good, the same desire is accompanied by hatred, anxiety, and sadness (which causes us to judge the evil inimical to ourselves). (*Passions* II, art. 88; AT XI 393 : CSM I 359)

There are different types of desires. According to Descartes we can “distinguish desire into as many different species as there are different objects that we pursue” (*Passions* II, art. 88, AT XI 394 : CSM I 359)--and thus “there are as many species of desire as of love or hatred” (*Passions* II, art. 88, AT XI 394 :

CSM I 359). Curiosity, for example, is a form of desire, “desire for knowledge” in particular, as opposed to other desires:

Curiosity, for example, is nothing but a desire for knowledge, and it differs greatly from a desire for glory, as the latter differs from a desire for vengeance, and likewise for other desires. But it is sufficient to note here that there are as many species of desire as of love or hatred, and that the most important and strongest desires are those which arise from attraction and repulsion. (*Passions II*, art. 88, AT XI 394 : CSM I 359)

This relationship between passions and desires is the reason why passions are usually confused with different “species” of desires. For example, “[t]he name ‘love’ is applied more often to the inclination or desire which arises in this way from attraction than to the passion of love described previously” (*Passions II*, art. 90, AT XI 396 : CSM I 360). Neither love nor attraction are desires. They are both passions. As to love, it is “an emotion of the soul caused by a movement of the spirits, which *impels the soul to join itself willingly* to objects that appear to be agreeable to it” (*Passions I*, art.79, AT XI 387 : CSM I 356; my italics). And attraction is a “kind of love.”²⁶⁷

Notice that this seems to imply that, as long as a passion inclines us to *pursue* an object, we could say that passion has caused also a *desire*.²⁶⁸ Descartes explicitly says of the basic passions (except wonder) that, when “they lead us to perform any action”—or “in so far as they govern our behaviour”—they “produce desire in us” (*Passions II*, art. 143, AT XI 435-36 : CSM I 379).²⁶⁹ Since “[a]ll the others [i.e. all the other non-basic passions] are either composed from some of these six or they are species of them” (*Passions II*, art. 69, AT XI 380 : CSM I 353), we can say that all passions—except wonder and its “species”—“produce desire in us” (when they “lead us to perform any action”).

²⁶⁷ “For we commonly call something ‘good’ or ‘evil’ if our internal senses or our reason make us judge it agreeable or contrary to our nature. But we call something ‘beautiful’ or ‘ugly’ if it is represented as such by our external senses (chiefly by the sense of sight, of which we take more notice than of all the others). Two kinds of love arise from this, namely the love we have for good things and the love we have for beautiful things. To the latter we may give the name ‘attraction’, so as not to confuse it with the former or with desire (to which we often give the name ‘love’).” (*Passions II*, art. 85, AT XI 391 : CSM I 358). A further feature distinguishes attraction from love. Attraction is “usually more violent than the other kinds of love” (*Passions II*, art. 85, AT XI 392 : CSM I 358) which is, at least part of the reason, why it “contains less truth” and why it is, together with repulsion, “the most deceptive of all the passions”: “[W]hat is most noteworthy here is that the passions of attraction and repulsion are usually more violent than other kinds of love and hatred, because what enters the soul through the senses affects it more strongly than what is represented to it by its reason” (*Passions II*, art.85, AT XI 392 : CSM I 358).

²⁶⁸ Thus, the desires that “arise” from attraction and repulsion—which are passions according to Descartes (see *Passions II*, arts. 89 and 90)—are different. “Attraction [...] is specially ordained by nature to represent the enjoyment of that which attracts us as the greatest of all the goods belonging to mankind, and so to make us have a burning desire for this enjoyment.” (*Passions II*, art.90, AT XI 395 : CSM I 360)

²⁶⁹ “We must take care to observe that what I have just said about these four passions holds only when they are considered exactly in themselves, and they do not lead us to perform any action. For in so far as they govern our behaviour by producing desire in us, it is certain that all those having a false cause may be harmful, while by contrast all having a just cause may be useful.” (*Passions II*, art. 143, AT XI 435-36 : CSM I 379)

As to wonder, it is not clear why it is, in principle, excluded, if we take into account Descartes' own definition of it.²⁷⁰ If being the “the first of all passions” means that wonder must precede any other passion, then it must, at least, *precede* desire too. Furthermore, Descartes says that it “*brings it* [the soul] to consider with attention the objects that seem to it unusual and extraordinary” (my italics) which we could read as that *inclination of the soul* that seems to be part of every passion.²⁷¹ And then, we could add, the inclination “to consider with attention the objects that seem to it [the soul] unusual and extraordinary” may bring about, like in other passions, a *desire to examine* the object of our wonder (“it [wonder] has as its object [...] only knowledge of the thing that we wonder at” [*Passions* II, art. 71, AT XI 381 : CSM I 353]). In this sense, we could understand wonder as “producing desire” like any other passion. The difference could then be that, unlike the other basic passions, Descartes is not considering wonder as a passion that “govern[s] our behaviour”.

In sum, Descartes does not say that different passions are different types of desire or that the disposition or inclination of the soul, in principle essential to each passion (including wonder), is equivalent to desire. Unlike other passions, desire seems to have a *closer* relation to our actions. The fact that other passions lead us to act by bringing about desire would also mean that the *disposition* desire brings about is of a different sort:

[I]t is only through a feeling of pain that the soul is immediately advised [*avertie*] about things that harm the body: this feeling produces in the soul first the passion of sadness, then hatred of what causes the pain, and finally the desire to get rid of it. Similarly the soul is immediately advised [*avertie*] about things useful to the body only through some sort of titillation, which first produces joy within it, then gives rise to love of what we believe to be its cause, and finally brings about the desire to acquire something that can enable us to continue in this joy, or else to have a similar joy again later on. (*Passions* II, art.137, AT XI 430 : CSM I 376)

²⁷⁰ “When our first encounter with some object surprises us and we find it novel, or very different from what we formerly knew or from what we supposed it ought to be, this causes us to wonder and to be astonished at it. Since all this may happen before we know whether or not the object is beneficial to us, I regard wonder as the first of all the passions. It has no opposite, for, if the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion.” (*Passions* II, art. 53, AT XI 373 : CSM I 350)

²⁷¹ “Wonder is a sudden surprise of the soul which *brings it* to consider with attention the objects that seem to it unusual and extraordinary. It has two causes: first, an impression in the brain, which represents the object as something unusual and consequently worthy of special consideration: and secondly, a movement of the spirits, which the impression disposes both to flow with great force to the place in the brain where it is located so as to strengthen and preserve it there, and also to pass into the muscles which serve to keep the sense organs fixed in the same orientation so that they will continue to maintain the impression in the way in which they formed it.” (*Passions* II, art. 70, AT XI 380 : CSM I 353)

This order of succession is not surprising. It is the one we should expect given Descartes' physiologico-mental account of the passions. Each successive passion *adds* or *reinforces* the disposition of the soul (towards the object that originated the sensation in the first place). Joy and sadness add that disposition (sensations do not generate it), love, and hatred reinforce it, and desire reinforces the disposition brought about by the latter (love and hatred). The order of arousal expresses, thus, a *progressive* increase in degree in the disposition of the soul towards the acquisition or maintenance of the object of the passion. Love exerts a stronger "influence on the will" (*Passions* I, art. 47, AT XI 365 : CSM I 346) than joy, and desire reinforces the disposition caused by love or hatred. This explains why the disposition desire may bring about will be more likely to result in action.²⁷² Notice for now that the *degree of disposition of the soul towards the object* seems to be the relevant aspect to talk about (a) why (functionally) certain passions may cause other passions; (b) which ones may cause which ones; and (c) which passions, for their proximity to sensations, may be more useful regarding the body.

This means that by presenting the conflicts of the mind which others had explained as a conflict of *parts* in terms of *desires vs. volitions*, Descartes was expressing the conflict in its strongest form, so to speak. No passion can dispose more strongly (i.e. have a stronger "influence" on the will) than our desires:

We observe conflict only between movements of the second kind [i.e. movements of the gland that result in passions] and the volitions which oppose them—for example, between the force with which the spirits push the gland so as to cause the soul to desire something, and the force with which the soul, by its volition to avoid this thing, pushes the gland in a contrary direction. [...] This makes the soul feel itself impelled, almost at one and the same time, to desire and not to desire [*à désirer & ne désirer pas une même chose*] one and the same thing. (*Passions* I, art 47; AT XI 366 : CSM I 346)²⁷³

In some places, it seems as if Descartes considers desire almost as a volition, despite being a passion:

[T]he passion of desire has this special characteristic: the volition to acquire some good or avoid some evil sends the spirits rapidly from the brain to all the parts of the body

²⁷² Desire itself can be more or less "powerful" e.g.: "there are different sorts of attraction, and [...] the desires arising from them are not all equally powerful. Thus, for example the beauty of flowers moves us only to look at them, and that of fruits to eat them" (*Passions* II, art. 90, AT XI 395 : CSM I 360).

²⁷³ "[T]here is no conflict here except in so far as the little gland in the middle of the brain can be pushed to one side by the soul and to the other side by the animal spirits (which, as I said above, are nothing but bodies), and these two impulses often happen to be opposed, the stronger canceling the effect of the weaker" (*Passions* I, art. 47, AT XI 364-65 : CSM I 346). How this conflict *should* be resolved is another question, and a central one to Descartes' theory of passions. I will return to it in the chapter on ethics.

which may help to bring about this effect, and especially to the heart and the parts which supply most of its blood. Receiving a greater amount of blood than usual, the heart sends a greater quantity of spirits to the brain, both in order to maintain and strengthen the idea of the volition and to pass from there into all the sense organs and all the muscles that can be used for obtaining what is desired. (*Passions* II, art. 106, AT XI 406-407 : CSM I 365)

The distinction Descartes establishes between love and desire helps confirm the progress we have made so far, and advance a bit more in understanding the *disposition* passions bring about. Descartes distinguishes love from “one of the most common effects of love,” namely, desire (*Passions* II, art. 81, AT XI 388 : CSM I 356). Whereas love only “impels the soul [*l’incite*] to join itself willingly [*de volonté*] to objects that appear to be agreeable to it” (*Passions* II, art.80, AT XI 387 : CSM I 356), “if we judge [*si on juge*] that it would be beneficial to possess an object or to be associated with it in some manner other than willingly [*d’autre façon que de volonté*], then we desire it [*on le desire*]” (*Passions* II, art.81, AT XI 388 : CSM I 356).

Descartes himself points out that the key to distinguish love and desire resides in understanding correctly the expression *de volonté* (confusingly translated as “willingly” in CSM) that appears in the definition of love--in the phrase “impels the soul [*l’incite*] to join itself willingly [*à se joindre de volonté*] to objects that appear to be agreeable to it” (*Passions* II, art.80, AT XI 387 : CSM I 356). First, we should probably consider alternative translations: “impels the soul *to be willing* to join” or “impels the soul *to have the will* to join” seem to be more appropriate than “impels the soul to join itself willingly” (CSM I 356). Those alternatives seem to accord better with Descartes’ own explanation of the expression *de volonté* (translated as “willingly” in CSM) as he uses it in the definition of love:

[I]n using the word ‘willingly’ [*de volonté*] I am not speaking of desire, which is a completely separate passion relating to the future. I mean rather the assent by which we consider ourselves henceforth as joined with that we love in such a manner that we imagine a whole [*consentement par lequel on se considere des à present comme joint avec ce qu’on aime : en sorte qu’on imagine un tout*], of which we take ourselves to be only one part, and the thing loved to be the other. In the case of hatred, on the other hand, we consider ourselves alone as a whole entirely separated from the thing for which we have aversion. (*Passions* II, art. 80, AT XI 387 : CSM I 356).

Here also we should pay attention to the original French. Notice that *consentement* seems to have less *active* connotations than the English *assent*. It should probably be understood—particularly in the expression “consentement par lequel on se considere”—as a form of perception rather than as *judgment* or

other action of the soul. That *consentement* is what the passion brings about, its effect. Understanding it as *willingness* (in this case to join a good) seems to agree with the view that passions “dispose our soul *to want*” (*Passions* II, art. 52, AT XI 372 : CSM I 349 [my italics]). To be *willing to*, in fact, has to do with the will, but it is *not* a volition (in the Cartesian sense) (see *Passions* I, arts. 17 and 18). What is then the relationship between that willingness and our volitions? How is *to be disposed to want* related to simply *want*?

We have seen why disposition should not be understood as a desire. That this *disposition* must be different from a *judgment* is clear from the very fact that the disposition, as an effect of a passion, is “caused by the spirits,” that is it is itself a *passion* (in the general sense). Judgments, on the other hand, are not caused by the spirits; they are *actions* of the soul (of the will). “I say that these emotions [love and hatred] are caused by the spirits not only in order to distinguish love and hatred (which are passions and depend on the body) from judgements which also bring the soul to join itself willingly to things it deems bad, but also to distinguish them from the emotions which these judgements produce in the soul” (*Passions* II, art. 79, AT XI 387 : CSM I 356). Even in the *Principles*, whether we understand “*si on juge*” either as equivalent to *assertion*--and thus as a “mode of willing” as Descartes does in the *Principles* (*Principles* I, art. 32, AT VIII A 17 : CSM I 204); or as a *judgment*--and thus as both a perception and a volition (*Principles* I, art. 34, AT VIII A 18 : CSM I 204)—a volition would be involved in both cases. Descartes had also explicitly rejected in the correspondence with Elizabeth that passions are judgments or even that the occurrence of a passion requires a judgment.²⁷⁴

Thus both judgments and the passion of love can “bring the soul to join itself willingly to things”. But whereas a judgment—insofar as it is a free action of the soul-- could also bring the soul to join things the soul “deems bad,” love passively *represents* a good (love is “an emotion of the soul caused by a movement of the spirits, which impels the soul [*l’incite*] to join itself willingly to objects that appear to be agreeable to it” [*Passions* II, art.80, AT XI 387 : CSM I 356]; “when we think of something as good with regard to us, i.e. as beneficial to us, this makes us have love for it” [*Passions* II, art. 56, AT XI 374 : CSM I 350]). This does not mean, of course, that the good represented by love is a true good—as we will see.

²⁷⁴ “Sometimes also people confuse the inclinations or habits which dispose to a certain passion with the passion itself, though the two are easy to distinguish. For instance, when it is announced in a town that enemies are coming to besiege it, the inhabitants at once make a judgement about the evil which may result to them: this judgement is an action of their soul and not a passion. And though this judgement is to be found in many alike, they are not all equally affected by it; some are more affected than others in proportion to the greater or less habit or inclination they have towards fear. Their souls can receive the emotion that constitutes the passion only after they have made the judgement, or else at least conceived the danger without making a judgement, and then imprinted an image of it in the brain, by another action, namely imagining.” (To Princess Elizabeth, 6 October 1645, AT IV 312 : CSMK 271)

Judgments then (1) may precede or “produce,” but are *not*, passions, and (2) insofar as they are actions not only they are not necessary *component* of passions, they are not even components. As Descartes puts in the passage quoted above, the desire that usually follows love would be a case of a passion (desire) aroused from a judgment (“if we judge [*si on juge*] that it would be beneficial to possess an object or to be associated with it in some manner other than willingly, then we desire it [*on le desire*]” [*Passions* II, art.81, AT XI 388 : CSM I 356]). This is important. It highlights that (1) desire is not *part* of another passion; it is a passion itself, and therefore has its own etiology;²⁷⁵ and (2) that in order to explain how love leads to desire we may have to explain how the *disposition* brought about by love relates to the *judgment* that results in desire.

How then should we understand the disposition of the soul brought about by passions? As suggested above, we should think about it as *willingness*. Insofar as it is the effect of the passions in the soul, this willingness would not be different from the *state* of the soul brought about by the passion, that is, the state in which the soul is after the representation proper of a passion and the bodily changes that maintain and strengthen that thought have occurred. And since we know that this thought is a perception, and in particular a perception of the “importance” the object represented has for us (*Passions* II, arts. 137 and 139), we can, at least, conclude the following about that disposition. To say that a passion *disposes us* (mind-body unions) *to want (an object)* means, in two words, that the soul is in the state that results from the experience of a passion. More precisely, this means, that the soul is in a state characterized (1) for having had a certain *perception* of an object (the representation proper of each passion), in particular (2) a perception about the *importance* of that object (regarding our perfection). And this, from the point of view of the possibility of taking (future) *actions* (including judgments), means that *to be disposed to want* (that object) is (3) to have (new) good reasons (in the form of perceptions of the importance of the object) to either make a judgment or have a volition regarding that object (both of which are actions of the soul, and thus not part of a passion).

In other words, to be *disposed to want* an object means that we have perceived that the object is important (for our perfection) and that this importance has become, at least for as long as the passion lasts, a *good* reason (i.e. a reason better than others we may have) to make judgments or undertake actions regarding that object. Whether any judgment is made or not, or any action taken or not, are different questions. That will depend on which *other* reasons the soul may have available to it and how it evaluates

²⁷⁵ “The passion of desire of desire is an agitation of the soul caused by the spirits, which disposes the soul to wish, in the future, for the things it represents to itself as agreeable.” (*Passions* II, art. 86, AT XI 392 : CSM I 358)

them. Thus, in the case of love, to say, for example, that the love for a mother *disposes someone* to want to write a letter to her means that the passion of love (love) provides us (the soul) with (i.e. makes us perceive) *good* reasons to make the decision (i.e. to have the volition) to write a letter to her (rather than not writing or rather than writing to someone else). Those reasons are, in principle, *good* ones precisely because this is what the passion of love indicates to the soul about the object, i.e., that the object is important (worth joining in this case) in order to increase our perfection. This does not mean, of course, that a careful examination of the object cannot advise the soul differently—but this would be an effect of a posterior action of the soul (study of the object), not of the passion of love itself. The disposition of the soul carries also good reasons for the soul to call the intervention of reason to study that particular object before taking any action.

We should then now be in conditions to understand the relationship between love and desire and why the latter is “one of the most common effects of love” (*Passions* II, art.81, AT XI 388 : CSM I 356). Desire is usually an “effect” of love, we can now say, because the *disposition* brought about by love usually becomes the *best reason* to make the judgment that joining the (loved) object would be beneficial—and that judgment would arouse desire towards that object:

[A]s soon as we have joined ourselves willingly to some object [*sistost qu'on s'est joint de volonté à quelque objet*], whatever its nature may be, we feel benevolent towards it—that is, we also join to it willingly the things we believe to be agreeable to it [*on joint aussi à luy de volonté les choses qu'on croit luy estre convenables*]: this is one of the principal effects of love. And if we *judge* [*si on juge*] that it would be beneficial to possess an object or to be associated with it in some manner other than willingly, then we desire it. (*Passions* II, art.81, AT XI 388 : CSM I 356; my italics)].

Notice also, once again, that insofar as desire is a passion, all it can bring about is a new *disposition* of the soul, in this case a disposition “to wish, in the future, for the things it represents to itself as agreeable” (*Passions* II, art. 86, AT XI 392 : CSM I 358). Thus, the difference between love and desire is not in whether they bring about a *disposition* or not to the soul (they both do), but rather in the *weight*, so to speak, which that disposition may have for the soul to make other judgments, and in general to have certain volitions (i.e. take actions). Desire, we can say, disposes *more forcefully* to act because it offers *stronger reasons* to the soul to make a decision. As to why this is so, one explanation could be that desire, unlike other passions, usually results from a judgment, as we have seen--which is a action of the soul itself--based on a an already good *reason*—the previous disposition caused by love in this case—thus

reinforcing the reasons for the soul to undertake an action (a volition).²⁷⁶ This could also explain why, physiologically, desire also *disposes* better the body to acquire its object.²⁷⁷

Two further clarifications regarding judgments are worth noticing. One is that, although judgments are *not* necessary to have passions, this does not mean *true* passions, in the sense discussed above, can be aroused without *judgments*. As we have seen passions as such are not *true* or *false*. “Experience and reason” help us determine the “true value” of their *objects* (*Passions* II, art. 138, AT XI 431 : CSM I 377). They (experience and reason) serve to correct the distortions in the *perception* of the object (and therefore also the disposition towards them) and thus guarantee that a passion inclines us towards a *real* good (or evil). This is what it means to talk about *true* passions, that they are *corrected* or *verified* by true knowledge—and consequently they can be considered *properly-functioning* passions. This, in turn, means that the representation of the object that occurs with the passion must have been *evaluated* at some point by the soul so that a *decision* on its truth could have been made. Thus, without stretching the meaning of judging, it looks like, the possibility of having true passions would require, under Descartes’ theory, judgments. Talking about the “proper weapons” to master our passions, Descartes does say those “weapons” are “judgments”:

What I call its ‘proper’ weapons are firm and determinate judgements bearing upon the knowledge of good and evil, which the soul has resolved to follow in guiding its conduct. The weakest souls of all are those whose will is not determined in this way to follow such judgements, but constantly allows itself to be carried away by present passions. (*Passions* I, art. 48, AT XI 367 : CSM I 347)

Notice the very narrow relationship between following true (or properly-functioning) passions and the “mastery” of our passions. As we will see in Chapter 4, following *true* passions is precisely what to master our passions means.

The second important clarification regarding judgments is that Descartes suggests that not only reason can “make us judge”. Our “internal senses” also can:

²⁷⁶ “[T]he passion of desire has this special characteristic: the volition to acquire some good or avoid some evil sends the spirits rapidly from the brain to all the parts of the body which may help to bring about this effect, and especially to the heart and the parts which supply most of its blood. Receiving a greater amount of blood than usual, the heart sends a greater quantity of spirits to the brain, both in order to maintain and strengthen the idea of the volition and to pass from there into all the sense organs and all the muscles that can be used for obtaining what is desired.” (*Passions* II, art. 106, AT XI 406-407 : CSM I 365)

²⁷⁷ “I note this special feature of desire, that it agitates the heart more violently than any other passion, and supplies more spirits to the brain. Passing from there into the muscles, these spirits render all the senses more acute, and all the parts of the body more mobile.” (*Passions* II, art. 101, AT XI 403 : CSM I 363).

[T]he objects both of love and of hatred may be represented to the soul either by the external senses, or by the internal senses and its own reason [*par les sens exterieurs, ou bien par les interieurs & par sa propre raison*]. For we commonly call something ‘good’ or ‘evil’ if our internal senses or our reason make us judge it agreeable or contrary to our nature [*nous appellons communement bien ou mal, ce que nous sens interieurs ou nostre raison nous font juger convenable ou contraire à nostre nature*]. But we call something ‘beautiful’ or ‘ugly’ if it is represented as such by our external senses [...]. Two kinds of love arise from this, namely the love we have for good things and the love we have for beautiful things. (*Passions* II, art.85, AT XI 391 : CSM I 358 [my italics])

We have seen that our passions, insofar as they *dispose* the soul, can dispose it to judge. But Descartes is talking in this passage about “internal senses”. If we take these *senses* to be responsible for *internal perceptions*, he could be thinking, regarding the body, for example, about the titillation of the nerves that informs the brain—i.e. that causes the corresponding impression in the brain--about the state of health of the body. “The soul is *immediately advised* about things useful to the body only *through some sort of titillation*, which produces joy within it [...]” (*Passions* II, art. 137, AT XI 430 : CSM I 376 [my italics]) or about the joy that follows the effort of the tennis player. That joy, in turn, can makes us judge (i.e. *dispose us to judge*), or can result in love and then in desire—supposedly after some judgment (the titillation “first produces joy within it, then gives rise to love of what we believe to be its cause, and finally brings about the desire to acquire something that can enable us to continue in this joy, or else to have a similar joy again later on” [*Passions* II, art. 137, AT XI 430 : CSM I 376]).

Regarding the soul, these “internal senses” could refer to the “internal emotions”—the type of emotions “produced in the soul by the soul itself” and which do not depend “on some movement of the spirits” (*Passions* II, art. 147, AT XI 440-41 : CSM I 381)--in which the soul *perceives* its own state of perfection (such as the joy of the mourning husband is an indication to the soul that it now belongs to a unity of greater perfection) (*Passions* II, art. 147) and thus can dispose it to judge or to have volitions. But in this second sense we would obviously be taking “internal senses” in a broader, non-sensorial, sense.

3.5. CONCLUSIONS

1. Natural perfection. The study of the function of our passions indicates that they are our only *natural guides* to our perfection, that is, they are the functions of the mind-body union that provide us with the only natural orientation *in the world* about how to achieve that perfection. They discriminate objects relevant for our perfection by simultaneously revealing a deficiency in our nature and representing them as *good candidates* to satisfy it. At the same time they dispose us to join them, thus increasing our perfection. Unlike any other “functions” of the soul, through this disposition, passions *force* us, not simply to study the world, but primarily into *interactions* with it.

The usefulness of our passions regarding our body and of love regarding our soul (i.e. the sense in which it increases our perfection) suggests that the *natural perfection* we can expect to gain through our passions (1) appears to be an ongoing process, never accomplished, (2) which can be *measured* by (a) the union the soul constitutes with the body, (b) the specific unions the mind-body union constitutes with certain objects, and (c) the set of *unions* which the mind-body union has constituted in a lifetime (i.e. the union of the mind-body union and the world).

2. Aboutness. The function of passions, together with their causal account (Chapter 2), helps also answer the question what passions are about—and thus clarifies the distinction in content between the representations that result in sensations and those that result in passions. The “importance” of the objects for the preservation or perfection of the body, or for the perfection of the mind-body union is the specific representative content of passions, and therefore, what distinguishes them from the representations Descartes calls sensations. We can then say that, in a sense, passions are *about* the objects they represent. Some passions would be about external objects (love would be *about* the loved one), others about *the body* (e.g. joy and sadness caused by the state of health or by its well-functioning during a tennis match), and others about the mind-body union (the joy that follows love), for example.

But the study of the usefulness of the passions allows us to say also now what is common in all these cases: passions are about the worthiness to join that which they represent in order to constitute unities of greater perfection with them. According to these unities we can talk about *different levels of aboutness*: (a) the state of mind-body union, (b) the state of the union of the mind-body union with specific objects, and (c) the state of the union of the mind-body union and *the world* (understood as the set of all the unions constituted in our lifetime). Internal emotions, the ones on which “our well-being depends

principally on” (*Passions* II, art, 147, AT XI 440 : CSM I 381), I would suggest are about this third level. The joy of the husband after the death of his wife, even assuming he is experiencing genuine sadness, would be the perception of the soul of the state of the union between him (mind-body union) and the world.

3. “We refer to the soul”. Knowing this, we could review Descartes’ original distinction between sensations, appetites and passions (*Passions* I, arts. 23-25), where he referred to the passions (in the strict sense) as “perceptions we refer to the soul” (*Passions* I, art. 25). This characterization appeared to be confusing because it did not seem to parallel the characterization of sensations as “perceptions we refer to objects outside us” (*Passions* I, art.23) or appetites and internal sensations as “perceptions we refer to our body” (*Passions* I, art.24). Recall that the reason he offered to support that passions are the perceptions “we refer them to the soul” was that it is in the soul where we “feel” their “effects”.²⁷⁸ Now we can understand why this was not an unjustified criterion, if not of classification, at least of characterization. In the case of the passions, the “effects,” not the causes—which can be many and different--becomes their defining feature. Their “main effect” as we have seen is “that they move and dispose the soul to want the things for which they prepare the body” (*Passions* I, art. 40, AT XI 359 : CSM I 343).

Now, we can add a new sense of that “we refer”. Passions can be said to be about the soul, more precisely about its *state* (of perfection) of the soul. It is in reference to this state that the objects of the passions become such. They appear important for us insofar as they can *alter* or *maintain* that state.

3. Reason. Insofar as passions *indicate* both a natural deficiency and guide us to overcome it (i.e. by feeling love we feel the deficiency in us and the possibility of perfecting ourselves), our perfection, or at least the perfection we are concerned with here, is a *natural perfection*, a perfection that is *taught to us* by nature (by our passions), not one *decided* by reason. Recall that Descartes is writing the treatise, as he says at the very beginning, as a “natural philosopher,” *not as moralist* (*Passions* Prefatory letters, AT XI 326 : CSM I 327). Accordingly, regarding our (natural) perfection, reason appears to be an *aid* to our passions rather than a possible substitute or even our main guide to act in the world.

²⁷⁸ “The perceptions we refer only to the soul are those whose effects we feel as being in the soul itself and for which we do not normally know any proximate cause to which we can refer them. Such are the feelings of joy, anger and the like, which are aroused in us sometimes by the objects which stimulate our nerves and sometimes also by other causes.” (*Passions* I, art. 25, AT XI 347 : CSM I 337)

Reason can, indeed, regardless of the occurrence of any passion, select objects from the world, evaluate them, and take action to acquire them. But it could only do this according to, say, a *rational* perfection, which is not even a question in the treatise. The treatise is about our nature, *what passions do* and whether and how we *should follow* them so that we can benefit from *what they do*. In this sense, i.e. regarding our *natural* perfection, reason does not have the means to guarantee an appropriate selection of objects in the world according to their *importance*; it can only help by evaluating the raw material delivered by the passions, in particular by helping us avoid what is harmful.

As it will be clearer in the next chapter, a virtuous life—a life according to reason--guarantees a continuous increase in perfection, not by imposing the dominion of reason over our passions, or by eliminating them, but by *following* them *according to reason*. This means *according to our nature*, that is, according to their proper function. And as long as we do this we will enjoy the “sweetest pleasures of this life” (*Passions* III, art. 404, AT XI 488 : CSM I 404) without any of the disturbances the mind may suffer otherwise (*Passions* II, art. 148, AT XI 442 : CSM I 382). The result is not just the tranquility of the mind, it is the *joy* of the mind-body union, of a human being *living in the world*, and constituting with it a unity (or unities) of greater perfection. It is the joy that, as in the case of love, *confirms* that we have achieved certain progress in our perfection; the joy of those who have taken advantage of the opportunities life has offered to increase their perfection by acting always according to “what we judge to be best” (*Passions* III, art.170, AT XI 460 : CSM I 391).

4. To finish, a more speculative note. If we read the usefulness of love in connection with Descartes’ partial account, briefly discussed in Chapter 1, of the origin of our passions, it could be argued that, whether love is or not what brought the soul into the union, love could at least be what keeps the union as such. “[I]n examining the passions I have found almost all of them to be good, and to be so useful in this life that our soul would have no reason to wish to remain joined to its body for even one minute if it could not feel them” (To Chanut, 1 November 1646, AT IV 538 : CSMK 300).²⁷⁹ But insofar as our perfection may depend on our passions, and particularly on love, we could also perceive the very possibility of loving as a *reason* for the union to occur, were this to be a historical event. In other words,

²⁷⁹ That the soul could not love—or experience any other passion for that matter--without the body is clear from the physiological account. “[I]f we had no body, I venture to say we could not go too far in abandoning ourselves to love and joy, or in avoiding hatred and sadness” (*Passions* II, art. 141, AT XI 434 : CSM I 378).

if passions are good for the soul, and love is the most useful among them, to be able to love could become the *best reason* the soul may have to remain joined to the body.

IV. ETHICS

INTRODUCTION

The overview of the correspondence Descartes maintained in 1641-49 showed that the control of the passions, and its relationship to happiness, was not only one of the original motivations behind the composition of the treatise but also the central topic around which Descartes' thought on passions evolved (see specially the letters to Elizabeth of 1643, 1645-46, 1649, and to Chanut of 1646-47). In the *Passions* the “mastery” reappears as the very explicit practical goal of the treatise. Each of its three parts ends with a *reminder* that this is what we should keep in mind. The last article of Part I (i.e. art. 50) is titled “There is no soul so weak that it cannot, if well directed, acquire an absolute power over its passions”; the last article of Part II (art. 148) “The exercise of virtue is a supreme remedy against the passions”; and the last one of Part III (art. 212), “It is on the passions alone that all the good and evil of this life depends,” which closes with these words: “[T]he chief use of wisdom lies in its teaching us to be masters of our passions and to control them with such skill that the evils which they cause are quite bearable, and even become a source of joy” (*Passions* III, art. 212, AT XI 488 : CSM I 404).

In comparison with the correspondence the treatise does not offer many new insights on ethical questions. It mainly places those questions in the context of the *tree of philosophy*, that is, it shows the section of the trunk out of which the branch of morals grows (Chapters 2 and 3) and what exactly that means for the disposition to act brought about by our passions. Whereas understanding the physiology of the passions helps determine to which extent they *can* be controlled, understanding their function is a condition to decide *what* exactly, and to which extent, *should* be controlled. This can explain why, despite its importance, so few articles are devoted to ethical questions. It is a conclusion that follows from understanding in which sense passions are beneficial for us. This also means that Descartes is not offering a general study of *ethics*, but only one of the ethics of the passions. The function of the passions has

shown that *the* ethical question arises from a very specific feature of the passions, their fundamental one: that they “influence the will,” i.e. that they dispose us to act. “[B]ecause these passions cannot lead us to perform any action except by means of the desire they produce, it is this desire which we should take particular care to control; and here lies the chief utility of morality” (*Passions* II, art. 144, AT XI 436 : CSM I 379). Recall that desire is the passion that most strongly disposes us to act and that other passions lead us to action by arousing desire first. Thus, neither are we authorized to extrapolate his conclusions, nor it is clear that Descartes, writing as a “natural philosopher,” could have gone any further.

Regarding the “foundations,” recall also that immediately after sending the complete draft to Elizabeth in 1646, Descartes announced to Chanut that he had reached “satisfactory conclusions” in “establishing sure foundations in moral philosophy” while explicitly referring to his recently finished “little treatise on the nature of the passions of the soul” (To Chanut, 15 June 1646, AT IV 441-42 : CSMK 289). One year later—and two before the publication of the treatise—he added a Preface to the French Edition of his *Principles of Philosophy*, where “morals” appears as one of the three main branches—the other two being medicine and mechanics—of the *tree of philosophy*, which is sustained by the trunk of physics and whose roots are metaphysics (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186). The *Passions* can be read as if we were climbing that tree towards the branch of “morals,” which is “the highest and most perfect moral system, which presupposes a complete knowledge of the other sciences and is the ultimate level of wisdom” (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186). And the trunk (“Physics”) can lead us there because it involves the study of our “human nature”²⁸⁰—of which the study of our passions is part—something which, as he tells Chanut, was missing in the *Principles*.²⁸¹

To show in which sense it can be said that the morals in the *Passions of the Soul* may emerge from the “physics” is the goal of this chapter. The Stoic “live according to nature” becomes in the *Passions* “live according to your *human* nature.” A virtuous life (the life of the *generous*) is the one of

²⁸⁰ “The second part is physics, where, after discovering the true principles of material things, we examine the general composition of the entire universe and then, in particular, the nature of this earth and all the bodies which are most commonly found upon it, such as air, water, fire, magnetic ore and other minerals. Next we need to examine individually the nature of plants, of animals and, above all, of man, so that we may be capable later on of discovering the other sciences which are beneficial to man.” (*Principles of Philosophy*, Preface to the French edition, AT IXB 14 : CSM I 186)

²⁸¹ “I agree with you entirely that the safest way to find out how we should live is to discover first what we are, what kind of world we live in, and who is the creator of this world, or the master of the house we live in. But I cannot at all claim or promise that all I have written is true, and besides there is a very great distance between the general notion of heaven and earth, which I have tried to convey in my *Principles*, and the detailed knowledge of the nature of man, which I have not yet discussed.” (To Chanut, 15 June 1646, AT IV 441 : CSMK 289)

those who (a) know their human nature—and in particular what is good and bad for it, and (b) take advantage of the opportunities life presents to increase its perfection (which are presented to us by our passions). This is also what to “master” our passions means. The virtuous is simply the one who benefits from his passions. Reason is then not a moral guardian, so to speak, serving some external interests (i.e. some independent ethical principles or goals), but a *functional* guardian: its role is to guarantee that our passions fulfill their proper (beneficial) function (“they are all by nature good, and [...] we have nothing but their misuse or their excess” [*Passions* III, art. 211, AT XI 485-86 : CSM I 403]). A neo-Stoic reading of Descartes’ morality would neglect both the physiological and functional explanations in the treatise, as well as Descartes’ own explicit separation from Seneca in the correspondence.

4.1. FREE WILL AND TRANQUILLITY

The short answer as to why we should control our passions is so that we can increase our natural perfection, and therefore be happy. Only mind-body unions have this ability, which emerges from the treatise as the most fundamental feature of the mind-body union: the soul’s power *to act*. We can master the passions because we are free (i.e. have free will) and thus can *act* in the true sense. This power—i.e. “the exercise of our free will and the control we have over our volitions”--is the only “good reason for esteeming ourselves” (*Passions* III, art. 152; AT XI 445 : CSM I 384). It is also the only feature that ““renders us in a certain way like God”.²⁸² Although our passions *dispose* us to act, we are free to act according to that disposition or not--unless our will is so weak that it becomes slave of the passions (see *Passions* III, art. 158).

Animals are always slaves of their passions. Since they cannot *act*, they cannot oppose the dispositions their passions bring about. Their behaviour is the result of being *moved* (literally) by them in the strong sense: they are *determined* by them. As any other parts of nature their behaviour is not different from the motion of bodies in collision. “[A]ll the animals devoid of reason conduct their lives simply

²⁸² “I see only one thing in us which could give us good reason for esteeming ourselves, namely, the exercise of our free will and the control we have over our volitions. For we can reasonably be praised or blamed only for actions that depend upon this free will. It renders us in a certain way like God by making us masters of ourselves, provided we do not lose the rights it gives us through timidity.” (*Passions* III, art. 152, AT XI 445 : CSM I 384)

through bodily movements similar to those which in our case, usually follow upon the passions which move our soul to consent to such movements” (*Passions* II, art. 138, AT XI 431 : CSM I 376-77). This also means animals cannot increase their natural perfection in the true sense (regarding their soul). It is particularly relevant that in one of the only two references to animals in the *Passions*, Descartes does not openly reject they have thoughts, but he does deny they have “reason”:

[A]lthough they [animals] lack reason, and perhaps even thought [*ny peut ester aussi aucune pensée*], all the movements of the spirits and of the gland that produce passions in us are nevertheless present in them too, though in them they serve to maintain and strengthen only the passions and not, as in us, the passions themselves. So, when a dog sees a partridge, it is naturally disposed to run towards it; and when it hears a gun fired, the noise naturally impels it to run away. (*Passions* I, art. 50, AT XI 369-370 : CSM I 348)

Why this doubt about whether animals could have thoughts? Probably because Descartes does not consider it equally evident to their ability to act than a ability to be moved which might require representations. Even if they are thoughts, representations are, in any case, passions. This would keep animals still within the natural world (although a world naturally associated with certain mental realm).

A human mind *determined* by its passions is not free. It is also a *disturbed* mind, insofar as its ability to act is inexistent. On the other hand, an *undisturbed* and *undisturbable* soul is a “tranquil” mind. Our happiness is a form of “tranquility” (e.g. *Passions* II, art. 148; AT XI 442 : CSM I 382) or “contentment” of the mind (e.g. To Princess Elizabeth, 4 August 1645, AT IV 264 : CSMK 257; To Princess Elizabeth, 18 August 1645, AT IV 277 : CSMK 262; To Princess Elizabeth, 18 August 1645, AT IV 275 : CSMK 261). This “tranquility” is achieved, or defended, when the soul is in full control of its passions. And it is in control when it has the “proper weapons” for it: free will and knowledge. “[F]irm and determinate judgments bearing upon the knowledge of good and evil, which the soul has resolved to follow in guiding its conduct” (*Passions* I, art. 48, AT XI 367 : CSM I 347). Notice that a “resolved” mind (a) acquires the habit to be *free* while (b) “guiding its conduct,” that is, as it interacts with the world.

Disturbances of the mind are understood by Descartes as forms of conflict--in direct opposition to “peace of mind” (*Passions* III, art.190, AT XI 471 : CSM I 396). Particularly relevant in the treatise are three of these conflicts: (a) the conflict of two opposed passions (“Thus, when fear represents death as an extreme evil which can be avoided only by flight, while ambition on the other hand depicts the dishonour of flights as an evil worse than death, these two passions jostle the will in opposite ways; and since the

will obeys first the one and then the other, it is continually opposed to itself, and so it renders the soul enslaved and miserable” [*Passions* I, art. 48, AT XI 367 : CSM I 347]); (b) the conflict between our volitions and our desires (“We observe conflict [...] between the force with which the spirits push the gland so as to cause the soul to desire something, and the force with which the soul, by its volition to avoid this thing, pushes the gland in a contrary direction” [*Passions* I, art. 47, AT XI 365 : CSM I 346]); and (c) the *conflict* in the form of passions that may be aroused after taking actions not based on true knowledge, such as remorse (*Passions* III, art. 177) or repentance (*Passions* III, art. 191). “There is, however, a great difference between the resolutions which proceed from some false opinion and those which are based solely on knowledge of the truth. For anyone who follows the latter is assured of never regretting or repenting, whereas we always regret having followed the former when we discover our error” (*Passions* I, art.49, AT XI 368 : CSM I 347).

The latter—the disturbance caused by remorse or repentance (“if we were certain that what we have already done was bad, we would feel repentance for it, not simply remorse” [*Passions* III, art.177, AT XI 464 : CSM I 392)—is a different type of *conflict* and the one that most seriously can jeopardize our “peace of mind”. “Repentance is directly opposed to self-satisfaction” (*Passions* III, art. 191, AT XI 472 : CSM I 396). Anger is the “passion whose excesses we should take more care to avoid” precisely because it might lead us to repentance: “[A]lthough this passion is useful in giving us the strength to ward off such wrongs, there is no passion whose excesses we should take more care to avoid. For such excesses confuse our judgment and often make us commit misdeeds of which we must afterwards repent” (*Passions* III, art. 203; AT XI 481 : CSM I 400).

Insofar as it is a passion, repentance brings about harmful effects similar to the ones that usually accompany passions aroused by the representation of an evil, such as sadness (*Passions* II, art.100). But repentance is quite different in another important sense: it is “very bitter because its cause lies in ourselves alone” (*Passions* III, art. 191; AT XI 472 : CSM I 396). Even if we took precautions to avoid it in the future, we cannot free ourselves from the disturbance it may continue to generate from past events. It is particularly “bitter” when it is based on irresolution, that is, when it is based, not on false judgment—of which we can learn for the future--but on *uncertain* judgment. “[I]t often happens that weak-spirited people repent of deeds they have done without knowing for certain that they are evil; they are convinced of this simply because they fear so, and if they had done the opposite, they would repent in the same way. This is an imperfection deserving of pity, and the remedies against this fault are the same as those which serve to dispel irresolution” (*Passions* III, art. 191, AT XI 472-73 : CSM I 397). Lack of resolution

causes, then, worse disturbance in the mind than *bad* resolutions. Lack of resolution is the sign of a weak mind, of a mind rather passive than active, rather slave than free. Only acting on true knowledge can, however, assure that we will not repent. “There is [...] a great difference between the resolutions which proceed from some false opinion and those which are based solely on knowledge of the truth. For, anyone who follows the latter is assured of never regretting or repenting, whereas we always regret having followed the former when we discover our error” (*Passions* I, art.49, AT XI 368 : CSM I 347).

Passions in general can arouse the worst disturbances in the mind for a similar reason: they can impair our judgment (our free will). To pursue virtue—not to fail “to do something he judges to be best”-- is thus the best protection from their “assault”:

[I]n order that our soul should have the means of happiness, it needs only to pursue virtue diligently. For if anyone lives in such a way that his conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’), he will receive from this a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquillity of his soul. (*Passions* II, art 148, AT XI 442 : CSM I 382)

Descartes does not elaborate in detail on the concept of “tranquility of the soul” in the treatise. We know, at least, that it is the state of mind of those in pursuit of *virtue*, that is the state of a mind (1) resolved to do always what it “judges to be the best,” as we have just read above, (2) which only sets to itself goals which are within its reach-- “the pursuit of virtue consists in doing the good things that *depend on us*” (*Passions* II, art. 144, AT XI 437 : CSM I 379 [my italics]); and (3) it is a “satisfied” mind insofar as it does not fail to take advantage of the opportunities life offers to increase its perfection—opportunities which, we know from Chapter 3, are presented to us by the passions (*Passions* III, art.211).

Thus achieving virtue is the “supreme remedy against the passions” (*Passions* II, art. 148), not only because a *resolute* mind to do what it judges best and is under its reach is an undisturbed and undisturbable mind but also because it is a free mind, i.e., a mind which only *follows* its own volitions (judgments) rather than the desires aroused by its passions. (“For if anyone lives in such a way that his conscience cannot reproach him for ever failing to do something he judges to be the best (which is what I here call ‘pursuing virtue’), he will receive from this a satisfaction which has such power to make him happy that the most violent assaults of the passions will never have sufficient power to disturb the tranquillity of the soul” [*Passions* II, art.148, AT XI 442 : CSM I 382]).

Weak minds cannot be virtuous, cannot control their passions, because they cannot be resolute about following their best judgements: “The weakest souls of all are those whose will is not determined in this way to follow such judgements, but constantly allows itself to be carried away by present passions” (*Passions* I, art. 48; AT XI 367 : CSM I 347).

4.2. THE WILL AND THE AROUSAL OF THE PASSIONS

How then can we avoid the disturbances of the passions that may jeopardize our happiness? How can we control our passions? The main lesson of the physiological account is that, once triggered, passions follow, so to speak, their own course, *unless* the soul intervenes. The second is that the soul can intervene, that is, we can exert certain control over them.²⁸³ The third is that we know at which stages of the arousal process the will can exert certain control over them: the first representations (that eventually trigger the chain of events we may call passions), the bodily motions (external signs and limbs), and the inclinations to act or desires aroused by the passions themselves. And the fourth is that we also know what the soul can do at each of these stages to modify their *normal* course and with which prospect of success.²⁸⁴ The soul can intervene in three main ways: (1) by *replacing*, so to speak, the current (harmful) passion with another (beneficial) one, something done by simply arousing the latter; (2) by altering the bodily motions they may generate; and (3) by *guiding* the desires they arouse. The last form is, as we have seen above, the one of particular interest from a moral point of view.²⁸⁵

By bringing about a new representation (associated to a different passion) when a passion is under way we can indirectly control our passions by arousing a new one (which will replace the first one). Through habit we can establish a new association between the original representation (that aroused

²⁸³ “These things are worth noting in order to encourage each of us to make a point of controlling our passions. For since we are able, with a little effort, to change the movements of the brain in animals devoid of reason, it is evident that we can do so still more effectively in the case of men. Even those who have the weakest souls could acquire absolute mastery over all their passions if we employed sufficient ingenuity in training and guiding them.” (*Passions* I, art.50, AT XI 369 : CSM I 348)

²⁸⁴ To talk about the normal course simply means the normal succession of stages through which all human passions are supposedly aroused, not that we all *experience* them similarly. As we have seen, past experiences, imaginings, prior knowledge, and the normal flow of the spirits, are factors that make of each human a *unique* mind-body union in which passions are experienced differently.

²⁸⁵ “[B]ecause these passions cannot lead us to perform any action except by means of the desire they produce, it is this desire which we should take particular care to control; and here lies the chief utility of morality.” (*Passions* II, art. 144, AT XI 436 : CSM I 379)

the first passion) and the second representation (that aroused the beneficial passion), so that, the cause of the first passion will from now on cause the second. “[A]lthough nature seems to have joined every movement of the gland to certain of our thoughts from the beginning of our life, yet we may join them to others through habit” (*Passions* I, art. 50, AT XI, 369 : CSM I 348); “although the movements (both of the gland and of the spirits and the brain) which represent certain objects to the soul are naturally joined to the movements which produce certain passions in it, yet through habit the former can be separated from the latter and joined to others which are very different” (*Passions* I, art. 50; AT XI, 369 : CSM I 348). Hence, in front of a lion we can indeed bring about thoughts of moments in which we used to play with lions, in which a lion was friendly to us, and so on. With the help of our will, the habit of bringing about these *new* thoughts in front of lions will eventually join the representation (perception) of the lion to a new representation (a friendly animal) which, in turn will generate the passion naturally associated to this second representation:

Our passions [...] cannot be directly aroused or suppressed by the action of our will, but only indirectly through the representation of things which are usually joined with the passions we wish to have and opposed to the passions we wish to reject. For example, in order to arouse boldness and suppress fear in ourselves, it is not sufficient to have the volition to do so. We must apply ourselves to consider the reasons, objects, or precedents which persuade us that the danger is not great; that there is always more security in defence than in flight; that we shall gain glory and joy if we conquer, whereas we can expect nothing but regret and shame if we flee; and so on. (*Passions* I, art. 45, AT XI 362-63 : CSM I 345)

Understandably, Descartes admits that we might be able to accomplish this *replacement* or even new association only when we are experiencing passions which are not very “violent”. “[The soul] can easily overcome the lesser passions, but not the stronger and more violent ones, except after the disturbance of the blood and spirits has died down” (*Passions* I, art. 46, AT XI 345 : CSM I 345). He compares these cases to cases in which the will may try to alter certain strong sensations. In both cases we can try to switch attention—with the hope of bringing about a different representation--but there is no guarantee of success. “The soul can prevent itself from hearing a slight noise or feeling a slight pain by attending very closely to some other thing, but it cannot in the same way prevent itself from hearing thunder or feeling a fire that burns the hand. Likewise it can easily overcome the lesser passions, but not the stronger and more violent ones, except after the disturbance of the blood and spirits has died down” (*Passions* I, art. 46, AT IX 364 : CSM I 345).

Regarding the control of the motions of our limbs, there are two important implications that follow from the physiological account: since (1) the motion of our limbs, as well as of the external signs of our passions, do not require an *active* participation of the soul (i.e. a volition) (“the body may be moved to take flight by the mere disposition of the organs, without any contribution of the soul” [*Passions* I, art. 38, AT XI 358 : CSM I 343]), and, for that reason, (2) our control of them--both of the motion of our limbs and of the external expressions of the passions--is limited.²⁸⁶ But as to whether this implies that the will cannot interfere and even impede that action, a few clarifications must be made.

Descartes does explicitly admit that the will can indeed stop the action for which the body has been prepared: “if anger causes the hand to rise to strike a blow, the will can usually restrain it; if fear moves the legs in flight, the will can stop them; and similarly in other cases” (*Passions* I, art.46, AT XI 364 : CSM I 345). From Descartes’ explanation, it seems that the will can act as soon as it perceives the *preparation* of the body—which is the correlate of the *disposition* in the soul—²⁸⁷ to move. The motion of the limbs does not seem necessary for the will to act (to impede or generate a different motion):

[J]ust as the course which the spirits take to the nerves of the heart suffices to induce a movement in the gland through which fear enters the soul, so too the mere fact that some spirits at the same time proceed to the nerves which serve to move the legs in flight causes another movement in the gland through which the soul feels and perceives this action. (*Passions* I, art. 38, AT XI 358 : CSM I 342)

On the other hand, Descartes notices that the more violent the motion of that limb (the hand in this case) the more likely it will also be that the motion might take place, at least partially, before the will manages to subdue it. That is why, Descartes says, the will not always, but “usually,” restrains that motion: “if anger causes the hand to rise to strike a blow, the will can usually restrain it; if fear moves the legs in flight, the will can stop them; and similarly in other cases” (*Passions* I, art.46, AT XI 364 : CSM I 345). This seems to suggest either that the soul does perceive only the motion of the limbs, or that, even if perceives the bodily changes that prepare the limbs to move, this perception is not enough for it to stop

²⁸⁶ “We may, however, acknowledge a kind of conflict, in so far as the same cause that produces a certain passion in the soul often also produces certain movements in the body, to which the soul makes no contribution and which the soul stops or tries to stop as soon as it perceives them. We experience this when an object that excites fear also causes the spirits to enter the muscles which serve to move our legs in flight, while the will to be bold stops them from moving.” (*Passions* I, art.47, AT XI 366 : CSM I 346-47)

²⁸⁷ “[T]he principal effect of all the human passions is that they move and dispose the soul to want the things for which they *prepare* the body.” (*Passions* I, art 40, AT XI 359 : CSM I 343 [my italics])

the motion before it has started. In support of the first option is Descartes' own denial that we perceive the flow of the spirits itself—which is the reason why the will cannot exert any direct influence on them.

It is however more difficult for the will to exert control over the other flow of the spirits that leaves the brain at the same time—that is the flow which is sent to the heart (from where refined blood travels to the brain and is transformed there into spirits which, by moving again the gland, maintain and strengthen the passion). In this case the will cannot directly act on that “disturbance” of the spirits. “Until this disturbance ceases they [the passions] remain present to our mind in the same way as the objects of the senses are present to it while they are acting upon our sense organs. [...] The most the will can do while this disturbance is at its full strength is not to yield to its effects and to inhibit many of the movements to which it disposes the body” (*Passions* I, art 46, AT XI 363 : CSM I 345). Notice that in the case of the motion of the limbs, perceiving the preparation of that motion seemed to be a condition for the soul to be able to *intervene*. This should imply that, since the soul cannot alter it, we do not perceive the motion of the spirits sent to the heart. We might, however, have *sensations* (supposedly caused by bodily motions) resulting from those motions. But this does not mean we perceive the *motion of the spirits*, in the same way that we do not perceive the motion of the fibres within the optic nerve when we have visual perceptions.

As to the external expressions that accompany certain passions, “in general the soul is able to change facial expressions, as well as expressions of the eyes, by vividly feigning a passion which is contrary to one it wishes to conceal. Thus we may use such expressions to hide our passions as well as to reveal them” (*Passions* II, art.113, AT XI 412-13 : CSM I 368). However, the power of the will over, for example, changes in color of our skin, is more limited. Blushing is beyond our control because it is simply the external appearance of the flow of blood towards the face—and, like the flow of spirits, the will has no control over those changes.

We cannot so easily prevent ourselves from blushing or growing pale when some passion disposes us to do so. For these changes do not depend on the nerves and muscles as do the preceding ones: they proceed more immediately from the heart, which may be called the source of the passions in so far as it prepares the blood and the spirits to produce them. It is certain that the color of the face comes solely from the blood which, flowing continually from the heart through the arteries into the veins and then back into the heart, colors the face more or less, depending on whether it fills the small veins located near its surface to a greater or lesser extent. (*Passions* II, art.114, AT XI 413 : CSM I 368)

Notice that whereas the will has no direct power over the flow of the spirits—a limitation of the will both in sensations and passions—those changes, in turn, do have an “influence” on the will, which is precisely the reason why they have such a strong power to bring about a “disturbance” in the mind: they influence the soul while being beyond its control.²⁸⁸

As to the third general form of controlling our passions—by altering the *inclination to act* they bring about—we have already explored, physiologically, the possible conflicts between the *inclination to act* (brought about by our passions) and our volitions. In these cases the gland is being simultaneously and contradictorily affected by both the soul (a volition) and the spirits (desire), the soul pushing the gland in one direction (action) and the spirits in another (passion).²⁸⁹ The mechanical conflict in the gland is a conflict between an action and passion in the soul. This conflict does not occur in the case of sensations because they do not exert an “influence” on the will (they do not dispose us to act).²⁹⁰ These conflicts are particularly relevant for Descartes regarding the attainment of happiness. To be able to overcome this type of conflicts is for Descartes one of the main signs of the strength of a soul, and for that reason one of the requirements for its happiness.²⁹¹

How these conflicts *should* be resolved, which is the interesting ethical question, is a different matter. I am addressing it in the next section. Notice also that the *conflict* between volitions and the bodily motions that accompany a passion does not need to imply also a conflict between volitions and the desire aroused by that passion. I may want to stop my arm but also maintain my anger. The reasons not to have

²⁸⁸ “There is one special reason why the soul cannot readily change or suspend its passions, which is what led me to say in my definition that the passions are not only caused but also maintained and strengthened by some particular movement of the spirits. The reason is that they are nearly all accompanied by some disturbance which takes place in the heart and consequently also throughout the blood and the animal spirits. Until this disturbance ceases they remain present to our mind in the same way as the objects of the senses are present to it while they are acting upon our sense organs.” (*Passions* I, art. 46, AT XI 363 : CSM I 345)

²⁸⁹ “[T]here is no conflict here except insofar as the little gland in the middle of the brain can be pushed to one side by the soul and to the other side by the animal spirits (which, as I said above, are nothing but bodies), and these two impulses often happen to be opposed, the stronger canceling the effect of the weaker.” (*Passions* I, art. 47, AT XI 364-65 : CSM I 346)

²⁹⁰ “As to the first, although they often hinder the actions of the soul, or are hindered by them, yet since they are not directly opposed to these actions, we observe no conflict between them. We observe conflict only between movements of the second kind and the volitions which oppose them—for example, between the force with which the spirits push the gland so as to cause the soul to desire something, and the force with which the soul, by its volition to avoid this thing, pushes the gland in a contrary direction.” (*Passions* I, art. 47, AT XI 365 : CSM I 346)

²⁹¹ “For undoubtedly the strongest souls belong to those in whom the will by nature can most easily conquer the passions and stop the bodily movements which accompany them. But there are some who can never test the strength of their will because they never equip to fight with its proper weapons, giving it instead only the weapons which some passions provide for resisting other passions. What I call its ‘proper’ weapons are firm and determinate judgements bearing upon the knowledge of good and evil, which the soul has resolved to follow in guiding its conduct. The weakest souls of all are those whose will is not determined in this way to follow such judgments, but constantly allows itself to be carried away by present passions. The latter, being often opposed to one another, pull the will first to one side and then to the other thus making it battle against itself and so putting the soul in the most deplorable state possible.” (*Passions* I, art. 48, AT XI 366-67 : CSM I 347)

certain desires, however, are different from the reasons not to act according to certain dispositions brought about by the passions, as we are going to see.

4.3. DESIRE

We have seen how the conflict volitions-desires *can* be resolved. But how it *should* be resolved is another question and, precisely, the “chief utility” of morality according to Descartes. “[B]ecause these passions cannot lead us to perform any action except by means of the desire they produce, it is this desire which we should take particular care to control; and here lies the chief utility of morality” (*Passions* II, art. 144, AT XI 436 : CSM I 379). This is quite important. Morality, at least as it can be found in the *Passions*, is about the *control* of this desire, meaning by control *right guidance* of the desire that is aroused by passions. And this means that the “chief utility” of morality is *not* simply the *right guidance* (through reason) of our volitions *in general*. Volitions can also incline the soul to act regardless of whether we are experiencing passions or not. Morality’s “chief utility” is more specific: to determine which of the desires *aroused by our passions* should be followed, and to which extent.²⁹²

In order to benefit from our passions, we must exert “mastery” over them (*Passions* I, art. 50, AT XI 370 : CSM I 348). This requires that we *guide* properly the desire they arouse.²⁹³ The basic passions (except wonder) “govern our behaviour by producing desire in us” (*Passions* II, art.143, AT XI 436 : CSM I 379)—or, in other words, “these passions cannot lead us to perform any action except by means of the desire they produce” (*Passions* II, art. 144, AT XI 436 : CSM I 379).²⁹⁴ As we have seen, we can only do this if we have knowledge of what is good (for us) and a will strong enough to pursue only what is best

²⁹² This clarification is not trivial if we think that some of those currently writing on Descartes’ morals have unjustifiably conceded themselves the license to draw from the *Passions* conclusions regarding *any decision* we might face. The *Passions* does not seem to authorize such reading—unless we limit its moral content to Descartes’ general definition of virtue, which may, of course, have broader applications. But using the *Passions* in this sense does not seem to do justice to the content of the *Passions*.

²⁹³ “The passion of desire is an agitation of the soul by the spirits, which disposes the soul to wish, in the future, for the things it represents to itself as agreeable. Thus we desire not only the presence of goods which are absent but also the preservation of those which are present. In addition we desire the absence of evils, both those that already affect us and those we believe we may suffer on some future occasion.” (*Passions* II, art.86, AT XI 392 : CSM I 358-59)

²⁹⁴ “[T]he soul is immediately advised about things useful to the body only through some sort of titillation, which first produces joy within it, then gives rise to love of what we believe to be its cause, and finally brings about the desire to acquire something that can enable us to continue in this joy, or else to have a similar joy later on.” (*Passions* II, art.137, AT XI 430 : CSM I 376)

for us, that is, if we have what Descartes calls the “proper weapons” of the soul to master our passions.²⁹⁵ The “mastery” of our passions should then not be understood simply as a *victory* of the will over the passions but rather as a *rational pursuit of our passions*--i.e. as a pursuit of our passions according to reason. And this means, as we know from the study of their function, not that reason takes passions by the hand but rather that reason *aids* our passions. Since passions are beneficial—our only natural guides to increase our natural perfection--the role of reason is not their elimination but to make of them a “source of joy” (“the chief use of wisdom lies in its teaching us to be masters of our passions and to control them with such skill that the evils which they cause are quite bearable, and even become a source of joy” [*Passions* III, art. 212, AT XI 488 : CSM I 404]). Recall that it is not the passions, but their “misuse” and their “excesses” what we should be concerned with. “[W]e see that they [passions] are all by nature good, and that we have nothing to avoid but their misuse or their excesses” (*Passions* III, art. 211, AT XI 485-86 : CSM I 403).

Why are their “misuse” and “excesses” the main reason for concern? Precisely because they can lead us to harm (which means to a lesser degree of perfection).²⁹⁶ The “most deceptive” passions are attraction and repulsion, and for this reason “the ones against which we must guard ourselves most carefully”:

[T]he passions of attraction and repulsion are usually more violent than the other kinds of love and hatred, because what enters the soul through the senses affects it more strongly than what is represented to it by its reason. At the same time, these passions usually contain less truth than the others. Consequently, they are the most deceptive of all the passions, and the ones against which we must guard ourselves most carefully. (*Passions* II, art.85, AT XI 392 : CSM I 358).

²⁹⁵ “It is by success in these conflicts that each person can recognize the strength or weakness of his soul. For undoubtedly the strongest souls belong to those in whom the will by nature can most easily conquer the passions and stop the bodily movements which accompany them. But there are some who can never test the strength of their will because they never equip it to fight with its proper weapons, giving it instead only the weapons which some passions provide for resisting other passions. What I call its ‘proper’ weapons are firm and determinate judgements bearing upon the knowledge of good and evil, which the soul has resolved to follow in guiding its conduct. The weakest souls of all are those whose will is not determined in this way to follow such judgements, but constantly allows itself to be carried away by present passions.” (*Passions* I, art. 48, AT XI 366-67 : CSM I 347)

²⁹⁶ The excess of wonder is one example: “[M]ore often we wonder too much rather than too little, as when we are astonished in looking at things which merit little or no consideration. This may entirely prevent or pervert the use of reason. Therefore, although it is good to be born with some inclination to wonder, since it makes us disposed to acquire scientific knowledge, yet after acquiring such knowledge we must attempt to free ourselves from this inclination as much as possible.” (*Passions* II, art. 76, AT XI 385 : CSM I 355). Or in the case of anger: “[T]here is no passion whose excesses we should take more care to avoid” than the excesses of anger for such excesses confuse our judgement and often make us commit misdeeds of which we must afterwards repent. Sometimes they even prevent us from warding off the wrongs as well as we could if we felt less emotion. But just as vanity more than anything else makes anger excessive, so I think that generosity is the best remedy that may be found against its excesses.” (*Passions* III, art.203, AT XI 481 : CSM I 400-401)

Accordingly, and again, reason and knowledge are the remedy against excesses (“there is no remedy for excessive wonder except to acquire the knowledge of many things and to practice examining all those which may seem most unusual and strange” [*Passions* I, art.76, AT XI 385 : CSM I 355]).²⁹⁷

And this should apply even in cases of imminent danger. Even in these cases, whether an imminent action is or not required on our part, we should, first of all, evaluate the reasons behind our inclination: “[T]he most general, and most readily applicable remedy against all excesses of the passions” (*Passions* III, art. 211, AT XI 487 : CSM I 403) is this: “[w]hen we feel our blood agitated in this way, we should take heed, and recollect that everything presented to the imagination tends to mislead the soul and make the reasons for pursuing the object of its passion appear much stronger than they are, and the reasons for not pursuing this object much weaker” (*Passions* III, art. 211, AT XI 487 : CSM I 403). If an action on our part is not immediately necessary, we should “refrain from making any immediate judgement about them, and distract ourselves by other thoughts until time and repose have completely calmed the disturbance in our blood” (*Passions* III, art. 211, AT XI 487 : CSM I 403); and if an immediate decision must be taken “the will must devote itself mainly to considering and following reasons which are opposed to those presented by the passion, even if they appear less strong” (*Passions* III, art. 211, AT XI 487 : CSM I 403). Experience and habit, Descartes believes, trains us to do all this even in extreme circumstances.²⁹⁸

For a “satisfied” mind correcting the representations of the passions is not enough. Certain desires, regardless of what they incline us to do, should, in principle, be discarded. Descartes classifies desires in three types: (a) “desires whose attainment depends only on us” (*Passions* II, art.144); (b) “desires which depend solely on other causes” (*Passions* II, art. 145); and (c) “desires which depend on us and others” (*Passions* II, art.146). We should pursue only desires of the first type (“virtue consists in

²⁹⁷ In the case of wonder, reason can even remedy its absence by bringing about the same benefits a *non-excessive* wonder would (“we may easily make good its absence through that special state of reflection and attention which our will can always impose upon our understanding when we judge the matter before us to be worth serious consideration” [*Passions* I, art.76, AT XI 385 : CSM I 355]).

²⁹⁸ “I must admit that there are few people who have sufficiently prepare themselves in this way for all the contingencies of life. Moreover, the objects of the passions produce movements in the blood which follow so rapidly from the mere impressions formed in the brain and the disposition of the organs, without any help at all from the soul, that no amount of human wisdom is capable of counteracting when we are not adequately prepared to do so.” (*Passions* III, art. 211, AT XI 486 : CSM I 403); “For example, when we are unexpectedly attacked by an enemy, the situation allows no time for deliberation; and yet, I think, those who are accustomed to reflecting upon their actions can always do something in this situation. That is, when they feel themselves in the grip of fear they will try to turn their mind from consideration of the danger by thinking about the reasons why there is much more scrutiny and honour in resistance than in flight. On the other hand, when they feel that the desire for vengeance and anger is impelling them to run thoughtlessly towards their assailants, they will remember to think that it is unwise to lose one’s life when it can be saved without dishonour, and that if a match is very unequal it is better to beat an honourable retreat or ask quarter than stupidly to expose oneself to a certain death.” (*Passions* III, art. 211, AT XI 487 : CSM I 403-04)

doing the good things that depend on us” [*Passions* II, art. 144, AT XI 437 : CSM I 379]), as long as they are based on true knowledge of the good we pursue:

Regarding those [desires] which depend only on us—that is, on our free will—our knowledge of their goodness ensures that we cannot desire them with too much ardour, since the pursuit of virtue consists in doing the good things that depend on us, and it is certain that we cannot have too ardent a desire for virtue. Moreover, what we desire in this way cannot fail to have a happy outcome for us, since it depends on us alone, and so we always receive from it all the satisfaction we expected from it. (*Passions* II, art. 144, AT XI 437 : CSM I 379)

Pursuing desires that depend on us can guarantee our “complete satisfaction” (*Passions* II, art. 146, AT XI 439 : CSM I 381), that is, the satisfaction of having followed, on one hand, inclinations whose fulfillment depends on us and, on the other, of having done so according to “the best that our intellect was able to recognize” (*Passions* II, art. 146, AT XI 439 : CSM I 381). Virtue is “the habit of governing our desires so that their fulfillment depends only on us, making it possible for them always to give us complete satisfaction” [*Passions* II, art. 146, AT XI 440 : CSM I 381]). And this satisfaction is independent of whether following our desires, we encounter adversities.

Thus, for example, suppose we have business in some place to which we might travel by two different routes, one usually much safer than the other. And suppose Providence decrees that if we go by the route we regard as safer we shall not avoid being robbed, whereas we may travel by the other route without any danger. Nevertheless we should not be indifferent as to which one we choose, or rely upon the immutable fatality of this decree. Reason insists that we choose the route which is usually safer, and our desire in this case must be fulfilled when we have followed this route, whatever evil may befall us; for, since any such evil was inevitable from our point of view, we had no reason to wish to be exempt from it: we had reason only to do the best that our intellect was able to recognize, as I am supposing that we did. And it is certain that we apply ourselves to distinguish Fatality from Fortune in this way, we easily acquire the habit of governing our desires so that their fulfillment depends only on us, making it possible for them always to give us complete satisfaction. (*Passions* II, art. 146, AT XI 439-40 : CSM I 380-81)

With respect to these desires (which depend on us) the “mistake” we usually make is not to pursue them in excess but not to pursue them enough: “the mistake we ordinarily make in this regard is never that we desire too much; it is rather that we desire too little” (*Passions* II, art. 144, AT XI 437 : CSM I 379). Descartes suggests that this is so, at least in part, because we do have more desires of the other two types

than we should. The “remedy” is simple: pursue more desires that depend on oneself. “The supreme remedy of this mistake is to free our mind as much as possible from all kinds of other less useful desires, and then try to know very clearly, and to consider with attention, the goodness of that which is to be desired” (*Passions* II, art. 144, AT XI 437 : CSM I 379).

As to the desires “which depend on us and on others” we must, first of all, again, “take care to pick out just what depends only on us, so as to limit our desire to that alone,” and as “for the rest [that is everything that is guided by divine Providence], although we must consider their outcome to be wholly fated and immutable, so as to prevent our desire from occupying itself with them, yet we must not fail to consider the reasons which make them more or less predictable, so as to use these reasons in governing our actions” (*Passions* II, art. 146, AT XI 439 : CSM I 380).

Finally, as to those desires “which do not depend on us in any way” Descartes recommends abstinence. “[W]e must never desire them with passion, however good they may be” (*Passions* II, art. 145, AT XI 437 : CSM I 379). There are two reasons for this recommendation: (a) their pursuit can “irritate” us more than bring us joy—that is, generate in the soul more disturbance than tranquility; and (b) they distract us from pursuing desires which depend on us: (“in occupying our thoughts they prevent our forming a liking for other things whose acquisition depends on us” [*Passions* II, art. 145, AT XI 437 : CSM I 380]). As to the “remedies” against these “vain desires,” which are the ones we should *always* avoid, Descartes proposes two: “the first is generosity,” and “[t]he second is frequent reflection upon divine Providence” (*Passions* II, art. 145, AT XI 438 : CSM I 380). Starting with the second, Descartes sees in the “reflection upon divine Providence” the benefit of realizing “that nothing can possibly happen other than as Providence has determined from all eternity” which should lead us to “desire only what we consider in some way to be possible,” a major condition to achieve virtue as we have seen.²⁹⁹ I will return to generosity, which is “virtue in a perfect manner” (*Passions* III, art. 153, AT XI 446 : CSM I 384) and “remedy against all the disorders of the passions” (*Passions* III, art. 156, AT XI 447 : CSM I 385), in the next section.

²⁹⁹ “[W]e should reflect upon the fact that nothing can possibly happen other than as Providence has determined from all eternity. Providence is, so to speak, a fate or immutable necessity, which we must set against Fortune in order to expose the latter as a chimera which arises solely from an error of our intellect. For we can desire only what we consider in some way to be possible; and things which do not depend on us can be considered possible only in so far as they are thought to depend on Fortune—that is to say, in so far as we judge that they may happen and that similar things have happened at other times. But this opinion is based solely on our not knowing all the causes which contribute to each effect. For when a thing we considered to depend on Fortune does not happen, this indicates that one of the causes necessary for its production was absent, and consequently that it was absolutely impossible and that no similar thing has ever happened, i.e. nothing for the production of which a similar cause was also absent. Had we not been ignorant of this beforehand, we should never have considered it possible and consequently we should never have desired it.” (*Passions* II, art. 145, AT XI 438 : CSM I 380)

4.4. GENEROSITY

Descartes defines generosity as follows:

I believe that true generosity, which causes a person's self-esteem to be as great as it may legitimately be, has only two components. The first consists in knowing that nothing truly belongs to him but this freedom to dispose his volitions, and he ought to be praised or blamed for no other reason than his using this freedom well or badly. The second consists in his feeling within himself a firm and constant resolution to use it well—that is, never to lack the will to undertake and carry out whatever he judges to be best. To do that is to pursue virtue in a perfect manner. (*Passions* II, art.153, AT XI 445 : CSM I 384)

In particular, they [i.e. “those who are generous”] have mastery over their desires, and over jealousy and envy, because everything they think sufficiently valuable to be worth pursuing is such that its acquisition depends solely on themselves; over hatred of other people, because they have esteem for everyone; over fear, because of the self-assurance which confidence in their own virtue gives them; and finally over anger, because they have very little esteem for everything that depends on others, and so they never give their enemies any advantage by acknowledging that they are injured by them. (*Passions* II, art.156, AT XI 448 : CSM I 385)

Generous persons can also be recognized by their humility:

[T]he most generous people are usually also the most humble. We have humility as a virtue when, as a result of reflecting on the infirmity of our nature and on the wrongs we may previously have done, or are capable of doing (wrongs which are no less serious than those which others may do), we do not prefer ourselves to anyone else and we think that since others have free will just as much as we do, they may use it just as well as we use ours. (*Passions* II, art.155, AT XI 447 : CSM I 385)

A generous person is not for Descartes exactly what we commonly understand by the term.³⁰⁰ A generous person is someone (a) resolved to follow his volitions (b) according to his best judgment—which is precisely what Descartes understands by virtue. This makes of him a fully autonomous person—not

³⁰⁰ Descartes acknowledges that he has chosen the term based on its original meaning (highborn, of noble birth) not the common one. “There is, it seems, no virtue so dependent on good birth as the virtue which causes us to esteem ourselves in accordance with our true value, and it is easy to believe that the souls which God puts into our bodies are not all equally noble and strong (which is why, following the vernacular, I have called this virtue ‘generosity’ rather than ‘magnanimity’, a term used in the Schools, where this virtue is not well known)” (*Passions* III, art. 161, AT XI 453 : CSM I 388).

dependent on anyone or anything—meaning he is also immune to the disturbance of the passions (his own and others’) but not indifferent to their relevance to increase our natural perfection.

Generosity is classified by Descartes among the passions, but it is also a virtue, habit or natural inclination (i.e. a habit). Courage would be another example of a passion, that can be also “habit or natural inclination” (*Passions* III, art. 171, AT XI 460 : CSM I 391). Generosity is a virtue in so far as virtues “habits in the soul which dispose it to have certain thoughts: though different from the thoughts, these habits can produce them and in turn can be produced by them” (*Passions* III, art. 161, AT XI 453: CSM I 387). In fact, in the treatise it is more often defined in terms of a *habit* than of a passion (e.g. “Those who are generous [...] are naturally led to do great deeds, and at the same time not to undertake anything of which they do not feel themselves capable. And because they esteem nothing more highly than doing good to others and disregarding their own self-interest, they are always perfectly courteous, gracious and obliging to everyone” [*Passions* III, art.156, AT XI 447 : CSM I 385]). And among the virtues, generosity is a quite special one: it is “the key to all the other virtues and a general remedy to every disorder of the passions” (*Passions* III, art.156, AT XI 454 : CSM I 388).

Generosity is also a passion—which may, of course, be partially caused by the virtue (insofar as it belongs to our natural constitution).³⁰¹ More precisely, it is a compound passion, “produced by a movement made up of those of wonder, of joy, and of love (self-love as much as the love we have for the cause of our self-esteem)” (*Passions* III, art. 160, AT XI 451 : CSM I 387). Generosity physiologically differs from other passions in that in generosity the movements of the spirits are “less apparent” (*Passions* III, art. 160, AT XI 451 : CSM I 386).

Although, interestingly enough, generosity happens to depend more than other passions on our individual nature (“no virtue so dependent on good birth as the virtue which causes us to esteem ourselves in accordance with our true value” [*Passions* III, art. 161, AT XI 453 : CSM I 388]) Descartes does not deny that it can also be *acquired* (*Passions* III, art. 161, AT XI 453-54 : CSM I 388). In order to acquire it (the virtue-habit of generosity) Descartes proposes to arouse first the passion in us by occupying ourselves frequently in “considering the nature of free will and the many advantages which proceed from a firm resolution to make good use of it--while also considering, on the other hand, the many vain and

³⁰¹ “It should also be noted that the thoughts may be produced by the soul alone; but it often happens that some movement of the spirits strengthens them, and in this case they are both actions of virtue and at the same time passions of the soul.” (*Passions* III, art. 161, AT XI 453 : CSM I 387)

useless cares which trouble ambitious people” (*Passions* III, art. 161, AT XI 454 : CSM I 388).³⁰² Notice its two sources: (a) knowing the “nature of free will” and (2) making “good use” of it. This means, in the terminology we have acquired so far, knowing the nature of the mind-body union (which implies knowing that the mind is fundamentally active and free) and pursuing its perfection. Or as we read in the quotation opening this section, the first defining feature of the generosity is “knowing that nothing truly belongs to him but this freedom to dispose his volitions”; the second is “feeling within himself a firm and constant resolution to use it well”. This is why the generous is also determined to avoid “vain and useless cares” (those not leading to his perfection) and, on the other hand, is not missing opportunities (he is also determined “never to lack the will to undertake and carry out whatever he [we, anyone] judges to be best” [*Passions* III, art.153, AT XI 446 : CSM I 384]).

The generous person appears thus to be the one who embodies the virtuous life and who, having made a habit of it, has achieved tranquility of mind. His tranquility is the result of following desires which depend on him and are based on knowledge of the truth—which also protects him against repentance (the worst possible disturbance). His actions are thus increasing his natural perfection. In direct opposition to generosity is vanity which “is so different from true generosity that it has quite the opposite effects.”³⁰³ Unlike the generous, “vain people attempt to humble everyone else, [and] being slaves to their desires, they have souls which are constantly agitated by hatred, envy, jealousy, or anger” (*Passions* III, art. 158, CSM I 386). Notice the opposition: whereas generous individuals are *free*—insofar as they are in *control* of their desires—vain individuals are “slaves to their desires”. And this means that whereas the virtuous life of the generous brings with it a “satisfaction” that results in self-esteem, envy is the most “detrimental” of the passions (“[t]here is [...] no vice so detrimental to human happiness than that of envy” [*Passions* III, art. 184, AT XI 468 : CSM I 394]).

There is another important feature of the generous (and of the vain by opposition). Whereas the generous “have esteem for everyone” (*Passions* III, art.156, AT XI 448 : CSM I 385), the vain “attempt to

³⁰² “[I]f we occupy ourselves frequently in considering the nature of free will and the many advantages which proceed from a firm resolution to make good use of it—while also considering, on the other hand, the many vain and useless cares which trouble ambitious people—we may arouse the passion of generosity in ourselves and then acquire the virtue. Since this virtue is, as it were, the key to all the other virtues and a general remedy for every order of the passions, it seems to me that this consideration deserves serious attention.” (*Passions* III, art. 161, AT XI 453-54 : CSM I 388)

³⁰³ “The volition we feel within ourselves always to make good use of our free will results, as I have said, in generosity. But any other cause of self-esteem, whatever it might be, produces a highly blameworthy vanity, which is so different from true generosity that it has quite the opposite effects. [...] The result is that vain people attempt to humble everyone else, being slaves to their desires, they have souls which are constantly agitated by hatred, envy, jealousy, or anger.” (*Passions* III, art. 158, CSM I 386).

humble everyone else” (*Passions* III, art. 158, CSM I 386). Descartes seems to be making a particular effort to show that generosity is not a virtue (or a passion) possessed by *isolated* individuals living outside society, or of individuals with no regard for others. This is what we should expect from those who in the pursuit of their own perfection become part of unites of greater perfection. But let us see Descartes’ presentation of the idea. Generous persons, in Descartes’ sense, are *socially involved* in “doing good to others”:

Those who are generous in this way are naturally led to do great deeds, and at the same time not to undertake anything of which they do not feel themselves capable. And because they esteem nothing more highly than doing good to others and disregarding their own self-interest, they are always perfectly courteous, gracious and obliging to everyone. (*Passions* III, art. 155, AT XI 447-48 : CSM I 385)

But why should we expect this of the *generous*? Does this *follow* from Descartes’ characterization of generosity? There is an additional premise Descartes seems to be assuming, i.e. that the generous person, insofar as he does not see himself as superior or inferior to anyone else, takes anyone else as an equal. Art. 154 is titled “Generosity prevents us from having contempt for others”:

Those who possess this knowledge and this feeling about themselves readily come to believe that any other person can have the same knowledge and feeling about himself, because this involves nothing that depends on someone else. That is why such people never have contempt for anyone. Although they often see that others do wrong in ways that show up their weakness, they are nevertheless more inclined to excuse than to blame them and to regard such wrongdoing as due rather to lack of knowledge than to lack of a virtuous will. Just as they do not consider themselves much inferior to those who have greater wealth or honour, or even to those who have more intelligence, knowledge or beauty, or generally to those who surpass them in some other perfections, equally they do not have much more esteem for themselves than for those whom they surpass. For all these things seem to them to be very unimportant, by contrast with the virtuous will for which alone they esteem themselves, and which they suppose also to be present, or at least capable of being present, in every other person. (*Passions* III, art. 154, AT XI 446-47 : CSM I 384)

But we can still ask why this “lack of contempt for others” should incline the generous to do “great deeds” for others. Why should this not result instead in indifference for others? One possible answer is that love is a *component* of generosity. Another could be that Descartes is here assuming—although does not make it explicit in the treatise—that the true knowledge of the generous includes knowledge of those

“principal truths” necessary to achieve virtue which he put forth in his correspondence with Elizabeth. Among the truths that “concern all our actions in general,” Descartes had mentioned four in particular. The fourth truth is the most pertinent here:³⁰⁴

[T]hat though each of us is a person distinct from others, whose interests are accordingly in some way different from those of the rest of the world, we ought still to think that none of us could subsist alone and that each one of us is really one of the many parts of the universe, and more particularly a part of the earth, the state, the society and the family to which we belong by our domicile, our oath of allegiance and our birth. And the interests of the whole, of which each of us is a part, must always be preferred to those of our own particular person—with measure, of course, and discretion, because it would be wrong to expose ourselves to a great evil in order to procure only a slight benefit to our kinsfolk or our country. (To Princess Elizabeth, 15 September 1645, AT IV 293 : CSMK 266).

This would imply that a virtuous person knows (1) that he is “part” of a larger unity (“each one of us is really one of the many parts of the universe, and more particularly a part of the earth, the state, the society and the family to which we belong by our domicile, our oath of allegiance and our birth”); and (2) that the “interests” of that unity should always be preferred to his own (“And the interests of the whole, of which each of us is a part, must always be preferred to those of our own particular person”). If this is the case, the actions of the virtuous person, particularly the generous, should always take into account the “whole” first and then the part (i.e. themselves).

But we might not need to postulate that fourth truth. As we saw above, in his letter to Elizabeth dated on 6 October 1645 Descartes placed *devotion to the community* under “the order of things” established by God. “For God has also established the order of things, and has joined men together in so close a community, that even if everyone were to relate everything to himself and had no charity for others, he would still commonly work for them as much as was in his power, provided he exercised prudence, and specially if he lived in an age in which morals were not corrupted” (To Princess Elizabeth, 6 October 1645, AT IV 316-317 : CSMK 273). This seems to imply that even in a *community* of individuals where “everyone were to relate everything to himself”, each of them would still be working

³⁰⁴ The three first of those truths are: 1) “[t]he first and chief of these is that there is a God on whom all things depend, whose perfections are infinite, whose power is immense and whose decrees are infallible” (To Princess Elizabeth, 15 September 1645, AT IV 291 : CSMK 265); 2) “[t]he second thing we must know is the nature of our soul. We must know that it subsists apart from the body, and is much nobler than the body, and that is capable of enjoying countless satisfactions not to be found in this life” (To Princess Elizabeth, 15 September 1645, AT IV 292 : CSMK 265); and 3) “it may be useful to judge worthily of the works of God and to have a vast idea of the extent of the universe, such as I tried to convey in the third book of my *Principles*” (To Princess Elizabeth, 15 September 1645, AT IV 292 : CSMK 266).

for the community. But notice the condition: “provided he [each individual] exercised prudence, and specially if he lived in an age in which morals were not corrupted.” How should we understand this?

A quite straightforward reading would be: provided the morals *of the individual* are not corrupted, that is provided that each individual still pursues what is *most useful* for his, that is, that each individual is engaged in the increase of his natural perfection. Understood in this sense, the *individual's* (virtuous) search for what is most useful for him would be enough (1) for that community to exist, and (2) to be prior in importance than any of its parts. Contributing to establish and maintain that community is good for each individual because it increases his perfection. “[A]s it is nobler and more glorious thing to do good to others than to oneself, it is the noblest souls who make least account of the goods they possess. Only weak and base souls value themselves more than they ought, and are like small vessels that a few drops of water can fill” (To Princess Elizabeth, 6 October 1645, AT IV 317 : CSMK 273).

V. THE *PASSIONS* AND CONTEMPORARY DEBATES ON EMOTIONS

INTRODUCTION

Properly understood, Descartes' theory of passions could not only become a forceful voice on its own right among current philosophical debates on emotions but it could also contribute to advance those debates. Besides addressing all the major issues (still) at stake today—and being the first in doing so in a good number of them-- Descartes offered a more comprehensive view than most of the present positions; provided original insights, still unrecognized today, that might be potentially fruitful for current debates, and convincingly *answered*, so to speak, some of the most serious demands placed on contemporary theories of emotions.³⁰⁵

The absence so far of an explicit recognition of a *Cartesian inspiration* among contemporary philosophers of emotions has probably been due, not only to the common disregard among contemporary thinkers for anything written before the twentieth century (which in philosophy of emotions means for anything written before William James or, at most, before Darwin), but also to the fragmentary state of the research on Cartesian passions among historians of early modern philosophy. The latter's failure to show whether Descartes had a *theory* of passions, and what the defining features of that theory are, may also have indirectly contributed to the survival of certain widely-accepted misconceptions on Descartes' position. Among these, particularly pervasive and distorting—and so often repeated or unquestionably assumed (by almost anyone, regardless of their philosophical views) that should probably be called the

³⁰⁵ This attempt to bring to contemporary light Descartes's *Passions of the Soul* (1649) is in a way similar to Martha Nussbaum's recent call of attention to the lessons we could learn today by taking into account neo-Stoic views on emotions (see, e.g. Martha Nussbaum, "Emotions as Judgments of Value and Importance," in Robert C. Solomon, ed., *Thinking About Feeling: Contemporary Philosophers on Emotions* [Oxford University Press, 2004], pp. 183-199). In comparison, Descartes' theory has many more lessons to teach.

received view-- is the belief that Descartes was one more *feeling-theory* proponent, and a quite irrelevant one (neither the first nor even an interesting one).³⁰⁶

In order to assess the relevance Descartes' theory of passions may have today I will, first of all, revise the historical *treatment* he has received by contemporary philosophers of emotions. I will do this by attempting to show, not only that Descartes' position does not clearly fit within the feeling theory paradigm—where he is usually placed--³⁰⁷ but neither within the paradigm taken by some to be the dominant one today, the *judgment theory* paradigm. Secondly, in order to attempt to make explicit in which sense his views can help us think today about emotions, I will discuss (a) how Descartes would answer some of the important challenges theories of emotions must face today; (b) where ideas we can consider *Cartesian* can be detected today; and (c) in which sense Descartes' thought on passions (both his general way of thinking about them and specific views) might be fruitful in current debates.

For the purposes of this chapter I will take as representative of “contemporary views on emotions” the 2004 compilation of articles edited by Robert Solomon under the title *Thinking about Feelings: Contemporary Philosophers on Emotions*, where seventeen of the current participants in philosophical debates on emotions, among which are probably the most influential ones, outline their positions.³⁰⁸

³⁰⁶ Among the judgment-theory proponents, Cheshire Calhoun and Robert Solomon, for example, write: “On the one hand, Descartes thinks of emotions as feelings of physical agitation and excitement. [...] He also describes emotions in straightforward mentalistic language, speaking of the perceptions, desires, and beliefs associated with different emotions.” (Ch. Calhoun, and R. Solomon, eds., *What is An Emotion* [New York: Oxford University Press, 1984], p. 54). Among current defendants of feeling views, Jesse Prinz writes: “These authors [James and Lange] were not the first to draw a link between the emotions and the body. Indeed, this had been a central theme of Descartes's exquisite opus *The Passions of the Soul*.” (J. Prinz, “Embodied Emotions,” in Robert C. Solomon, ed., *Thinking About Feeling: Contemporary Philosophers on Emotions* [Oxford University Press, 2004], 44). In a recent doctoral dissertation, Andrea Scarantino summarizes two thousand years of thought on emotions by saying that “[p]ractically everyone since Ancient Greece to the beginning of the 20th century was a feeling theorist” (A. Scarantino, “Explicating Emotions,” [Ph. Dissertation, U. of Pittsburgh, 2005], p. 12). According to John Deigh, a critic of cognitivist views, “the empiricist conception of them [the emotions] was the orthodoxy” in Darwin's time and explains: “this conception identifies emotions with feelings as distinct from thoughts” (“Primitive Emotions,” in R. Solomon, ed., *Thinking About Feelings*, p. 14).

³⁰⁷ Among Descartes scholars, Lilli Alanen, on one hand, and Deborah Brown and Calvin Normore, on another, are among those who have pointed out this *misconception*. I think they have not, however, responded to it forcefully enough. (See Lilli Alanen, “The Intentionality of the Passions,” in Wilson, Byron, and André Gombay, eds. *Passion and Virtue in Descartes* [Amherst, NY: Humanity Books, 2003], p. 107; and Deborah Brown and Calvin Normore, “Traces of the Body: Cartesian Passions,” in *ibid.*, p. 84)

³⁰⁸ Robert C. Solomon, ed., *Thinking About Feeling: Contemporary Philosophers on Emotions*, Oxford University Press, 2004. The seventeen contributors are: John Deigh, Jenefer Robinson, Jesse Prinz, Ronald de Sousa, Robert Solomon, Peter Goldie, Cheshire Calhoun, Patricia Greenspan, Michael Stocker, Jon Elster, Jerome Neu, Martha Nussbaum, Annette Baier, Purushottama Bilimoria, Paul E. Griffiths, Aaron Ben-Ze'ev, and Amelie Rorty.

5.1. DESCARTES AND THE FEELING THEORY

William James and Carl Georg Lange are generally considered by contemporary philosophers to be the *fathers* of current thought on emotions.³⁰⁹ Their views are also usually taken to be the inspiration of present *feeling theories* of emotions as well as the standard to recognize past ones. Their work was however of a quite different scope. Simplifying a bit, whereas James should probably be credited mainly for having been the first to define emotions in terms of “feeling” (and arguing in its favor), C. G. Lange went further by initiating the scientific study of those feelings. Interestingly enough, whereas Descartes cannot be said, despite the common view today, to have defended a James-like view of emotions, he should probably be credited for having started the scientific tradition within which Lange was (unknowingly) working.³¹⁰

5.1.1. William James and Descartes.

In 1884, James identified passions with the “feeling” of certain bodily changes that “follow” the “perception of [an] exciting fact”:

³⁰⁹ E.g.: “[the James-Lange theory] continues to be the starting point for most contemporary theories of emotion, however they may disagree on its initial formulation.” (Ch. Calhoun and R. Solomon, *What is An Emotion*, p. 126) William James’ first presentation of his views appeared in his “What is an Emotion?” (*Mind* [vol. 9, n. 34 (1884), 188-205] and C. G. Lange’s one year later in Dutch under the title *Ueber Gemüthsbewegungen* (translated as “The Emotions: A Psychophysiological Study”). Lange did not refer once to James in his work but in 1922, both texts appeared in their joint *The Emotions* (New York and London: Hafner Pub. Company [c.1922], 1967). By that time, as the editor indicates, the expression “James-Lange Theory” was already customary to refer to “the organic theory of the emotions”: “The writings of James and Lange had profound influence on contemporary and later psychologists, and on this account it is not unfair to apply the name ‘James-Lange Theory’ to the organic theory of the emotions as is customarily done” (Knight Dunlap, “Preface,” to C. G. Lange and W. James, *The Emotions*, p. 5). Robert Solomon refers to the theories inspired in James as “the primitivist theories of James and his successors” (R. Solomon, “Emotions, Thoughts and Feelings: Emotions as Engagements with the World,” in *Thinking About Feeling*, p. 78). The label, as he himself explains, is aimed at underlying that his view could well be called, by contrast, an *intelligent conception of emotion*. “what I call the primitivist conception of emotions, [is] the idea that emotions are basically physiological or (now) neurological syndromes conjoined with feelings that have only marginally to do with cognition or our engagements in the world.[....] [M]y own analysis of emotion challenged this primitivism and maintained that emotions were, to employ a precocious word, *intelligent*.” (p. 76)

³¹⁰ Although Solomon and Calhoun, for example, place the James-Lange Theory within the “Cartesian tradition”, they do so for the wrong reasons. “Because it defines emotion in terms of physical sensations the James-Lange theory falls squarely within the Cartesian tradition” (Calhoun and Solomon, *What is An Emotion?* p. 126). On the other hand, C. G. Lange, who seemed to have partially noticed the long distance between Descartes and the *feeling theory*, did not appreciate Descartes’ contribution to the scientific study he is proposing: “he [Descartes] attributes joy to a consciousness of the possession of good; but about what joy itself really is, he says nothing” (C. G. Lange, “The Emotions: A Psychophysiological Study,” in C. G. Lange and W. James, *The Emotions*, p.84, n.4).

Our natural way of thinking about these standard emotions is that the mental perception of some fact excites the mental affection called the emotion, and that this latter state of mind gives rise to the bodily expression. My thesis on the contrary is that *the bodily changes follow directly the PERCEPTION of the exciting fact, and our feeling of the same changes as they occur IS the emotion.*³¹¹

According to this, an emotion seems to be *only* the “feeling” of certain bodily changes, nothing else, something strongly confirmed in other passages: “the emotion both begins and ends with what we call its effects or manifestations. It has no mental *status* except as either the presented feeling, or the idea, of the manifestations; which latter thus constitute its entire material, its sum and substance, and its stock-in-trade” (p. 197); “[t]he more closely I scrutinize my states, the more persuaded I become, that whatever moods, affections, and passions I have, are in very truth constituted by, and made up of, those bodily changes we ordinarily call their expression or consequence; and the more it seems to me that if I were to become corporeally anaesthetic, I should be excluded from the life of the affections, harsh and tender alike, and drag out an existence of merely cognitive or intellectual form” (p. 194).

The term “feeling,” in James’ use, appears then to be equivalent to *perception*, in particular *perception of certain bodily changes*, which is only a subclass of what James considers feelings. James explicitly distinguishes the “feeling” that we should call *emotion* from other “feelings of pleasure and displeasure” (p. 189)--which he also calls “moral, intellectual, and aesthetic feelings” (p. 201) or “cerebral forms of pleasure and displeasure” (p. 201). Among these he distinguishes two types: those feelings which are caused by “[the perception of] certain arrangements of sounds, of lines, of colours” and those caused by “certain sequences of ideas” (p. 189). Unlike the “feelings” we should call emotions, these two other types of feelings, according to James, have “no obvious bodily expression” (p. 189).³¹² This feature is, according to him, clearer in the second type—those caused by “certain sequences of ideas”. The pleasure or displeasure caused by “sequences of ideas”—to which he also refers with terms such as “intellectual delight” or “intellectual torment”—“depend on processes in the ideational centres exclusively” (p. 189). As to the first type—those caused by “[the perception of] certain arrangements of sounds, of lines, of colours”—he does not deny that they involve “bodily sensations” (“the first set of

³¹¹ William James, “What is an Emotion?” *Mind* 9, 34 (1884), 189-90.

³¹² “That there are feelings of pleasure and displeasure, of interest and excitement, bound up with mental operations, but having no obvious bodily expression for their consequence, would, I suppose, be held true by most readers. Certain arrangements of sounds, of lines, of colours, are agreeable, and others the reverse, without the degree of the feeling being sufficient to quicken the pulse of breathing, or to prompt to movements of either the body or the face. Certain sequences of ideas charm us as much as others tire us. It is a real intellectual delight to get a problem solved, and a real intellectual torment to have to leave it unfinished.” (p. 189)

examples, the sounds, lines, and colours, are either *bodily sensations*, or the images of such” [189, my emphasis]) but he does not think this is enough to qualify as emotions. Emotions are

more complicated cases in which a wave of bodily disturbance of some kind accompanies the perception of the interesting sights or sounds, or the passage of the exciting train of ideas. Surprise, curiosity, rapture, fear, anger, lust, greed, and the like, become then the names of the mental states with which the person is possessed. The bodily disturbances are said to be the “manifestation” of these several emotions, their “expression” or “natural language”; and these emotions themselves, being so strongly characterized both from within and without, may be called the *standard* emotions. (p. 189)

Which type of “pleasures” then are the “intellectual” ones? James distinguishes them simply by *placing* them earlier than bodily ones in the causal chain: they are “pleasures and pains inherent in certain forms of nerve-action as such, wherever that action occurs” (p. 189), or we can understand it as “a pleasure that seems ingrained in the very form of the representation itself, and to borrow nothing from any reverberation surging from the parts below the brain” (p. 201). As long as these cerebral pleasures are not “coupled” with “a bodily reverberation of some kind,” they are just a “cognitive act” (p. 202).³¹³ This act, James believes, is similar to a judgment. In these cases (“cases of pure cerebral emotion”) “our mental condition is more aligned to a judgment of *right* than anything else. And such a judgment is rather to be classed among awareness of truth: it is a *cognitive* act” (pp. 201-202). James admits, though, that “as a matter of fact the intellectual feeling hardly ever does exist thus unaccompanied” (p. 202).³¹⁴

The “feeling” that can be called emotion, then, is a perception of (a) a characteristic “wave of bodily disturbance” (p. 189) which is (b) “prompted by the presence of objects or the experience of events” (p. 201)—i.e. by a *perception* which is not itself a “feeling”—; and (c) usually accompanied by, or involving, the perception of external expressions of the emotions (which are also bodily changes). Notice two things. One is that the perception of the “wave of bodily disturbance” means for James the perception of *all* bodily changes that occur, and as they occur, during the emotion. “[E]very one of the bodily changes, whatsoever it be, is *felt*, acutely or obscurely, the moment it occurs” (p. 192), and it is

³¹³ “Unless in them [i.e. “cases of pure cerebral emotion”] there actually be coupled with the intellectual feeling a bodily reverberation of some kind, unless we actually laugh at the neatness of the mechanical device, thrill at the justice of the act, or tingle at the perfection of the musical form, our mental condition is more aligned to a judgment of *right* than to anything else.” (pp. 201-202)

³¹⁴ Recall a similar relationship between “intellectual” emotions and their corresponding passions in Descartes, e.g.: “Sadness is an unpleasant listlessness which affects the soul when it suffers discomfort from an evil or deficiency which impressions in the brain represent to it as its own. There is also an intellectual sadness which, though not the passion, rarely fails to be accompanied by it” (*Passions* II, art. 92, AT XI 397 : CSM I 361).

“abstractly possible that no shade of emotion, however slight, should be without a bodily reverberation as unique, when taken in its totality, as is the mental mood itself” (p. 192). Another is that James usually considers within that “wave of bodily disturbance” both physiology and physiognomy, that is, not only the internal bodily changes, but also the muscular preparation for action and the changes that constitute the expression of the emotion.³¹⁵

These features should distinguish emotions, not only from those other feelings of pleasure or displeasure James talks about, but also from other perceptions--such as the perception of the smoothness of a piece of wood, or of the temperature of our body, or the perception that we are hungry. None of these cases would meet all three *criteria*. None of them, in particular, can be said to require a prior perception to be prompted. However, James does not offer any specific criteria to distinguish the perception of the bodily changes that occur, for example, when we are hungry from the perception of the “wave of bodily disturbance” which is proper of an emotion. This leaves us with the assumption that their phenomenology is enough to distinguish them.³¹⁶ Given, in particular, that both appetites and emotions may be triggered by perceptions, the question of telling apart different perceptions of bodily changes (e.g. appetites from emotions) is not a minor one.

As to the role of the prior perception (of the “exciting fact,” which triggers the bodily changes) James seems to consider it *causally sufficient* (for an emotion to occur) but not part of what an emotion is. But notice that insofar as that perception is, to use James’ language, *that* which is *colored* by the feeling (and without which the feeling would have nothing to color), that perception seems to be *causally necessary* too:

Without the bodily states following on the perception, the latter would be cognitive in form, pale, colourless, destitute of emotional warmth. We might then see the bear, and judge it best to run, receive the insult and deem it right to strike, but we could not actually *feel* afraid or angry. (p. 190)

³¹⁵ “That the heart-beats and the rhythm of breathing play a leading part in all emotions whatsoever, is a matter too notorious for proof. And what is really equally prominent, but less likely to be admitted until special attention is drawn to the fact, is the continuous co-operation of the voluntary muscles in our emotional states. Even when no change of outward attitude is produced, their inward tension alters to suit each varying mood, and is felt as a difference of tone or strain. In depression the flexors tend to prevail; in elation or belligerent excitement the extensors take the lead.” (p. 192)

³¹⁶ “The more closely I scrutinize my states, the more persuaded I become, that whatever moods, affections, and passions I have, are in very truth constituted by, and made up of, those bodily changes we ordinarily call their expression or consequence” (p. 194).

Considering this, one crucial distinction between the feeling of hunger and, say, sadness would be that hunger does *not* color a prior perception. Hunger would be only a perception of the state of, or of the changes occurring in, the body. But notice that this is based on the idea that we do not have emotions which are *not* preceded by sensory perceptions, which is not an unproblematic idea.

This necessary role of the perception explains, according to James, why “the attempt to imitate an emotion in the absence of its normal instigating cause is apt to be rather ‘hollow’” (p. 192). And this is so because that prior perception is responsible for triggering not only bodily motions we can control but also changes which are beyond our voluntary control (and which are also an essential part of the “feeling” we should call emotion).³¹⁷ This means that the often-quoted “we feel sorry because we cry, angry because we strike, afraid because we tremble” (p. 190) should probably be understood --rather than as strictly meaning that crying will *make us* feel sorry, strike feel angry and so on--as a way of expressing that the sequence perception-emotion-bodily changes should be replaced by the sequence perception-bodily changes-emotion, which is in fact one of the explicit goals of James in his essay.³¹⁸ If it is true that we cannot voluntarily control all the bodily changes (whose perception James calls emotion), and that those changes which are beyond our control can only be triggered by a certain prior perception--but not voluntarily replicated by us--then we should think that either voluntary crying (i.e. crying without a preceding perception, produced just by moving muscles) is not possible or, if it is possible, it should not be taken to be the type of crying characteristic of the “wave of bodily disturbance” proper of an emotion. Proper crying would be accompanied by the other involuntary changes and thus beyond our control. That crying voluntarily *without a previous perception* is possible--if by *voluntary* we simply mean putting the means to make ourselves cry—is easy to confirm: cutting onion makes us cry. But it would be difficult to accept that this crying, in turn, makes us sad (as the often-quoted passage seems to imply).

But two possible objections to the idea that we can voluntarily cry without feeling sad could be presented by James: (a) that this crying should not count as *proper* crying—i.e. it would be, say, only tear dropping (however different from crying that could be); or (b) that this crying is not *proper of the emotion* we may be trying to trigger (joy is also accompanied by crying, supposedly a different crying) and thus

³¹⁷ “The immense number of parts modified in each emotion is what makes it so difficult for us to reproduce in cold blood the total and integral expression of any of them. We may catch the trick with the voluntary muscles, but fail with the skin, glands, heart, and other viscera.” (p. 192)

³¹⁸ “Common sense says, we lose our fortune, are sorry and weep; we meet a bear, are frightened and run; we are insulted by a rival, are angry and strike. The hypothesis here to be defended says that this order of sequence is incorrect, that the one mental state is not immediately induced by the other, that the bodily manifestations must first be interposed between, and that the more rational statement is that we feel sorry because we cry, angry because we strike, afraid because we are sorry, angry, or fearful as the case may be.” (p. 190)

we should not expect this emotion to arise, or not only this emotion. But these objections would lead us, on one hand, to conclude that James' "we feel sorry because we cry" cannot be taken literally (i.e. meaning that crying *causes* sorrow), and, on the other, to confirm that not only the involuntary changes and the perception that triggers them are causally *necessary*, but also that the triggering perception is probably necessary to *individulalize* emotions (for example, joy or sadness). Notice that the case of voluntary crying by bringing to consciousness sad events would not be, for these purposes, fundamentally different from crying triggered by a previous perception.

In support of his thesis, James offers evidence in favour of the idea that "any voluntary arousal of the so-called manifestations of a special emotion ought *to give us* the emotion itself" (p. 197 [my emphasis]). That evidence is not only inconclusive, but it would also fit in alternative accounts (especially in accounts of a *Cartesian* nature). Part of the support he offers for this idea is anecdotal evidence which supposedly shows that if an emotion is not expressed "it dies": "Refuse to express a passion, and it dies" (p. 197). The fact that James considers this good evidence for his main thesis indicates that the bodily motions that result in the *expression* of the emotions should be taken to be part of the bodily changes whose perception he calls "feeling". This is how he presents the evidence:

Still, within the limits in which it can be verified, experience fully corroborates this test. Everyone knows how panic is *increased* by flight, and how the giving way to the symptoms of grief or anger *increases* those passions themselves. Each fit of sobbing makes the sorrow *more acute*, and calls forth another fit *stronger* still, until at last repose only ensues with lassitude and with the apparent exhaustion of the machinery. In rage, it is notorious how we 'work ourselves up' to a climax by repeated outbreaks of expression. Refuse to express a passion, and it dies. Count ten before venting your anger, and its occasion seems ridiculous. [...]. (p. 197 [my emphasis])

Even if we took this as well-founded evidence, the conclusion that James himself draws from it is only that the expression of the emotions contributes to *increase* or *decrease* the emotion, as he himself says, not to generate it or to eliminate it. Not only he does not show that without expression there is no emotion, but his observation would be perfectly compatible with, for example, Descartes' account, according to which the function of the bodily changes is to *maintain* and *strengthen* the passion (see e.g. *Passions* I, arts. 36 and 37). Since *acting* our passions might not always be desirable, Descartes recommends "time and repose" to calm "the disturbance in our blood" (*Passions* III, art. 211, AT XI 487 : CSM I 403). However, if we want to do something to eliminate the emotion, the best "remedy" is to change the thought that originated it: "when they feel themselves in the grip of fear they will try to turn

their mind from consideration of the danger by thinking about the reasons why there is much more security and honour in resistance than in flight” (*Passions* III, art.211, AT XI 487 : CSM I 404). And this observation, according to Descartes, seems to be crucial to understand why the representation is essential to the passion, a view quite different from James’.

Notice also that regarding whether the bodily motions by themselves can generate the passions, both James and Descartes could answer affirmatively but for quite different reasons. Whereas James is forced by his definition (the perception of the bodily changes *is* the emotion), Descartes must accept it insofar as those bodily changes can first generate the representations proper of passions. According to Descartes, the mind-body union—and, in particular, the natural association between certain bodily changes and certain representations--would explain that certain bodily changes may produce representations of the second sort (i.e. representations proper of emotions). As we saw in the correspondence, Descartes does, in fact, give Elizabeth advice based on this idea, namely, that she should enjoy certain bodily pleasures so that they may bring about joyful thoughts (see, e.g., To Princess Elizabeth, May or June 1645, AT IV 219 : CSMK 250 on the benefits of the waters of Spa to control excessive passions). This does not imply that the feeling is the emotion, but rather that a feeling (or the bodily changes rather) can be the cause of an emotion. Notice also that this is different from the specific case of passions caused by fortuitous motions of the spirits. In these cases, although the cause is the bodily changes, we cannot say there is a prior feeling. The fortuitous flows of spirits are responsible for activating, so to speak, thoughts which, in turn, will produce the bodily motions proper of the emotion.

Strong evidence in favor of his thesis (“strong presumption in favour of the truth of the view we have set forth” [p. 203]), James thinks, would also be provided by “a case of complete internal or external corporeal anaesthesia, without motor alteration or alteration of intelligence except emotional apathy” (p. 203). However, the doctor that performed the only case he knew of complete anesthesia concluded that his patient “was by no means lacking in emotional affections” (p. 205). But since the doctor could only extract conclusions based on behaviour (“my case was certainly one of a very centrally conditioned anaesthesia (perception-anaesthesia, like that of hysterics) and therefore the conduction of outward impressions may in him have been undisturbed” [p. 205]), and thus could not confirm the *experience* of feelings, James suspended judgment: “Should a similar case recur, it ought to be interrogated as to the inward emotional state that co-existed with the outward expressions of shame, anger, &c. And if it then turned out that the patient recognized explicitly the same mood of feeling known under those names in his former normal state, my theory would of course fall” (p. 205). Once again, it is questionable that these

cases would confirm James' view. They would at most confirm that the perception of the bodily changes is *part of what the subjects take to be* a fundamental feature of the experience of an emotion.

Let us return to the perceptions that cause the emotions. As to whether they are of a different qualitative sort than other perceptions, James' language suggests, at least, that unlike sensory perceptions or appetites they are perceptions of "facts". Emotions are "nervous anticipations [...] called forth directly by the perception of certain facts" (p. 191); or in other words, "certain facts" are like "special forms of key" which unlock the "sort of lock" each living creature is, and thus activate its "wards and springs".³¹⁹ James does not, however, discuss what a "fact" is in this context, or whether to perceive a *fact* differs in any relevant sense from other forms of perception--in particular from the sensory perception of *objects*--or what makes an object or a fact an *emotional object* or an *emotional fact*. We know that the "feeling" that follows certain "facts" makes them *emotional* by *coloring* them, but not why the feeling colors some "facts" and not others.

James provides a good number of examples that seem to indicate that certain objects and facts can be said to be *naturally* emotional if by that we mean that emotions are *natural reactions* to their perception. Thus, as to objects, he gives the following examples: "The egg fails to fascinate the hound, the bird does not fear the precipice, the snake waxes not wroth at this kind, the deer cares nothing for the woman or the human babe" (p. 191). And as to supposed facts: "In advance of all experience of elephants no child can but be frightened if he suddenly finds one trumpeting and charging upon him. No woman can see a handsome little naked baby without delight, no man in the wilderness see a human form in the distance without excitement and curiosity" (p. 191). All these are "instances of the way in which peculiarly conformed pieces of the world's furniture will fatally call forth most particular mental and bodily reactions, in advance of, and often in direct opposition to, the verdict of our deliberate reason concerning them" (p. 190).³²⁰

But James does not confine all cases to this *natural reaction* model. He is aware that "most of the objects of civilized men's emotions are things to which it would be preposterous to suppose their nervous systems connately adapted. Most occasions of shame and many insults are purely conventional, and vary

³¹⁹ "Every living creature is in fact a sort of lock, whose wards and springs presuppose special forms of key,--which keys however are not born attached to the locks, but are sure to be found in the world near by as life goes on. And the locks are indifferent to any but their own keys." (p. 191)

³²⁰ "The love of man for woman, or of the human mother for her babe, our wrath at snakes and our fear of precipices, may all be described similarly, as instances of the way in which peculiarly conformed pieces of the world's furniture will fatally call forth most particular mental and bodily reactions, in advance of, and often in direct opposition to, the verdict of our deliberate reason concerning them" (p. 190).

with the social environment” (p. 194). These cases could represent, he thinks, an important objection to his views if they were to be explained by association of the “idea of shame, desire, regret, &c.,” to a particular object, which in turn would cause the bodily changes (upon the perception of the object). If by “idea of [an emotion]” is understood the resulting emotional state (i.e. the emotion), this would mean that in these cases the emotion would *precede* the bodily changes and not *vice versa* as James believes³²¹ James’ answer is this:

To discuss thoroughly this objection would carry us deep into the study of purely intellectual Aesthetics. A few words must here suffice. We will say nothing of the argument’s failure to distinguish between the idea of an emotion and the emotion itself. We will only recall the well-known evolutionary principle that when a certain power has once been fixed in an animal by virtue of its utility in presence of certain features of the environment, it may turn out to be useful in presence of other features of the environment that had originally nothing to do with either producing or preserving it. A nervous tendency to discharge being once there, all sorts of unforeseen things may pull the trigger and let loose the effects. That among these things should be conventionalities of man’s contriving is a matter of no psychological consequence whatever. The most important part of my environment is my fellow-man. The consciousness of his attitude towards me is the perception that normally unlocks most of my shames and indignations and fears. The extraordinary sensitiveness of this consciousness is shown by the bodily modifications wrought in us by the awareness that our fellow-man is noticing us *at all*. (p. 195)

The distinction between “idea of an emotion” and the “emotion itself” is not very clear but it is potentially important. It seems that “idea” refers to the *conscious identification* of the feeling or set of feelings which constitute the emotion, i.e. our *understanding* of that set of feelings.³²² Thus the “consciousness of the ludicrousness of an object” would result from the “feeling of laughter and of tendency to laugh”.³²³

³²¹ “In these cases, at least, it would seem that the ideas of shame, desire, regret, &c., must first have been attached by education and association to these conventional objects before the bodily changes could possibly be awakened. And if in *these* cases the bodily changes follow the ideas, instead of giving rise to them, why not then in all cases?” (p. 195). James himself seems to use synonymously “idea” of an emotion and the “feeling” (i.e. the emotion) in certain passages, as in e.g.: “It [the emotion] has no mental *status* except as either the presented feeling, or the idea, of the manifestations...” (p. 197); “Is there any evidence, it may be asked, for the assumption that particular perceptions *do* produce widespread bodily effects by a sort of immediate physical influence, antecedent to the arousal of an emotion or emotional idea?” (p. 196).

³²² “It [emotion] has no mental *status* except as either the presented feeling, or the idea, of the manifestations...” (p. 197). Another similar expression is “ideal emotion” as in: “This case is typical of a class: where an ideal emotion seems to precede the bodily symptoms, it is often nothing but a representation of the symptoms themselves” (p. 197).

³²³ “When you fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its characteristic bodily symptoms, we find we have nothing left behind, no “mind-stuff” out of which the emotion can be constituted.... When you beg them [i.e. the skeptics] to imagine away every feeling of laughter and of tendency to laugh from their consciousness of the ludicrousness of an object, and then to tell you what the feeling of its ludicrousness would be like, whether it be anything more than the perception that the object belongs to the class ‘funny,’ they persist in replying that the thing proposed is not the practical one of seeing a ludicrous object and annihilating one’s tendency to

But as to how “[a] nervous tendency to discharge being once there, *all sorts of unforeseen things* may pull the trigger and let loose the effects” [my emphasis], which seemed to be the original question, his account is still a defense of the universal reaction model where the perception that triggers the emotion is the specific individual “consciousness” of the fact, and that consciousness, in principle, *should* cause that emotion. (“What the action itself may be is quite insignificant, so long as I can perceive in it intent or *animus*. *That* is the emotion-arousing perception...[p. 196]). That individual consciousness, which seems to explain different *reactions* in front of new objects or facts, includes non-perceptual thoughts (“the additional persuasion that my fellow-man’s attitude means either well or ill for me, should awaken stronger emotions still” [p. 195]).

Other cases that, according to James, could be seen as objections to his views are the emotions in whose arousal past experiences may play an important causal role. We should not confuse, he warns, the “anticipation of certain feelings” which might precede the bodily motions with the emotion itself—which, as we know, always follows those motions:

Imagine two steel knife-blades with their keen edges crossing each other at right angles, and moving too and fro. Our whole nervous organization is “on-edge” at the thought; and yet what emotion can be there except the unpleasant nervous feeling itself, or the dread that more of it may come? The entire fund and capital of the emotion here is the senseless bodily effect the blades immediately arouse. This case is typical of a class: where an ideal emotion seems to precede the bodily symptoms, it is often nothing but a representation of the symptoms themselves. One who has already fainted at the sight of blood may witness the preparations for a surgical operation with uncontrollable heart-sinking and anxiety. He anticipates certain feelings, and the anticipation precipitates their arrival. [...] In the various forms of what Professor Bain calls “tender emotion,” although the appropriate object must usually be directly contemplated before the emotion can be aroused, yet sometimes thinking of the symptoms of the emotion itself may have the same effect. (p. 197)

So, what has James accomplished? He has, at most, shown that what he calls “feeling” is *necessary* for emotions to occur, but not that it is *sufficient*. He has not even discussed whether that “feeling” is even sufficient to define or to describe our emotions and all the relevant evidence is aimed at exploring what occurs when that feeling is absent. To put it in a slogan, rather than *feeling is the emotion*, his arguments do not amount to more than a much softer and inconsequential *there is no emotion without*

laugh. It is the purely speculative one of subtracting certain elements of feeling from an emotional state supposed to exist in its fullness, and saying what the residual elements are.” (p. 193)

feeling. Not only by treating the feeling as an add-on to the perception of the “exciting fact” he leaves aside any *semantical* considerations (i.e. any reference to the content of the emotions), but he does not even accomplish a clear distinction between these feelings and other perceptions we may have of different bodily changes (such as the ones we usually take to be appetites).

It is true, as suggested above, that James seems at times to be aware that the “emotion-arousing perception” (p. 196) plays a fundamental role in the individuation and identification of emotions, as his insistence that without “feeling” the perception is “colorless” may indicate. (“Without the bodily states following on the perception, the latter would be purely cognitive in form, pale, colourless, destitute of emotional warmth” [p. 190]).³²⁴ However, neither the prior perception nor any other mental states that may follow the feeling are *part* of the emotion itself according to him. The bodily effects thus appear devoid of sense. They are, in his own words, “senseless bodily effects”: “[t]he entire fund and capital of the emotion here is the *senseless bodily effect* the blades [i.e. “two steel knife-blades with their keen edges crossing each other at right angles, and moving too and fro”] immediately arouse” (p. 197, [my emphasis]). Insofar as they are *only* perceptions of certain bodily motions, not only James’ emotions are devoid of meaning—or if they do have it, it is not essential to them—but they are also detached of any disposition to act.

It should not be difficult now to see that Descartes was not putting forth a *feeling theory*, neither in the strong Jamesian sense--according to which feeling is all a passion is, nor in any sense in which the “feeling” might be taken to be the central defining feature of emotions. To start with, whereas “feeling” for James would be, in Descartes’ language, a *sensation*—the sensation of all the bodily changes that take place as we undergo an emotion--passions are for Descartes perceptions (of the soul) of a sort different from sensory perceptions.

James’ “feeling” would be, from Descartes’ point of view, only a *component* of the physiologico-mental process that a passion is. Passions for Descartes are perceptions (a) whose content is primarily the “importance” the object has for us (for our natural perfection), (b) which are maintained and strengthened by bodily motions, and (c) which prepare the body to act and have an “influence” on the will. Thus, to take the “feeling” for the passion would be similar, from Descartes’ view, to take the part for the whole.

³²⁴ See also: “If we fancy some strong emotion, and then try to abstract from our consciousness of it all the feelings of its characteristic bodily symptoms, we find we have nothing left behind, no “mind-stuff” out of which the emotion can be constituted, and that a *cold and neutral state of intellectual perception* is all that remains.” (p. 193 [my emphasis]); or “if I were to become corporeally anaesthetic, I should be excluded from the life of the affections, harsh and tender alike, and drag out an existence of merely cognitive or intellectual form” (p. 194).

Under Descartes' account, the "feeling" would correspond only to the *sensation* caused by the bodily changes that maintain and strengthen the passion and by the muscular changes that constitute their expression. Insofar as these specific bodily changes have a very particular function—maintaining, strengthening and expressing the passion—we can say that for Descartes they are as *proper* of an emotion as these functions are. Notice that this sensation is not in Descartes merely a side effect if we consider that it is a sensation of pleasure or pain—or one that can be *located* somewhere in the continuum between these extremes—that may be beneficial for our health and also serve to *inform* the soul about the state of the body.³²⁵

The feeling James talks about is, in any case, in Descartes' view, far from being sufficient for a passion to occur or for its function to be accounted for. An emotion is a broader process, and only within that process the feeling can be said to be an *emotional* feeling. Detached from it, it is only a sensory perception. The representation that precedes the bodily changes provides the *content* and *direction* of that feeling, and the disposition that follows (i.e. the disposition to want or not to want the object towards which it is directed) relates it to the will, to the understanding, and to action. None of this is irrelevant, Descartes would say, to recognize a feeling as an *emotional* feeling. The feeling that accompanies the (specific) joy caused by birds singing in spring outside my window may contribute in an important way to the disposition to want to live in latitudes where spring is particularly long. Without a connection between the feeling and the bird and between the feeling and my desire, that feeling is both senseless and emotionless.

This would serve also as basis to question what James considers the ideal crucial test. Is it not true that we would experience anger if we reproduced in ourselves the precise bodily changes that occur when we are angry? The first problem would, of course, be to identify those changes that characterize only anger, or even a paradigmatic case of anger. But let us assume we could agree on such a thing. James would still think, as he explicitly acknowledges and we have seen above, that this is not something we could voluntarily accomplish because a number of changes that occur during the experience of any emotion are beyond our control. These changes (out of our control) depend, as we have seen, directly on the perception of the "exciting fact" (p. 189; also e.g. p. 197). Let us assume, then, that we could do this

³²⁵ Unlike James, Descartes does not think that we feel *every* bodily change that takes place as we undergo a passion, we should say that for Descartes the "feeling" would only be the sensation of *some* of those bodily changes.

in a lab, i.e. that we could stimulate those bodily changes (voluntary and involuntary) and *only* those bodily changes which occur when we experience anger.

In these circumstances, according to James, there would be no doubt that we would experience anger. This is not so clear though. Even if a majority of reasonable healthy adults submitted to the test would say they feel angry under those circumstances—a result which should by no means be taken for granted, this would still not count as decisive proof that the feeling is the emotion. The subjects of the experiment could simply be *interpreting* their feeling as anger. They could do so simply because the experience is similar to past cases in which they also thought they were feeling anger, or because they can find at that very moment a good reason for their anger (an object towards which their anger could be directed), such as a bill to pay or an visit to the dentist on Monday. We could then justifiably say that those subjects were, at least at first, only experiencing a feeling, not an emotion. Whether that feeling *became* part of an emotion, and whether certain feelings usually do, is another question. Common expressions such as being “emotional” or “anxious” seem to refer to similar experiences: objectless feelings, feelings which are not part of an emotion. Only when we *interpret* (i.e. give direction, content and intention to) those feelings--which otherwise (a) have no apparent cause, or (b) point towards no apparent object, and (c) bring about no specific disposition--we can say we are *having an emotion* (instead of simply *having a feeling*).

James seems, in some passages, to be aware of this disparity between the feeling in the strict sense and what the subjects might call emotion. His distinction, discussed above, between the “idea” of an emotion and the “feeling” may suggest it. He explicitly distinguishes “feeling laughter” and the “consciousness of ludicrousness” (p. 193). Although he maintains—as he does regarding the relationship between “feeling” and emotion in general—that without the former (feeling) we cannot have the latter (consciousness), it seems that “consciousness” for him involves *something else* besides a “feeling” or a set of “feelings”:

When you beg them [i.e. “most people”] to imagine away every feeling of laughter and of tendency to laugh from their consciousness of the ludicrousness of an object, and then to tell you what the feeling of its ludicrousness would be like, whether it be anything more than the perception that the object belongs to the class ‘funny,’ they persist in replying that the thing proposed is a physical impossibility, and that they always *must* laugh if they see a funny object. (p. 193)

Notice that, as James puts it, “most people” would deny a difference, not between the “consciousness of ludicrousness” and the “feeling of laughter,” but between the “feeling of ludicrousness” and “the perception that the object belongs to the class ‘funny’.” But this does not clarify much. First, it is not clear that we can talk about the “feeling of ludicrousness” in the same sense that we talk about the “feeling of laughter”. The latter clearly refers to the bodily changes that occur when we laugh, but not the former. And, second, it is not evident either that “the perception that the object belongs to the class ‘funny’” does not imply something else not included in sensations of bodily changes (i.e. feelings). In fact, as James himself puts it, it does seem to require at least an *extra mental event*: the *classification* of the object under the “class ‘funny’”. And this is not a perception of bodily changes.

That there is *something else* between the “feeling” and the emotion is also suggested in other places, e.g.: “It [the emotion] has no mental *status* except as either the presented feeling, or the idea, of the manifestations; which latter thus constitute its entire material, its sum and substance, and its stock-in-trade. And these cases ought to make us see how in all cases the feeling of the manifestations may play a much deeper part in the constitution of the emotion than we are wont to suppose” (p. 197). Notice two things: the reference to the “idea” in this formulation of the *definition* of emotion; and the soft conclusion James draws: “the feeling of the manifestations may play a much deeper part in the constitution of the emotion than we are wont to suppose”. It is precisely when James encounters these difficulties that, rather than exploring them, he seems to retreat from his supposed thesis *feeling is the emotion* to the softer *no emotion without feeling*.

5.1.2. C. G. Lange and Descartes.

Descartes should probably be credited for having started the scientific study of the emotions as it is being defended today particularly among certain followers of the so-called feeling theories. Carl Georg Lange’s study of emotions, which is generally taken to have set the foundations for the work of contemporary *scientists* of emotions, appears to the reader of the *Passions* as a step forward but within a research program strikingly similar.³²⁶ Neither Lange himself—who knew Descartes’ *Passions of the Soul*—nor any of his followers has, however, called attention to the historical continuity of their thought. Lange

³²⁶ See C. G. Lange, “The Emotions,” in C. G. Lange and W. James, *The Emotions* (Hafner: New York and London, 1967), pp. 33-90.

himself, like Descartes before, was convinced he was starting a new project: “[I]t might be declared without exaggeration that scientifically we have absolutely no understanding of the emotions. We have not even a shadow of insight into the nature of the affections in general, or of the individual emotions” (Lange, p. 38). Recall the similar grandiosity in the first line of Descartes’ treatise: “The defects of the sciences we have from the ancients are nowhere more apparent than in their writings on the passions.” (*Passions* I, art. 1, AT XI 327 : CSM I 328).

As suggested above, the label “James-Lange theory,” while emphasizing one specific common view, may also impede to see the enormous differences in the type of work James and Lange did. James’ basic insight that emotions are feelings became relevant for scientific purposes only thanks to Lange’s study. Lange’s work, on the other hand, did not attempt to provide a theory of emotions. It had very specific “practical medical purposes. “The study is limited entirely to one aspect of the problem. It owes its origin primarily to the necessity of clearing up, for practical medical purposes of my own, the relation of emotions to bodily conditions (often pathological); and if possible to ascertain this relation by means of a more precise, physiological method than has therefore been attempted” (Lange, “The Emotions,” p. 34). Lange limits also his study to specific “affections,” a group among them which he calls “emotions”:

Sorrow, joy, fear, anger and the like, on the one hand, and on the other, love, hate, scorn, admiration, etc., are obviously two groups of phenomena which, from the point of view of psychology, must be kept apart. I shall retain the term ‘Emotions’ with reference to the first group only, whereas I shall let the others be called passions, feelings, or anything else appropriate. (p. 35)

This distinction (emotions/affections) is, roughly, established in terms of “simple” versus “complex” affections. Lange’s object is only the simple ones:

We cannot throw conditions such as fright, rage, joy, together with jealousy, love, desire for freedom, etc. And the difference between these two groups lies not only in the fact that the latter is more complicated, and includes dissimilar disturbances of the mind so that disturbances in imagination and reflexion especially play a part in their origin; but also they are complicated and heterogeneous in the conditions of their origin. Feelings such as love, hate, admiration, etc., consist of quite complex psychic phenomena, in which the emotions of joy, anger, fear, etc., enter as separate elements, the latter being simple, single phenomena. (p. 36)

This separation follows the very long tradition of separating, for explanatory purposes, basic or primitive emotions from compound or complex ones. Descartes himself distinguished six “primitive passions” (i.e. wonder, love, hatred, desire, joy and sadness) from those which are “either composed from some of these six or ... species of them” (*Passions* II, art. 69, AT XI 380 : CSM I 353). The latter, according to Descartes, “originate in” the primitive ones (*ibid.*). The distinction leaves, both in Lange and Descartes, open the question of whether the “complex” (Lange) or “composed” (Descartes) passions are just *combinations* of “simple” (Lange) or “primitive” ones. The descriptions Descartes, at least, provides do not always seem to support this view.³²⁷ Notice also that whereas love and hate are complex for Lange, they are primitive for Descartes; fear is simple for Lange but composed for Descartes. Although Lange’s list of simple emotions is not complete, he specifies that he is focusing mainly on “a few of the most decided and best defined affections”: joy, sorrow, fear and anger.³²⁸ Of these only joy and sorrow (if understood as sadness) were primitive for Descartes.

In order to be able to study those simple emotions scientifically, Lange thinks that only their “physiological manifestations” should be taken into account. “It is these physiological manifestations of emotions which serve us as stepping-stones—assuredly the only ones—to their scientific investigation.” (Lange, “The Emotions,” p. 37) To give primacy to these manifestations is the main novelty Lange attributes to his work. “[E]xaminations of the affections have never been based upon these bodily manifestations, but have always considered these to be secondary phenomena, which might perhaps be interesting and important, but which, nevertheless, possessed only subordinate significance. Bodily expressions were considered to be more or less accidental concomitants of the main phenomena—the mental affection.” (p. 38) Descartes too should probably be *accused* of treating the “manifestations” as “secondary” (although it would require some qualifications).

³²⁷ E.g.: “Jealousy is a kind of anxiety which is related to our desire to preserve for ourselves the possession of some good. It does not result so much from the strength of the reasons which make us believe we may lose the good, as from the high esteem in which we hold it. This causes us to examine the slightest grounds for doubt, and to regard them as very considerable reasons.” (*Passions* III, art. 167; AT XI 459 : CSM I 389) Descartes uses “species of” to refer to passions that result from the *addition* of judgments to other passions, e.g. : “[W]hen we think of the good or evil as belonging to other people, we may judge them worthy or unworthy of it. When we judge them worthy of it, that arouses in us solely the passion of joy, in so far as we get some benefit from seeing things happen as they ought; and the joy aroused in the case of a good differs from that aroused in the case of an evil only in that the former is serious whereas the latter is accompanied by laughter and derision. But if we judge the others unworthy of the good or evil, in the former case envy is aroused and in the latter case pity—envy and pity being species of sadness. And it should be observed that the same passions which relate to present goods or evils may often also be related to those which are yet to come, in so far as we think of a good or evil as if it were present when we judge that it will come about.” (*Passions* II, art. 62, AT XI 377 : CSM I 351)

³²⁸ “The investigation will be limited to only a few of the most decided and best defined affections: joy, sorrow, fear, anger, and to a certain extent, embarrassment, suspense, and disappointment.” (p. 39)

As to the observations to be analyzed, “we are reduced essentially to simple observation of ourselves and others, to ‘clinical’ observation, to use the medical term, where all observation of the symptoms which appear causally are included, as opposed to experimental investigation, where the symptoms are controlled’ (p. 39). Particularly interesting, he thinks, are (a) “cases where the affections appear with such powerful and persistent disturbances that we enter into the field of pathology” (p. 39); (b) new-born infants which “offer very interesting material for observation along certain lines, particularly because of the relative simplicity of the conditions and the predominance of affections undisturbed and uninterfered with by reason; also because of the freedom from acquired conventional expression of the affections” (p. 40); and (c) “primitive peoples, where the emotions are often very strongly are immediately expressed” (p. 40). If we discard, as Lange does, the two last sources because of the difficulty to use them,³²⁹ we are left with cases of “powerful and persistent disturbances.” That these were also the interesting cases for Descartes is clear from the correspondence with Elizabeth, where he provides help to *control* her disturbance, but also from the overall practical goal of the treatise, i.e. to control the excesses of the passions. “They [passions] are all by nature good, and ... we have nothing to avoid but their misuse or their excess, against which the remedies I have explained might be sufficient if each person took enough care to apply them” (*Passions* III, art. 211, AT XI 486 : CSM I 403).

The first major *discovery* Lange claims to have made is “that emotions are accompanied by disturbances in the brain circulation” (p. 62), more precisely:

According to all physiological experiences, nothing opposes the assumption that the immediate bodily expression of the affections is a change in the function of the vasomotor apparatus, different for each affection, and that the other bodily appearances, which accompany the affections, are due to these vaso-motor disturbances, these changes in the blood-content of the various organs, and members of the body. Thus the changes in appearance (skin) and in the functions (nervous-system, secretory glands) of the organs are explained. (p. 62)

It is by answering “the question concerning the nature of the relation of the emotions to the concomitant body-phenomena” (p. 63) where Lange’s study can be seen as continuing and completing Descartes’. It is also where his *theoretical* proximity to James can be better observed. The question is the relationship between what Lange calls the “cause” and the “effect” of an emotion-, that is, “what lies

³²⁹ “[W]e meet with the same difficulties in dealing with infants and primitive peoples, as we do when we study animal behavior, namely the uncertainty of our psychological understanding, the inevitable consequences of the subject’s unsatisfactory reports.” (p. 40)

between these two factors” (p. 64): “we have in every emotion as sure and tangible factors: (1) a cause—a sensory impression which usually is modified by memory or a previous associated image; and (2) an effect—namely, the above mentioned vaso-motor changes and consequent changes in bodily and mental functions” (p. 64).

To start with, Lange thinks, we should discard the “purely mental affection” hypothesis, that is, the assumption that what lies between the cause and the effect is only “mental”. “[W]e have absolutely no means of differentiating between a sensation of mental and one of physical nature. No man, in fact, is capable of differentiating between a sensation of mental and one of physical nature. No man, in fact, is capable of differentiating between psychical and somatic feelings” (p. 65). And since, for scientific purposes, we should only trust observations, the mental hypothesis should be eliminated. “Whoever attributes a sensation to the mind, does so only on basis of theory, not on basis of immediate perception.” (p. 65) In support of this, Lange offers some arguments very similar to those James provided in favor of the view that an emotion is the perception of certain bodily changes. On one hand, there is no emotion without bodily symptoms: “Take away the bodily symptoms from a frightened individual; let his pulse beat calmly, his look be firm, his color normal, his movements quick and sure, his speech strong, his thoughts clear; and what remains of his fear?” (p. 66). On the other, eliminating or altering the bodily symptoms, eliminates or alters the emotion:

The power of a ‘cold shower’ to dampen violence and wrath sometimes finds practical application, and yet this method can hardly have any direct effect upon the mind, if applied *in natura*; so much the stronger is the effect upon the vasomotor functions. By means of one drug—the well-known potassium bromide—which has a paralyzing effect on the vasomotor apparatus, we have it in our power not only to allay fear and sorrow and other similar unpleasant affections, but also induce a condition of apathy, which makes it impossible for the subject to be either lively or depressed, fearful or angry, simply because the vasomotor functions have been suspended. (p. 68)

Notice that, unlike James, Lange is not using these observations to defend a general definition of emotions. His study seems to be more clearly aimed at supporting, not that emotions are feelings, but the softer claim *no emotions without bodily changes*.

Lange then shows that indeed “the physical expression of affections may arise in a purely physical way” (p. 66), which does not mean that the cause itself must be “material”; it can be “mental” too (e.g. p. 73). And although “it is not so easy to draw a line between material and mental causes for affections” (p. 72), we should be aware that the difference between emotions, between say different fears,

may lie “only in the difference of cause and in the consciousness of the respective causes, or in the lack of consciousness of a cause” (p. 72). Notice the role of certain thoughts: the “consciousness of a cause” might causally explain the difference between emotions. Lange is aware of the importance of the distinction between “material” and “mental” causes and of how unnoticed it has been so far.³³⁰ In any case, the “consciousness of the respective causes” is, for Lange, still part of the “cause” of an emotion—not of the “effect,” with which he seems to identify the emotion proper. That consciousness would be similar to the “representation” (of the “second kind”) which, according to Descartes, is identified as the passion, as is responsible for triggering the bodily motions. Recall also that the multiplicity of causes was also partially behind Descartes’ characterization of the passions of the soul as perceptions “we refer to the soul”.³³¹

In any case, “[w]hatever the causes may be that arouse affections, the effects on the nervous system are identical in one point; in the effect upon the vasomotor center, that group of nerve cells which regulates the innervation of the bloodvessels. The stimulation of these cells, which lie chiefly in the part of the cord between the brain and the spinal cord, is the root of the causes of the affections however else they may be constituted; and is fundamental to the physiological phenomena which are the essential components of the affections.” (p. 73) These cells can, accordingly, be stimulated in different ways depending on their causes. How this occurs is probably the most original aspect of Lange’s work.

Thus, in the case of “those emotions which are due to a simple sense impression, a loud noise, a beautiful color combination, etc.” the emotion is thus aroused:

Consider Θ to be the sense organ [...], the eye for example, which received the impression in question and which subsequently passes along the optic nerve (N.O.) to the central optic organ (C.O.’), is diverted by a simple nerve connection to the vasomotor center (C.V.) to lead off the impulse first aroused in the eye and in this way to effect the emotional changes in the vascular innervation. (p. 74) (See Figure 7)

³³⁰ “It has never occurred to anyone to separate the emotion due to a suddenly discharged shot, from the true affections. No one hesitates to call it fright, and it presents all the ordinary characteristics of fright. Nevertheless, it has no connection with any image of danger, and is not caused by any association of ideas, memory or any other mental process. The phenomena of fright follow the shot immediately, without any trace of ‘mental’ fright. Many will never grow accustomed to standing beside a gun when it is fired, merely on account of the noise, although they know perfectly well that there is no danger present, either to them or to any one else. We can also consider the case of the infant, which presents all the phenomena of fright at every strong impression of sound; we cannot assume that the sound arouses an image of danger in this case.” (p. 72)

³³¹ “The perceptions we refer only to the soul are those whose effects we feel as being in the soul itself, and for which we do not normally know any proximate cause to which we can refer them. Such are the feelings of joy, anger and the like, which are aroused in us sometimes by the objects which stimulate our nerves and sometimes also by other causes.” (*Passions* I, art. 25, AT XI 347 : CSM I 337)

Things are “somewhat more complicated” when the emotions are produced “by some ‘mental process,’ some memory or association of ideas, even if the latter be due to sense-impression” (p. 74). Lange notices two important differences between these two causal processes: (1) the latter cases “usually produce a much stronger emotional effect than do the simple sense-impressions” (p. 74); and (2) sense-impressions “usually only arouse affections when they are very powerful, and their effects are usually not so deep nor so lasting, especially when compared with those aroused psychically” (p. 74).

As the “simplest case” of emotions caused by a sense-impression *and* some mental process, Lange explains why “[a] young child will cry at the sight of the spoon which has previously been used several times to give him nasty medicine” (p. 75). This is what occurs in these cases:

Whenever the child received medicine from that spoon, his visual sense was stimulated as well as his gustatory sense, by the sight of the spoon as well as by the taste of the medicine. Both impressions are conveyed to the brain from the peripheral sense organs, and there, after they have become sensations in the central sense organ (in C.G.’ and C.O.’ in the above figure), they are brought to consciousness in that they are brought to the centers of taste and vision in the cortex (in C. G.” and C.O.”). But the dispositional outbreaks of the child show conclusively that each impression of taste is always conveyed to the vaso-motor center (C.V. from C.G.’) and hereby arouses the phenomena which express fright, disgust, *et al.* The sight of the spoon alone therefore can not set the vascular nerves in action; if we show the spoon to a child in a condition of ignorance, before he has tasted the bitters that he may receive from it, he will reach for it instead of beginning to cry. (pp. 75-76) (See Figure 8)

Notice two important differences with respect to Descartes’ account. (1) As it could be expected from someone who has rejected the idea that emotions are mental, consciousness of our sensations occurs in the brain (in particular in the cortex); and (2) the activation of the vaso-motor center in Lange plays a role similar to the motion of the gland *and* the entrance of the spirits in the pores of the brain (which supposedly occur simultaneously) in Descartes (see e.g. *Passions* I, art. 38, AT XI 358 : CSM I 342-43).

As to the question, then, “[f]rom which of these points now does the impulse to C.V. start when the child sees the hated spoon?” (p. 76) the answer is easy: “[s]urely from C.O.”, the cortical center, since this is the first organ where an image of the spoon becomes conscious” (p. 76). But why does C.O.” have now the power to stimulate the vaso-motor center that is of “stimulating it to emotional activity” (p. 76)? We can assume, Lange argues, that “a functional connection must have been established by these simultaneous stimulations between the two cell groups C.O.” and C.G.”, the conscious centers for the appearance of the spoon and the taste of the medicine” (p. 76). How is this connection established?

The new effect of this sense-impression upon the child does not depend upon his being led along new paths, which formerly were closed, but upon the fact that the point C.G." is in a condition to be influenced by the irradiation from the point C.O.", or rather, C.G." is the only group which responds recognizably to the impulse propagated by irradiation. (p. 78)

In Cartesian terms, this connection would be due to "past experience," that is, it would be explicable in terms of "folds" produced in the brain by past impressions. Past experience means having a different brain. As Lange puts it: "We can only consider the fact that this group has previously been stimulated simultaneously with C.O." as a reason for this greater sensitivity. A change has hereby been produced in its cells, a condition of excitability, which is not to be found in the other brain cells, which may be reached by irradiation. A summation of functional activity occurs in C.G." due to the existing activity and the additional activity conducted to it from C.O." (p. 78) This account could, in principle, be applied to any other emotion that arises by *association* with a conscious thought, whether the latter results from sense-impressions or not. Lange does not, however, provide an explicit account of other cases.

Notice that Lange's separation between the terminations of the nerves in the brain (central sensory organs) and the cortical centers where consciousness occurs, is not fundamentally different from Descartes' functional distinction between the role of the pores where the nerves terminate and the gland (where thoughts occur, insofar as it is associated with the soul). Similarly to Descartes also, Lange's explanation would account for the comparative strength of the "'mental' affections" (as opposed to the material ones): "an increase of impulse occurs in the case of indirect, 'mental' affections, due to a previous brain stimulation which has not yet quite died away, and the effect of which is added to the impulse coming from the external impression" (p. 79). Recall how imagination or judgment can alter or increase passions caused by sensory perceptions in Descartes (To Princess Elizabeth, 6 October 1645, AT IV 312 : CSMK 271)

As if trying to add a footnote to Descartes' "[i]t is on the passions alone that all the good and evil of this life depends" (*Passions* III, art.212, AT XI 488 : CSM I 404), Lange summarizes his own view by adding an important detail: "[w]e owe all the emotional side of our mental life, our joys and sorrows, our happy and unhappy hours, to our vasomotor system." (p. 80). In opposition to Descartes' optimism as to the benefits of knowing how to use our passions, Lange sees in education a danger for our "emotional life": "The aim of all education (which must not be confused with instruction) is to increase self-control and the opposition or suppression of impulses, which are the immediate effects of our bodily

organization, but which do not fit into established social conditions. Physiologically, we consider education to consist in practice in the ability to control simple elementary reflexes by higher ones.” (p. 82) And this, little by little is having, according to Lange, an effect on humankind:

In the course of years, the center of the vascular nerves loses more and more of its emotional activity by reason of the influence of control and lack of practice, and, as we have discovered so often in acquired characters, this result of development of the mental life and of education is transmitted to posterity by inheritance; generations arise which have less and less prompt emotional vascular innervation, and with always slighter innervation of the vascular nerves for the organs of intelligence. If our development continues to progress along these lines, we shall finally reach Kant’s ideal of the ‘man of pure reason,’ who will consider every affection, every joy and sadness, fear and fright, as a disease, a mental disturbance, which is not proper for him. (pp. 82-83)

Descartes should not, however, feel affected by this criticism. He would rather agree with Lange. Descartes was not proposing “self-control” in this sense or, even less, “opposition or suppression of impulses”. He was not requesting to moderate our desires or reduce the strength of our passions, but rather to follow certain precautions not to be harmed by the actions our desires dispose us to perform. In other words, as long as we *benefit* from them, there is nothing to fear (e.g. *Passions* II, art. 139) and a lot to gain (*Passions* III, art. 212) from our passions.

5.1.3. Descartes and Contemporary Feeling Theorists

It is difficult to find today, among the main participants in debates on emotions, Jamesians in the strict sense. Among those who claim to write under his inspiration are, notably, Jesse Prinz and Jenefer Robinson.

Jesse Prinz is a *critical Jamesian*, so to speak. Although he admits that James (or the James-Lange view as it is usually known) failed “to reckon with what can be broadly be regarded as the rationality of emotions” (p. 45), he also thinks “that failure, however, has a remedy that does not depart from the spirit of the James-Lange approach” (p. 45). “[T]he objections can be answered without abandoning the core idea put forward by James and Lange” (p. 45). That “core idea,” according to Prinz, is “that emotions are perceptions (conscious or unconscious) of patterned changes in the body (construed

inclusively)” (p. 45).³³² Most importantly, Prinz, unlike James, believes emotions are “fundamentally semantic” (“[e]motions are somatic, but they are also fundamentally semantic: meaningful commodities in our mental economies” [p. 45]). This shows that the “spirit” of the James-Lange view is understood by Prinz quite generously.

As to the “core idea”—that emotions are “perceptions of bodily changes”—Prinz does not offer either conclusive evidence in its support. Besides arguing in favor of “a link, or correlation, between emotion and bodily perturbations” (p. 45), he also claims to have “evidence that bodily changes can induce emotions” (i.e. the “sufficiency of those changes” [p. 46]), and “that bodily changes are necessary for emotions” (p. 46). As to the sufficiency claim, all Prinz “suggests” is that “emotions can arise without the mediation of anything like an appraisal judgment” (p. 46). This is far from supporting that feelings are sufficient, especially since no independent argument in support of the idea that an appraisal judgment is the only event that can “mediate” between the feeling and the emotion, properly speaking, is offered. But the problem is deeper. Even without the specific mention of judgment as the mediator, the argument seems to rest on the assumption that *causal* sufficiency is enough to talk about *ontological* sufficiency. And this is obviously more difficult to accept. For the necessity claim Prinz offers contemporary research—in particular done by Hohmann in 1966—to which James or Lange obviously did not have access. But, like James, all he is able to support is that “with less bodily feedback, Hohmann concludes, there is less emotion” (p. 47).³³³ Prinz is unable to show that we can have emotions *only* with bodily motions.

Prinz stretches still more the so-called “core idea” in an attempt to address some important objections against *feeling theories*. Against the objection that “long-standing emotions” may not imply bodily changes, Prinz defends that in these cases the “disposition” is enough to qualify as emotion. “Long-standing emotions deserve to be called emotions only because they *dispose* us to enter into patterned bodily responses. We do not say that these emotions disappear when they are unfelt, because the disposition is there all the time.” (p. 50) But this alteration does not seem to be part of the “core idea”.

³³² Prinz does not however accept “that emotions are always felt, as James sometimes implies, or that the relevant bodily changes must have the origins in the vasomotor system, as suggested by Lange” (p. 45).

³³³ “In a more systematic study, Hohmann (1966) investigated the emotional states in a population of twenty-five people with spinal cord injuries. He found reductions throughout the group, and those reductions became more acute with injuries higher in the cord. With less bodily feedback, Hohmann concludes, there is less emotion. He did find that these patients tended to experience an increase in ‘sentimentality,’ characterized by crying and feeling choked up. This is unsurprising on the James-Lange view, however, because those bodily states involve changes that are above the injury, and hence perceivable to the patient.” (p. 47) The study by Hohmann is: G. W. Hohmann, “Some Effects of Spinal Cord Lesions on Experienced Emotional Feelings,” *Psychophysiology* 3 (1966), 143-56.

Prinz, however, rather than defining his own position (and consider it simply inspired by the original formulation), prefers to present this disparity within the “spirit” of James and Lange. To be *disposed to* perceive and to *perceive* seem indeed to be quite different things. It is not obvious at all that to talk about perception implies talking about the *disposition to perceive* and there is, in particular, no indication that this is the case in James’ definition of emotion as the perception of certain bodily motions.

An important objection to the sufficiency claim, already suggested above, is whether an “interpretation” of the bodily changes is necessary to talk about the experience of an emotion. In support of the objection Prinz refers to the study by Schachter and Singer in 1962, according to which, under similar arousals caused by adrenalin injections, different subjects expressed having different emotions in correspondence with certain contextual variations.³³⁴ Regardless of whether that experiment has or not been replicated (Prinz suggests it has not), the most interesting thing is that, once again, Prinz thinks that the interpretation of the results according to which an interpretation is necessary could also be accommodated within James and Lange’s views.³³⁵ This is how: “First, strictly speaking, James and Lange do not need to insist that every emotion has distinctive physiology. They can say that the identity of an emotion depends in part on context.” (p. 51)

But this is not a satisfactory answer. If an emotion is, strictly speaking, the perception of certain bodily changes, as James says, there is in principle no room in that definition for the *perception of context*. Furthermore, context never even appears, either centrally or marginally, in James’ account. All we have seen within his view which falls slightly outside his explicit definition of “feeling,” and which might indicate he perceived certain limitations in it, is (a) his reference to “exciting fact” rather than to exciting object (which could leave room for context); and (b) some vague references indicating he was probably implicitly acknowledging that having an emotion implies *something more* than just perceiving certain bodily changes. But none of this seems to justify reading context in text or in intention. If emotion is the feeling *only*, as James says, then we would have to admit, against the generous stretch by Prinz, that the “identity” (Prinz) of each emotion can only be properly determined by its distinctive physiology.

³³⁴ S. Schachter and J. E. Singer, “Cognitive, Social, and Physiological Determinants of Emotional State,” *Psychological Review* 69 (1962), 379-99.

³³⁵ “The experimental results are inconclusive. There have been other alleged replications of Schachter and Singer’s results along with attempted replications that failed. In a major review, Reisenzein, Meyer, Schützwohl (1983) conclude that Schachter and Singer’s conclusions are not supported by the data” (p. 52). Although the reference provided is a bit confusing (year and authors do not match in the bibliography), there are two works Prinz might be referring to: R. Reisenzein, “The Schachter Theory of Emotion: Two Decades Later,” *Psychological Bulletin* 94 (1983), 239-64; or R. Reisenzein, W.-U. Meyer, and A. Schützwohl “James and the Physical Basis of Emotion; A Comment on Ellsworth,” *Philosophical Review* 4 (1995), 757-61.

As to the most serious objection to the James-Lange theory in Prinz's words, that is, "that it cannot explain the fact that emotions have intentional content" (p. 54), Prinz, once again, believes he is thinking within James' "spirit" when trying to account for it. Interestingly enough, he does it in a way in which ideas that would be familiar to a reader of the *Passions of the Soul* play a quite important role. Following Dretske and Fodor, Prinz accepts that "a mental state gets its intentional content in virtue of being reliably caused (or having the function of being reliably caused) by something" (p. 55). Thus, Prinz argues, "if those changes in the body are caused by the instantiation of core relational themes, then our perceptions of the body may also represent those themes" (p. 55).³³⁶ Prinz gives the following example to clarify what he means by "caused by the instantiation of core relational themes":

Consider fear. It seems quite likely that we are wired to undergo a perceived (or imagined) bodily change under a variety of threatening conditions. A similar bodily pattern is triggered when the auditory system detects a loud sudden noise, or when the visual system detects a looming object, or when we proprioceptively detect a sudden loss of support. The perception of that bodily state represents danger, because it is under the reliable causal control of dangerousness. Danger is the property in virtue of which these highly desperate eliciting conditions have come to perturb our bodies. (p. 55)

There are two particularly problematic ideas here: (1) the "the perception of that bodily state represents danger because it is under the reliable causal control of dangerousness," and (2) "[d]anger is the property in virtue of which these highly desperate eliciting conditions have come to perturb our bodies". The first statement seems somehow circular: we perceive "danger" because we are undergoing a "bodily state" that "represents" it, and that bodily state represents it because that it is "under the reliable causal control of dangerousness".³³⁷ What is "dangerousness" then? What is the relationship between "dangerousness" and the bodily motions? How does "dangerousness" *cause* that bodily state and what does it mean for a bodily state to "represent" it? Is Prinz assuming or concluding that the bodily state is "under the reliable causal control of dangerousness"? As to the second statement, to call danger a "property" of the object seems confusing if, in fact, this property *becomes* only such under certain "eliciting conditions," that is, *once the*

³³⁶ Prinz refers to F. Dretske, *Knowledge and the Flow of Information* (Cambridge: MIT Press, 1981), and *Explaining Behavior* (Cambridge: MIT Press, 1988); and J. A. Fodor, "A Theory of Content, I and II," in *A Theory of Content and Other Essays* (Cambridge: MIT Press, 1990).

³³⁷ It could be read in a more Cartesian way in the sense that in Descartes' account the bodily perceptions can be said to be about the object that caused them only *via* the representation they first produce—otherwise they would simply be about the state of, or changes taking place in, the body.

perceiver interacts with the object. On the other hand, if the “bodily state represents danger,” is then danger both a “property” and a “representation”?

The “eliciting conditions” constitute what Prinz calls “elicitation files”:

We can think of all these body-change elicitors as belonging to a mental file—and elicitation file. That file may start out with a handful of triggers and expand over the life span. As we learn of new dangers, we may add new entries to the elicitation file. Elicitation files can even come to include evaluative judgments of the kind emphasized by defenders of appraisal theories. Each addition to an elicitation file will be sufficient for triggering the relevant bodily response, though getting admitted to the elicitation file in the first place will depend on similarity or association with triggers that have already been attained. Consequently, all the representations that trigger the bodily response will do so in virtue of being recognized as dangerous, either explicitly or implicitly by similarity to previously established elicitors. (p. 55)

The expression “elicitation file” is not very clear here. Which type of “file” is this? We know it is a “mental file” and, in particular, a collection of “triggers” which share “similarity” or “association” and among which there might be “evaluative judgments”. But “trigger” is not independently defined. We also know that, as we could expect from the “core idea” (of the James-Lange view) that elicitation files (1) are not “constituent parts” of an emotion (“the fact that elicitation files help establish the intentional content of emotions does not entail that they should be regarded as constituent parts” [p. 57]); (2) “do not activate with the right time course to qualify as components of an emotion. An emotion can be triggered by a passing thought or fleeting perception and then linger” (p. 57); and (3) their contents are “very heterogeneous”.³³⁸

All this means that the “elicitation files” would explain why certain facts become, in James’ language, “exciting facts.” But, as Prinz himself points out, the explanatory value of “elicitation files” is limited: they may help answer why emotions have “formal objects” but not why they have particular objects. “If bodily perceptions represent core themes by reliable causation (or something along these lines), then they have formal objects. They also have conditions of correctness.” (p. 56) This distinction reminds of the distinction between the two types of representations that must take place, according to the

³³⁸ “In contrast to appraisal theories, I submit that there is no privileged representation mediating the link between core relational themes and bodily changes. The items in an elicitation file range from very abstract cognitive appraisals to very concrete perceptual representations of specific objects. If emotions are elicited by different representations on different occasions, there is no reason to think that any one of those representations qualify as constituent parts of the emotion. If elicitation-file contents were constituent parts, emotions would change from occasion to occasion.”(p. 57)

Passions, for an object of the senses to cause a passion. The representation of the second type could be said to represent “formal objects”. The outline he provides as to how to explain “particular objects” bring him still closer to Descartes:

How does a thought about heights latch onto a perception of the body? A full answer to this question would have to include details about how mental states are bound in thought. The idea would be that a representation of heights gets coactivated with a somatic perception and linked to it in such a way that the former causes the latter to occur, and the latter wanes when the former becomes inactive. There is no reason to provide the details here, because any theory of the emotions will have to explain how dependencies arise between representations of particular objects and somatic states. Everyone agrees that bodily responses often occur *in virtue of* some particular perception or thought. The defender of the James-Lange theory can say that this dependency, however it gets fleshed out, determines the particular content of an emotional state. (p. 56)

The idea that a “representation of heights gets coactivated with a somatic perception and linked to it in such a way that the former causes the latter to occur” does not seem to be very different from Descartes’ account in terms of “natural associations” between thoughts and bodily changes. Descartes would not, on the other hand, say that the sensory representation is the one who “gets coactivated” with the bodily changes. Only representations of the “second kind” are for Descartes naturally associated to certain bodily motions. The bodily changes, according to Descartes, rather than representing, maintain and strengthen the original representation that caused the passion. As to the role of the “elicitation files,” it could be explained by Descartes as sets of impressions in the brain which little by little, through experience and association, have become more likely to be *activated* by a certain object—meaning more likely to be causally relevant in the arousal of a certain passion.

Only towards the end of his article does Prinz acknowledge that his view might be departing noticeably from James and Lange’s—although, once again, however, he maintains this is only so in appearance as long as he is preserving “their core insight”:

Is this the view that James and Lange had in mind? Probably not. Their contributions predate the relevant developments in philosophical thinking about representation. But the embodied appraisal theory preserves their core insight and endows emotions with semantic properties that can be used to deflect the arrows of dissent. In developing a theory of emotion, we should not feel compelled to supplement embodied states with meaningful thoughts: we should instead put meaning into our bodies and let perceptions of the heart reveal our situation in the world. (pp. 57-58)

Particularly surprising is that Prinz justifies his distance from James and Lange's original position by referring to "developments in philosophical thinking about representation" (p. 57) that have taken place after their death. It is not clear what about that "development in philosophical thinking" could not have been available to James and Lange at the end of the nineteenth century--at least insofar as it is a theoretical view, not an empirical one. Thought about the role of representations in the arousal of passions is, at least, as old as the seventeenth century, and, as we have seen, ideas not very different from the ones Prinz claims to be borrowing from Fodor and Dretske can be found in the *Passions of the Soul*. Given the efforts made by Prinz for it, it seems that there might be some reason why he is so interested in defending that he is only drawing new consequences from James and Lange's view rather than simply acknowledging an inspiration for a view that seems to have departed remarkably from theirs. His insistence that he is writing under the shadow of James and Lange despite the appearances could be a deliberate and explicit attempt, rather than to emphasize the differences, not to leave any doubts about where he is within the debate feelings vs. judgments. In other words, his bridges towards the other camp are built from the feeling side, not from the judgment side. Otherwise it is quite difficult to accept suggestions such as that James himself took into account the intentionality of the emotions, no matter how minimally that intentionality is understood. A different question is whether a feeling theorists can incorporate it into the theory, but there is no need to attribute that to James and Lange.³³⁹

³³⁹ Patricia Greenspan, openly acknowledging that "we can have it both ways, that is, about emotions as feelings or judgments," (Patricia Greenspan, "Emotions, Rationality, and Mind/Body," in R. Solomon, ed. *Thinking About Feeling*, p. 132.) has attempted also to incorporate the intentionality into feelings. She has suggested to understand emotions as (1) feelings ("emotions are and remain feelings" [p. 133]) which (2) evaluate. "Affect evaluates! Emotional affect or feeling is itself evaluative—and the result can be summed up in a proposition." (p. 132) To say that feeling is "evaluative" means for Greenspan that it has "evaluative thought content" (p. 133). "It does not make out emotion as 'quasi-judgments' or thoughts with hedonic tone but rather as *feelings* with evaluative thought content." (p. 133) This "thought content" should be understood "not necessarily [as] an occurrent mental event, at any rate apart from feeling, but rather [as] what a feeling registers or conveys." (p. 133) As to what a "feeling" actually is and what exactly it "registers or conveys" Greenspan is not very explicit:

The assumption of intentionality at this level of basic feeling can sound mysterious, but in principle it is no *more* so than in more familiar cases involving units of language and thought. In fact, I suspect that the historical or evolutionary account would start with feelings assigned 'meanings' by their significance for the organism in a sense that includes their role in behavioral response—meanings in a sense that becomes mental only with later cognitive development. Thought content in this sense, even at later stages of development, need not be a separable mental element; it is the content *of* a feeling. (p. 131)

Greenspan does not, however, say what exactly counts as a "feeling," in which sense what it registers has to do with the "significance for the organism," how it registers it, or whether different sorts of feelings evaluate differently (e.g. the feeling of pain in my hand and the feeling that accompanies my anger at you for not waking me up on time to take the test).

5.2. DESCARTES AND THE JUDGMENT THEORY

Descartes' theory of passions would not either fit easily in what some contemporary philosophers—both skeptics and defendants--consider the leading *paradigm* today, the so-called judgment theory (see e.g. J. Robinson, p. 28; J. Deigh, p. 10).³⁴⁰ Its basic idea, that emotions *are* judgments was originally introduced in contemporary debates in the 1960s as a refinement of general cognitive theories.³⁴¹ Cognitive theories, in Cheshire Calhoun's terms, "argue that emotions are or entail beliefs."³⁴²

Martha Nussbaum, who has argued that the idea that emotions are judgments can be found in the Stoics, is today probably one of the clearest defendants of it's the strongest version of the *judgment theory*. According to her, judgments are "necessary constituent elements of the emotion, but ... sufficient as well"³⁴³ and thus "emotions can be defined in terms of judgment alone" (p. 196). On the *weak* side of this camp, Robert Solomon, for example, has in several occasions attempted to incorporate into his original "emotions are judgments" what is still taken to be the pending task of the theory: the accompanying feelings.³⁴⁴ Feelings are to judgment theories what intentionality is to feeling theories: the missing aspect towards which the bridges should be built.

There are four fundamental features of emotions Martha Nussbaum claims to be capturing by proposing to view emotions as judgments:³⁴⁵ (1) emotions "are *about* something" (p. 187); (2) "the object is an *intentional* object: that is, it figures in the emotion as it is seen or interpreted by the person whose

³⁴⁰ A bit more generally, R. Solomon considers "the cognitive theory has become the touchstone of all philosophical theorizing about emotion, for or against" (p. 78). The so-called judgment theory, insofar as it views emotions as judgments, is usually considered a cognitive view.

³⁴¹ Patricia Greenspan calls these views "judgmentalism" and places the origins of its contemporary form in E. Bedford, "Emotions," *Proceedings of the Aristotelian Society*, 1957 [repr. In *Essays in Philosophical Psychology*, ed. D. Gustafson. New York: Doubleday-Anchor, 1963]. (See P. Greenspan, "Emotions, Rationality and Mind/Body," in R. Solomon, ed. *Thinking About Feeling*, p. 133, n. 14). Greenspan mentions also R. Solomon, *The Passions* (New York: Doubleday, 1973) and W. Lyons, *Emotion* (Oxford: Oxford University Press, 1980) as two later books influential in shaping this view. Of Solomon's she says that "it expands the view and connects it with continental philosophy, specially Nietzsche and Sartre" (ibid.), and of Lyons's that it is "a more qualified variant of the view with Jamesian physiological elements" (ibid.).

³⁴² Cheshire Calhoun, "Subjectivity and Emotion," in R. Solomon, ed., *Thinking About Feeling*, p. 108.

³⁴³ Martha Nussbaum, "Emotions as Judgments of Value and Importance," in R. Solomon, ed., *Thinking About Feeling*, p. 193.

³⁴⁴ "My bumper-sticker slogan, my walk-away-from-the-lecture catch phrase, has always been "Emotions are judgments." The abbreviated slogan has too often been mistaken for a full-blown theory in itself, as if the emotions are *nothing but* judgments, and the particular term *judgment* has often been misunderstood as overly detached and intellectual. But I have long argued that emotions as judgments should not be confused with singular summary judgments (such as might be used to briefly define them or distinguish one emotion from another), nor should a judgment be thought to be something deliberative, articulate or fully conscious (Solomon 1988 ["The Politics of Emotion," in *Midwest Studies in Philosophy XXII*, ed. Peter French et al. Notre Dame: University of Notre Dame Press]).

³⁴⁵ "[T]he explananda will be the genus of which grief, fear, love, joy, hope, anger, gratitude, hatred, envy, jealousy, pity, guilt, and other relatives are the species" (p. 186).

emotion it is” (p. 188); (3) judgments “embody not simply ways of seeing an object, but beliefs—often very complex—about the object” (p. 188); and (4) “there is something marked in the intentional perceptions and the beliefs characteristic of the emotions: they are all concerned with *value*, they see their object as invested with value” (p. 189). As to the obvious omission of the bodily changes Nussbaum explains that: “There usually will be bodily sensations and changes involved in grieving, but if we discovered that my blood pressure was quite low during this whole episode, or that my pulse rate never went above sixty, there would not, I think, be the slightest reason to conclude that I was not grieving” (p. 195).

The most interesting feature that Nussbaum has called attention to, specially from a Cartesian point of view, is the last of the above four. Writing under Stoic influence, she views the idea that emotions are “concerned with *value*” as meaning that “emotions are eudaimonistic—that is, concerned with the agent’s flourishing” (p. 189):

The concept of *eudaimonia* includes all that to which the agent ascribes intrinsic value; for instance, if one can show that there is something missing without which one’s life would not be complete, then that is sufficient argument for its inclusion. The important point is this: in a eudaimonistic theory, the actions, relations, and persons that are included in the conception are not all valued simply on account of some instrumental relation they bear to the agent’s satisfaction. This is a mistake commonly made about such theories under the influence of utilitarianism and the misleading use of “happiness” as a translation for *eudaimonia*. Not just actions but also mutual relations of civic or personal *philia*, in which the object is loved and benefited for his or her own sake, can qualify as constituent parts of *eudaimonia*. On the other hand, they are valued as constituents of a life that is my life and not someone else’s, as my actions, as people who have some relation with me. This, it seems, is what emotions are like, and this is why, in negative cases, they are felt as tearing the self apart: because they have to do with damage to me and to my own, to my plans and goals, to what is most urgent in my conception of what it is for me to live well. (p. 190)

Descartes’ idea of “natural perfection” seems to fall within the scope of this concept too—and he could obviously have been inspired by it. Unlike most of the current accounts, the idea places the intentionality of the emotions in a broader functional context of reference than the usual Darwinian reading—according to which survival appears as the ultimate explanatory referent.

Robert Solomon, probably the most outspoken contemporary proponent of the idea that emotions are judgments,³⁴⁶ has recently refined his position to overcome what he takes to be a major deficiency in the so-called “cognitive theory of emotions”. This view, according to him, had left out “any essential role for desire or active engagement in the world in favor of the intellect or affectless ‘information’” (p. 78). In order to incorporate that “active engagement,” instead of his original *emotions are judgments*, Solomon’s is now proposing a softer “emotions are like judgments, and emotions necessarily involve judgments” (p. 83). More precisely, “emotions are subjective engagements in the world.”³⁴⁷ “I still favor the use of ‘judgment’ to make this point, but I now want to stress even more than I have before the idea that a judgment is not a detached intellectual act but a way of *cognitively grappling* with the world.../ I try to be very clear in my judgment-view that desire and engagement in the world (or the thwarting of our engagements) are essential to emotion” (p. 77-78).

It is not clear, though, what Solomon understands by “subjective engagements,” specially when it comes to emotions, and why this should, in any sense, be understood as part of his general position that emotions are judgments. “Engagement,” he says, “seems to me an apt interpretation of the kind of judgment I want to pursue in a dynamic analysis of emotions.” (p. 84) Emotions are then “judgments” which should be understood as “engagements,” or “engagements” which should be understood as “judgments”. One passing commentary reveals a bit more about Solomon’s choice of the term: “As engagements (*as opposed to things that happen to us*), emotions would certainly seem to be good candidates for the role of ‘existentialia’ through which we define ourselves” (p. 78 [my italics]). That active sense (“as opposed to things that happen to us”) is apparently then the idea what makes of “engagement” a good choice. “‘Judgment’ is less than adequate not because it is too detached or cerebral but because it fails to make fully explicit our active engagement in the world” (p. 83). This still does not help much. If emotions are “active,” cannot we say also of sensations that they too are “active

³⁴⁶ “Judgments, unlike thoughts, are geared to perception and may apply directly to the situation we are in, but we can also make all sorts of judgments in the utter absence of any object of perception. Thus while I find the language of ‘thought’ just too intellectual, too sophisticated, and too demanding in terms of linguistic ability, articulation, and reflection to apply to all emotions, ‘judgment’ seems to me to have the range and flexibility to apply to everything from animal and infant emotions to the most sophisticated and complex adult human emotions such as jealousy, resentment and moral indignation. In other words, I argued the following to be essential features of emotion and judgment: they are about the world (including oneself in the world). They are episodic but possibly long-term processes as well. They must span conscious and nonconscious awareness. (In fact, I would argue, these are ill conceived as a simple polarity. There are many ‘levels’ of consciousness.) Emotions as judgments must accept as their ‘objects’ both propositions and ordinary of perception (imagination, memory, etc.). They must be appropriate both in the presence of their objects and in their absence. They must involve appraisals and evaluations without necessarily involving (or excluding) reflective appraisals and evaluations. They must stimulate thoughts and encourage beliefs (as well as being funded on beliefs) without being nothing more than thoughts or beliefs themselves. And, of considerable importance to my larger view, they must artfully bridge the categories of the voluntary and the involuntary.” (Robert Solomon, “Emotions, Thoughts, and Feelings: Emotions as Engagements with the World,” in R. Solomon, ed, *Thinking About Feeling*, pp. 82-83)

³⁴⁷ Robert Solomon, “Emotions, Thoughts, and Feelings: Emotions as Engagements with the World,” p. 77.

engagements in the world”? We have read above that emotions are “a way of cognitively *grappling* with the world” (p. 77), something which we could also say of sensations.

It is not clear what “engagement” adds to what we could already understand by judgment. Judgments seem to be already “active engagements in the world”. To put it in Cartesian terms, it seems as if Solomon were trying to capture the “disposition” emotions bring about—but does not succeed in making it explicit. Solomon calls this “arousal and action readiness”: “Both arousal and action readiness should be subsumed under the more general phenomenological rubric of *getting engaged in the world*.” (p. 86) Rather than saying then that passions dispose us to act, Solomon would say our emotions *engage us in the world* (“through our emotions we are engaged in the world”). But it looks like this is not enough, he wants to say more. He wants to say that (1) we ‘make’ them (the engagements), (2) we “choose” them, and (3) we are “responsible”: “The fact that we ‘make’ judgments does not yield the conclusion that we choose or are responsible for our emotions” :

I continued to realize that the core of the theory I had been developing for decades was the *dynamic* nature of emotions. It was always driven by my existentialism. That is why I have been so adamantly opposed to ‘primitivism’ and insistent on the degree to which we should think of our emotions as our ‘doing’ and as our responsibility. The idea that our emotions are judgments supports that thesis, but meekly. (The fact that we ‘make’ judgments does not yield the conclusion that we choose or are responsible for our emotions.) But the existential idea that through our emotions we are engaged in the world (or as Heidegger wrote, we are ‘tuned into’ the world) not only supports the possibility of choice and responsibility but also has built into it just that ambiguity between willfully engaging and ‘getting caught up’ that captures the fundamental ambiguity of the emotions themselves. (pp. 83-84)

“Engagement” then is supposed to capture the “willfully engaging” and the “getting caught up” of the emotions. What is each? Are these two moments? Two mental events? Are both essential features of emotions, causally necessary conditions, two among other stages of their arousal? Whether this is or not a “fundamental ambiguity” of emotions, it seems that Solomon is also expressing here his own ambiguity. If we “make” judgments, as Solomon himself says, should we not accept that we are “responsible” for that action? Cannot we also choose to make or not to make judgments? The concept of “engagement” seems to bring consequences already in the concept of judgment. When we judge we are actors not patients, as Descartes would say (which is precisely the difference between *actions* and *passions*, the first and most fundamental distinction in Descartes’ *Passions*). The concept of ‘judgment’ would seem to be

enough if, as Solomon says, he needs one that “*supports the possibility* of choice and responsibility” (my italics).

The more serious problem is, however, not to find a term to express this (although it is a problem since it is not clear what we want to express), but the very idea that we are “responsible” for our emotions. Although at times he does not want to say this is common to all passions (“I think that emotions are [...] at least sometimes, ‘chosen’ and voluntary” [p. 78]) it is not clear whether we should reading this literally. What does this mean? Does he really mean we *choose* to undergo our emotions? There is, of course, a sense in which this cannot be denied, i.e. cases in which we can try to arouse in ourselves certain emotions (by, for example, bringing about certain thoughts). But even in these cases our *action* is not the process of undergoing the emotion, but *bringing about certain thoughts*. We *choose* the thought that is associated to the emotion. These cases would not justify in any case making of the “active engagement” a central feature of emotions.

A second quite problematic claim by Solomon, in his recent revision of his main position, is the idea that emotions also imply “judgments of the body” (p. 87). “I think that a great deal of what is unhelpfully called ‘affect’ and ‘affectivity’ and is supposedly missing from cognitive accounts can be identified with the body, or what I will call (no doubt to howls of indignation *the judgments of the body*.” (p. 87) But, once again, when it comes to explaining the concept, Solomon does not provide more than vague strokes. “Feelings are not just sensations, nor are they mysterious ‘affects,’ but felt bodily engagements with the world.” (p. 88) What does it mean to say that feelings are “engagements”? As opposed to what? What is a “bodily engagement”? Is this opposed to “mental engagement”?

From the example of “feelings of comfort” he gives, it seems that “bodily engagement” is placing the emphasis on the idea that the actions certain emotions incline us to perform define more those emotions than any accompanying thoughts. “Feelings of comfort (and discomfort) have a great deal to do with doing the familiar and finding ourselves acting in familiar ways with familiar responses.” (p. 88) But now it seems that the meaning of “feeling” has shifted. This “feeling” does not seem to be of the sort of those feelings we should consider either emotions in the Jamesian sense (from whom Solomon seems to be taking the term [see p. 88]) or components of emotions. “Feeling comfort” (whatever we might mean by that) doing familiar things is just that, feeling comfort doing familiar things. This “feeling” implies either much more than a Jamesian “feeling,” or something quite different. Not being worried, having the mind free to think about other things, and having done it many times in the past, for example, may result in *experiencing* it (whatever it is that we are experiencing) as *familiar*. That we can construct a specific

expression (such as “feelings of comfort”), and that it might look meaningful at first sight, does not mean we should let it lead us towards an explanation of any of the components of that expression.

This is how Solomon attempts to link the supposed bodily feeling to the emotion:

Anger often involves feelings of discomfort, but to be anger (and not just frustration or irritation), the emotion must be further directed by way of some sort of *blame*, which in turn involves feelings of aggression and hostility that may themselves be readily traced (as James did) to specific modes of arousal in the body (tensing of muscles, etc.). So, too, shame is at least in part a feeling of discomfort with other people, a feeling of rejection, as love is (in part) a feeling of unusual oneness with another. (p. 88)

Notice, first, that the expression “the emotion must be further directed by way of some sort of *blame*” seems to indicate that Solomon is taking the “feeling of discomfort” as the “emotion” itself, which does not agree with his own general view (that emotions are judgments or “engagements”). Let us, for the sake of consistency, then simply take “blame” as the central *judgment* of this emotion (anger). The “feeling of discomfort” would then supposedly be the accompanying *bodily engagement*. It is still quite misleading to look for support of this idea in James by saying that he (James) “traced” certain “feelings” to “specific modes of arousal in the body.” James simply identify “feelings” with the perception of certain bodily changes. Thus, to talk about a “feeling of rejection” or a “feeling of unusual oneness” would not mean much for James. And if it does for Solomon, he should probably assume the responsibility of providing a new definition of feeling. How does the “rejection” or the “unusual oneness” get embedded in the feeling? Is this simply a way of combining in one linguistic expression the *mental* and the *bodily* judgments? Solomon seems to admit that it is: “There are feelings, ‘affects’ if you like, critical to emotion, but they are not distinct from cognition or judgment and they are not mere ‘read-outs’ of processes going on in the body.” (p. 88) However, to borrow the term (“feeling”) from an alternative account (James’) and use it for your own purpose does not obviously legitimize the new use. “Feelings” for Solomon are (a) “cognition or judgment” and (b) “not mere ‘read-outs’ of processes going on in the body”. Does this “not mere” mean they are *also*, or only that they are *not*, “‘read-outs’ of processes going on in the body”? And if the former, are they anything else besides “cognition or judgment” *and* “read-outs”?

Thus, Solomon appears to be making room for “feelings” in his emotion-as-judgments view by uncritically inserting them under the umbrella of “judgments” without previously revising one or the other concept (“feeling” or “judgment”). He does, to put it briefly, by simply *talking* about the former (feelings)

in terms of the latter (judgments). In fact, somehow in the transition, those feelings do not seem to be “bodily” any more, at least in any recognizable sense. What does the idea of *bodily judgments* have to do with “feeling” in James’ sense, i.e. with the perception of changes in the body? This is how Solomon sees that both judgments and feelings are part of an emotion: “[T]he judgments that I claim are constitutive of emotion may be nonpropositional and bodily as well as propositional and articulate. They manifest themselves as feelings.” (p. 88) Does then the same judgment (emotion) have two different “manifestations,” one propositional and one non-propositional? Does this mean that the “feeling of unusual oneness” is simply the nonpropositional manifestation of a judgment which, propositionally, could be equivalent to “I am in possession/in the presence of unusual oneness”? If so, how are both manifestations of the same judgment related? And in which sense is the *manifestation of a judgment* also a judgment? (Feelings “are profound manifestations of our many ways of emotionally engaging with the world” [p. 88]).

Peter Goldie, thinking as well within the *cognitivist* paradigm, has also attempted to incorporate feelings into this general view of emotions. “[N]ot only are emotional feelings a potential source of knowledge, they also have a tendency to mislead us, and to do so in a systematic way that cannot be dismissed as merely the tendency to throw up a few ‘false positives.’”³⁴⁸ As to the sense in which “emotional feelings” are a “potential source of knowledge,” according to Goldie, they are so insofar as they provide an “epistemic route,” but not one from the feeling “to a belief about the object of your emotion *as such*” (p. 94): “the most the bodily feeling can reveal is that there is *something* in the environment (you know not what) that has a certain property, such as the property of *being frightening*.” (p. 94):

Many emotional experiences involve characteristic bodily feelings. These are intentional, being directed toward the condition of one’s body. Such bodily feelings can provide prima facie reasons for believing that one is experiencing a certain sort of emotion (introspective knowledge), and for believing that there is something in the environment that has the related emotion-proper property (extraspective knowledge). But bodily feelings alone cannot reveal to you what your emotion is about. The feeling of the hairs on the back of your neck going up can tell you there is something frightening nearby, but it cannot tell you that this something is a burglar. The other kind of emotional feeling, on the other hand, *is* directed toward the object of one’s emotion as such—for example, your feeling of fear that is directed toward the burglar. (p. 96)

³⁴⁸ Peter Goldie, “Emotion, Feeling, and Knowledge of the World,” in R. Solomon, ed., *Thinking About Feeling*, p. 92.

A first problem about this view is whether there is something substantial, as it seems to be Goldie's intention, behind the distinction between "bodily feelings" and "emotional feelings". What are "emotional feelings"? It seems that these two expressions are not more than simply two ways of talking about certain "bodily feelings". In themselves "bodily feelings" are not, according to Goldie, different from other "sensations" *about* our own body.³⁴⁹ They seem to become "emotional feelings" once they are part of an emotion. But why talk then about two "kinds" of feelings in emotions ("as bodily feelings and as feelings directed toward the object of the emotion" [p. 92])? Neither the difference between both "kinds" nor the sense in which each of them is constitutive of an emotion is clear.

Goldie does not seem to recognize that there might be "bodily feelings," not of the sort we may call "sensations" of the body (such as pain), which may occur without being part of an emotion, that is which are only feelings. These would also be feelings without intentionality and it would imply that not all "bodily feelings" would "provide prima facie reasons for believing that one is experiencing a certain sort of emotion (introspective knowledge), and for believing that there is something in the environment that has the related emotion-proper property (extraspective knowledge)."

In which sense do "bodily feelings" provide "reasons" to believe that "there is something in the environment that has the related emotion-proper property (extraspective knowledge)"? The definition Goldie provides of "emotion-proper property" is a bit confusing: "Let me here introduce a term for properties such as the property of *being frightening*: I will call them *emotion-proper* properties, to capture the idea (borrowed from the ancient scholastics) that a property can belong to, or be proper to, an emotion." (p. 94) Hence according to this definition, these are not properties *of objects*, as suggested before, but *properties of the emotion*. "Other examples of emotion-proper properties are being disgusting (proper to disgust), being shameful (proper to shame), being enviable (proper to envy), and being worthy of pride (proper to pride)." (p. 94) But, if so—if these are properties of the emotion--what do we gain by saying that *being frightening* is a "property of," or "proper to," fear? Is there anything in it not expressed by simply saying that "we are fearful of something"? According to Goldie, supposedly we gain awareness of what he calls an "epistemic route" to the object. But this is not so clear either. Here is the most explicit example he provides:

³⁴⁹ "A bodily feeling or sensation, the feeling from the inside of the condition of one's body, is intentional in just this sense: the feeling is directed toward an object, one's body, as being a certain way or as undergoing certain changes. For example, when you feel an agonizing pain in your elbow, the object of the sensation is your elbow, which feels a certain way: agonizingly painful." (p. 93)

[Y]ou might wake up in the middle of the night feeling frightened. You are aware of your bodily condition as being characteristic of fear; you feel the hairs going up on the back of your neck and your heart racing. In such circumstances, it is not just intelligible, it is also *sensible*, to look around fearfully, ask yourself whether there was a strange noise from downstairs that woke you, whether there is a burglar in the house, and so forth. It might all have been a dream, but it makes sense to be sure before going back to sleep. (p. 94)

This example reveals well some of the problems with Goldie's attempt to read the bodily feelings as an "epistemic route" to the world. Notice that Goldie does not see the need to explain the distinction and relation between (a) feeling bodily changes, (b) being aware of undergoing a certain emotion ("[y]ou are aware of your bodily condition as being characteristic of fear"), and (c) the intentionality of that emotion. It is, in particular, not obvious at all either that the "feeling" after waking up would immediately be recognized as proper of "fear"; or that we would start looking for the cause of that feeling after waking up. The latter would not only be conditioned by the fact that upon waking up we may immediately recognize the feeling to have been caused by a dream. As mentioned above, it could be feelings which, although similar to those that accompany emotions, are themselves not constitutive of an emotion. These feelings *may* become part of an emotion but they are not such in themselves. Goldie himself acknowledges that "there is nothing *intrinsic* to the experience of, for example, the hairs going up on the back of your neck to suggest that it is characteristic of a feeling of fear." (p. 95) Why then should this feeling provide "prima facie" good "reasons" to attribute "emotion-proper" properties to anything?

As to the second "kind" of feeling, the "feelings directed toward the object of the emotion" (p. 92), Goldie thinks that

Feeling toward is unreflective extraspective emotional engagement with the world beyond the body; it is not a consciousness of oneself, either of one's bodily condition or of oneself as experiencing an emotion. Such feelings are thus something that a creature incapable of self-reflective thought—a dog or a toddler, for example—could achieve. We adult humans, however, are capable of a turn of reflectiveness: we are capable noticing through introspection that we have feelings toward something. (p. 96)

But, once again, the example he provides is not convincing:

[Y]ou are in an audience at a conference and a new speaker takes the stand. A friend next to you observes that you are becoming increasingly restless; your fingers are drumming on your notepad, your foot is tapping, and your lips and jaw are tense. Your friend

surmises, rightly, that you are becoming irritated by something about the speaker: his manner, what he is saying, or something. But you are not aware of this. You have not noticed that you are feeling irritated by the speaker, yet you do have feelings of irritation toward him. Then your friend passes you a note, asking what is irritating you; and *then* you notice, or become aware, that you are feeling this emotion. Before seeing the note, you had feelings of irritation toward the speaker but were not aware that this was so. (pp. 96-97)

The main problem with this example is that Goldie is here unconvincingly assuming what he is supposed to show: “yet you do have feelings of irritation toward him”; “[b]efore seeing the note, you had feelings of irritation toward the speaker but were not aware that this was so”. Later on, Goldie generalizes this idea: “Your feeling afraid of a burglar, or your feeling angry about the level of unemployment, involves having feelings (of fear, of anger) toward the object of your emotion, and this sort of intentional attitude cannot be identified with, or analyzed into, terms that refer only to unemotional attitudes.” (p. 97) Goldie is trying to show that “emotional feelings are inextricably intertwined with the world-directed aspect of emotion, so that an adequate account of an emotion’s intentionality, of its extraspective directedness toward the world outside one’s body, will at the same time capture an important aspect of its phenomenology. Intentionality and phenomenology are inextricably linked.” (p. 97)

But is this really so? Is the original feeling in the previous example actually “toward” the speaker? Goldie says it is but that we were not aware of it (“You have not noticed that you are feeling irritated by the speaker, yet you do have feelings of irritation toward him”; “[b]efore seeing the note, you had feelings of irritation toward the speaker but were not aware that this was so”). Notice that we can confirm it *was* “toward” the speaker (even when we were unaware) because we *noticed* (became aware) it was so later on. But why should we conclude from this that it was toward the speaker even when we were unaware? Could the intentionality not have been *added* to the feeling precisely at the moment in which we “noticed” it? The example does not show the *intentionality* is in the feeling. We do have feelings *without direction* (if by such we understand feelings about *something in the world*). In fact, the very idea of a *feeling towards something* of which we might not be aware is itself a problematic one. If we agree that the “towards” of that feeling is that “we refer it to” (in Descartes’ terms), which means it is somehow *available* to us and *recognized as object* by us, then we should conclude that “feeling towards” always requires awareness.

Emotions do, in any case, constitute an “epistemic route” towards the world, according to Goldie, only if certain conditions are met: “if one is of the right emotional disposition, and if there are no other

undue influences” (p. 99). Under these conditions one will perceive the shadow in the dark as frightening *only* when the shadow *is* frightening:

[I]f one is of the right emotional disposition, and if there are no other undue influences, then one will feel the right emotions and one will perceive things as having emotion-proper properties when and only when they do have such properties. One’s emotions will then help one to find one’s way around the world and to gain extraspective knowledge, so one will be right to “listen to” them. But if one is not properly disposed, or if there is some undue interference with one’s emotional response, then there is a significant risk of getting things wrong. Not only that; one’s emotions can also *distort* perception ad reason. (p. 99)

Why the emphasis on “one will perceive things as having emotion-proper properties when and only when they do have such properties”? Does this mean that, as in the case of sensory perceptions, if our *system* is properly working, we should perceive things as red when and only when they are red? Are these two cases of the same sort? That they are not seems clear, at least, from (a) the different phenomenological regularity of one and the other (sensations are much more *stable*, phenomenologically speaking); and (b) from the very fact that the same perception may or may not be part of the chain of events that also arouses an emotion, in different subjects, at different times or under slightly different circumstances. This only seems to make the claim that objects *are frightening* more problematic than the one that they are red—even if the latter is too, of course. In any case, a distinction between both properties seems necessary.

Descartes’ theory of passions would not fit well within judgment theories for one major reason: judgments, according to Descartes, are actions, not passions, of the soul (see e.g. *Principles of Philosophy* I, art. 34). This implies that *making* judgments and *undergoing* passions are fundamentally different events. We have seen however Solomon’s ambiguous position in this sense: we are both active and “caught up” as we experience emotions. Solomon would not even agree that judgments are always conscious (“They must span conscious and nonconscious awareness,” [p. 82]), as they are for Descartes.³⁵⁰ The idea of an *unconscious passive judgment*, as strange as it would be for Descartes, might indicate there is between them an important similarity in intentions. Unconscious evaluations seem to precede, in the case of Descartes, the representation proper of emotions, in a way similar to Jenefer Robinson’s understanding of the role of “affective appraisals” (p. 42). Particularly interesting is that a

³⁵⁰ “By the term ‘thought’, I understand everything which we are aware of as happening within us, in so far as we have awareness of it. Hence, *thinking* is to be identified here not merely with understanding, willing and imagining, but also with sensory awareness” (*Principles of Philosophy* I, art. 9; AT VIII A 7 : CSM I 195).

major reason for Robinson to defend this idea as central to emotions is to account for the *passive* character of emotions:

If this idea that emotion requires affective appraisal is right, it nicely explains why emotions have always been thought of as passive states and the extent to which this is true. [...] [T]he notion of a noncognitive appraisal produced automatically and automatically resulting in physiological changes explains why traditionally emotions have been treated as ‘passions,’ as phenomena that act upon us and are not directly under our control, rather than as ‘judgments’ that we consciously and deliberately make. Noncognitive affective appraisals are not controllable except indirectly. I can try to program myself or brainwash myself. I can go to a therapist. But I can’t just decide not to react when I return to the scene of the accident [...] (pp. 42-43)³⁵¹

If we read the arousal of the representation Descartes considers proper of, and necessary for, emotions, as a “noncognitive appraisal,” Descartes’ rejection of the idea that our emotions are judgments could have been very similar to Robinson. The idea that we *are moved* by our emotions is, in fact, rarely questioned in contemporary debates. Nussbaum, defendant of the judgment view, acknowledges its plausibility as a difficulty for her position: “[I]t is difficult to find in them [i.e. judgments] the passivity that we undoubtedly experience: for judgments are actively made, not just suffered.”³⁵² However, the neo-Stoic view of judgment which she is proposing in order to encapsulate the fundamental features of emotions do not address this request. “According to the Stoics [...] a judgment is an assent to an appearance” (p. 191).³⁵³ This is clearly an *action* in the Cartesian sense.³⁵⁴ None of the four major reasons she offers to

³⁵¹ “I have suggested that an affective appraisal is an essential part of an emotional state, and an affective appraisal is by definition an automatic appraisal. In the simplest cases, an affective response is preprogrammed in an organism, as when we—and lots of other organisms—respond to a sudden loud sound with the startle response. More complex cases involve wants and interests that have been acquired or learned but that still evoke an automatic appraisal of ‘I like it!’ or ‘I don’t like it!’ or perhaps ‘This is an offense!’” (p. 42)

³⁵² Martha Nussbaum, “Emotions as Judgments of Value and Importance,” in R. Solomon, ed., *Thinking About Feeling*, p. 187.

³⁵³ “To understand the case for the view that emotions are judgments, one needs to understand exactly what a Stoic means when he or she says that; [...] According to the Stoics, then, a judgment is an assent to an appearance. In other words, it is a process that has two stages. First, it occurs to me or strikes me that such and such is the case. [...] It looks to me that way—but so far I haven’t really accepted it. Now there are three possibilities. I can accept or embrace the appearance, take it into me as the way things are: in this case it has become my judgment, and that act of acceptance is what judging is. I can repudiate it as not the way things are: in that case I am judging the contradictory. Or I can let it be there without committing myself to it one way or another. In that case I have no belief or judgment about the matter one way or the other.” (M. Nussbaum, p. 191)

³⁵⁴ “Sensory perception, imagination and pure understanding are simply various modes of perception; desire, aversion, assertion, denial and doubt are various modes of willing” (*Principles of Philosophy* I, art. 32; AT VIII A 17 : CSM I 204); “In order to make a judgment, the intellect is of course required since, in the case of something which we do not in any way perceive, there is no judgment we can make. But the will is also required so that, once something is perceived in some manner, our assent may then be given. Now a judgment—some kind of judgment at least—can be made without the need for a complete and exhaustive perception of the thing in question; for we can assent to many things which we know only in a very obscure and confused manner.” (*Principles of Philosophy* I, art. 34; AT VIII A 18 : CSM I 204)

show that emotions are “judgments” addresses either this question (pp. 187-89).³⁵⁵ Furthermore, understanding emotions as a form of *perception*, rather than judgments, could not only satisfy those four features, but also their *passivity*.

Solomon himself acknowledges that the idea of perception could be a good substitute for judgment, but he still prefers the latter: “I prefer the concept of judgment precisely because it maintains these close ties to perception but at the same time is fully conceivable apart from perception” (p. 81). Why this interest in conceiving it “apart from perception”? One obvious reason would be to emphasize the *active* understanding of emotions. Emotions are judgments which “must artfully bridge the categories of the voluntary and the involuntary” (p. 83); they are to some degree “our ‘doing’ and our responsibility” (p. 83). Feelings themselves can be “of activity and not passivity” [p. 86].

What is the concept of “judgment” then supposed to capture or emphasize? Leaving aside its very problematic *active* aspect, Nussbaum, Solomon, Greenspan and others seem to be inclined to adopt it in order to point out the fundamental role in emotions of (a) some form of *cognition* and of (b) some form of *evaluation*. Peter Goldie, for example, sums up what “cognitivism” regarding emotions is alluding to both ideas: “This view [i.e. “cognitivism”] is of the emotions as playing an essential role in our gaining evaluative knowledge of the world.”³⁵⁶ *Judgment*—as a simile or not—is insufficient to capture these ideas. In a sense it expresses too much, and in another not enough. Solomon’s proposal that the judgments proper of emotions have two types of “manifestations,” a propositional and a non-propositional one—or, so to speak, a *mental* and a *bodily* judgment—could be read, à la Descartes, as a *mind-body judgment*. But Descartes’ own account seems to address the cognitive and evaluative requests without running into the difficulties brought up by thinking in terms of *judgments*.

Descartes’ is a *cognitive* view insofar as a specific *representation* is necessary for a passion to occur, but not insofar as a belief (which requires assent [*Principles* I, art.34]) is necessary (which is not). To say, however, that for Descartes a passion, as such, is *only* this thought would be an oversimplification. That representation is necessary but so are the bodily changes (that maintain,

³⁵⁵ Those features are: (1) “they are *about* something” (p. 187); (2) “the object is an intentional object: that is, it figures in the emotion as it is seen or interpreted by the person whose emotion it is” (p. 188); (3) “emotions embody not simply ways of seeing an object, but beliefs—often very complex—about the object” (p. 188); and (4) “they are all concerned with *value*, they see their object as invested with value” (p. 189).

³⁵⁶ Goldie continues: “When we are angry at an insult, or afraid of a burglar, our emotions involve evaluative perceptions and thoughts directed toward the way something is in the world that impinges on our well-being, or on the well-being of those that matter to us. Without emotions, we would be worse off, prudentially and morally: we would not see things as they are, and accordingly we would not act as we should. Emotions are, according to this view, a Good Thing.” (Peter Goldie, “Emotion, Feeling, and Knowledge of the World,” in R. Solomon, ed., *Thinking About Feeling*, p. 91)

strengthen, and express the emotion) and the disposition of the soul to act. As to their evaluative aspect, passions are (a) perceptions of (b) the significance (“importance”) of the objects in order to increase our natural perfection (i.e. their worthiness to be joined in order to constitute with them unities of greater perfection). In this sense we can say they can be considered *evaluative* perceptions, which preserves their passivity and distinguishes them from other perceptions (sensory or appetites).

5.3. THE ACTUALITY OF THE *PASSIONS OF THE SOUL*

5.3.1. Some Cartesian views relevant in current debates.

5.3.1.1. Past experience

One of the most significant *pieces* of Descartes’ causal explanation of the passions is the role of past experience (physiologically impressions on the brain), which can account for any individual occurrence, under similar circumstances, of a passion (regarding the soul) instead of a sensation, or of one passion rather than another. It can also account for any form of social influence (*via* education). Interestingly enough, this idea is, in general, quite absent in contemporary debates on emotions. And it is not clear that its absence means it is taken for granted.

In an attempt to incorporate what is usually considered “emotional subjectivity” into a cognitivist view, Cheshire Calhoun has recently tried to show that it does not have to imply “epistemic subjectivity.” “Labeling emotions ‘subjective’ works to undercut their epistemic significance and, given the premium we place on knowledge, their significance period” (p. 109). Calhoun has tried to restore the *epistemological* “significance” of emotions by drawing attention to the role of what he calls “personal biography”.³⁵⁷ The concept, although never explicitly defined, does not seem to be very different from the set of “past experiences” and “memories” which in Descartes can determine our emotional experience. Calhoun, also in a fashion similar to Descartes, proposes to understand emotions, in general, as *selective perceptions*, a view which, according to him, “does not entail epistemic subjectivity” (p. 109).

³⁵⁷ Cheshire Calhoun, “Subjectivity and Emotion,” in R. Solomon, ed., *Thinking About Feeling*, p. 108.

Passions are, as Calhoun puts it, “biographically” *selective*: “[e]motions presuppose, and thus emotion-statements express, evaluations made from a biographically subjective viewpoint” (p. 117). This means that “[t]he kind of selective attention that typifies emotion can be epistemically fruitful” (p. 109).³⁵⁸ And so fundamental is our “personal biography” in our emotions that “[t]o criticize emotion, then, is to criticize the person, her memories, her way of life, her style of thinking, and evaluative systems.” (p. 121) Descartes would agree.

How does this liberate emotions from “epistemic subjectivity”? According to Calhoun, it seems that “having good reasons” for something is enough to avoid the charge of being ground on subjectivity. “Similarly unreasonable is the charge that emotions are subjective because they create a world of, say, frightening or adorable objects, or heroes and heroines. Any interpretive reconstruction of the world—for example, positing the existence of quarks—constitutes a world. Avoiding subjectivity only requires having good reasons for the interpretation.” (p. 109) Thus, Calhoun’s task turns from an apparent initial attack on the idea that emotions are epistemically subjective, to a *justification* of their “epistemic subjectivity.” He does so by defending their epistemological significance which, in turn, is based on a revision of “our ideal of knowledge” (p. 113). Rather than revising the value of “subjectivity,” he makes room within the adjective “epistemic” for that which “significant for our lives”:

My point here is that it is only from a peculiar, and questionably desirable, academic point of view that epistemic objectivity appears to require biographical objectivity. If our ideal of a knowledge purified of its connection to the knower’s daily life, then getting the truth will of necessity mean adopting an anonymous, impersonal point of view, and emotions will have no place in the pursuit of knowledge. If, on the other hand, our ideal of knowledge is that it be relevant to living some kind of life, then getting the truth will be compatible with taking a biographically subjective point of view. And we might reasonably expect emotions to come into play in the pursuit of knowledge. (p. 113)

Not only none of this is new for a careful reader of the *Passions of the Soul* but one might even consider it quite insufficient in comparison. Despite his revision—i.e. having found room for “significance for our lives” within the idea of “epistemic”—Calhoun does not explore that “significance” any further. Had he done so, he might have felt the need for another more fundamental revision: a questioning of the idea that the function of our emotions is fundamentally epistemological—which, in turn, could have brought him

³⁵⁸ “Jealousy, rather than detrimentally biasing perception, may appropriately draw attention to evidence of a decaying relation that otherwise might have been overlooked. Moreover, we are selectively attentive whenever we adopt a point of view, whether it is emotional, moral, prudential, or scientific. Rigidly adhering to any point of view, emotional or nonemotional, may incur judgment errors: but simply adopting a point of view and being selectively attentive does not entail epistemic subjectivity.” (p. 109)

much closer to Descartes (even without reading him). That idea—the epistemological value of emotions—is rarely questioned in contemporary debates.

5.3.1.2. Intellect and emotions

Familiar to a reader of the *Passions of the Soul* is also Michael Stocker's defense of the idea that the separation between *intellectual* and *emotional* life is, at least in two senses, not a well-founded one.³⁵⁹ According to Stocker, (1) “there are important emotional ‘aspects’ of the intellect, such as intellectual interest and excitement” (p. 144) (which means that “emotions and desires can be useful and beneficial for intellectual activity” [p. 136]); and (2) there are “intellectual emotions, or emotions about intellectual matters” (p. 144). Notice that the latter idea—that there are “intellectual emotions”—has been present in modern debates since, at least, William James, as we saw above.

As to the beneficial role emotions have for the intellect—or for our intellectual life—Stocker tries to show that emotions “help make everyday life—indeed everyday, intellectual life—healthy and good.” (p. 137) And they help, according to him, mainly insofar as “intellectual interest and excitement” (p. 140), as “instances of both care and desire” (p. 140), contribute to that intellectual life. Learning, a major aspect of our intellectual life, depends on interest and excitement, which are “emotions” (p. 141):

[L]earning involves developing interest and excitement, as well as the ability to mobilize and direct them. It also involves developing an ability to master them and not to be overwhelmed or disrupted by them. We learn both where to direct our interest and excitement, and also how to modulate them in relation to the value, often the intellectual value, of what does or should interest or excite us as students or practitioners. For just as intellectual interest and excitement are important and often essential for good intellectual activity, unmodulated and undirected interest and excitement can impede or harm, even preclude, good intellectual activity.

It is clear, then, that many instances of intellectual interest and excitement are about what is intellectually good. But it is also clear that many instances of them are *not* about what is good. I am here not thinking about what is morally bad, such as sadism, or aesthetically bad, such as kitsch. These can be intellectually interesting, at least as objects of study. (p. 140)

Stocker is particularly interested in emphasizing that emotions are not only “instrumentally useful for intellectual activity” (p. 148). They are “internal to another ‘phase’ or aspect of our intellect and our

³⁵⁹ Michael Stocker, “Some Considerations about Intellectual Desire and Emotions,” in R. Solomon, ed., *Thinking About Feeling*, pp. 135-148.

intellectual work and life” (p. 148). “Showing that attention is best for intellectual work when it is made up, or infused by, those intellectual emotions thus goes well beyond showing that intellectual emotions are instrumentally useful—much less *only* instrumentally useful—for intellectual work and life” (p. 148). Unfortunately the language he uses (“best for”) still seems instrumental. In which sense then are emotions “internal” to the intellect other than in the sense that we can say that the intellect is also *emotional* (insofar as we have intellectual emotions)?

The above passage reminds of the function Descartes saw in wonder, the first of the basic emotions.³⁶⁰ But unlike Descartes—who considers wonder a primitive passion--Stocker considers “interest and excitement” to be “intellectual emotions” (p. 141).³⁶¹ Stocker’s characterization of these emotions, though, differs from Descartes’. “Intellectual emotions” are defined by Stocker simply as “emotions about intellectual matters” (p. 145), which does not clarify much. Does this mean that “interest and excitement” about a mathematical problem is fundamentally different from “interest and excitement” upon the contemplation of Milo’s Venus? In which sense? What is an “intellectual matter”? Is “intellectual” here opposing ideas to objects? Another question is how useful a classification of emotions according to their *object* might be (as Descartes pointed out). Stocker says that “many instances” of these emotions are about what is “intellectually good”—to be distinguished from what is, simply, *good*--and “good” seems to mean good for knowledge. Summing up, neither (a) Descartes considered “interest and excitement” as intellectual emotions, but (b) both Stocker and Descartes seem also to differ on what an intellectual emotion is.

Like Descartes did about wonder, however, Stocker warns about the dangers of excitement and interest for our intellectual life, specially when it is excessive. And he does so in terms very similar to Descartes’:

I want to insist that we do have some reason to be wary of intellectual interest and excitement. They can be dangerous for moral and intellectual concerns. They can be dangerous in the ways they get us to attend to intellectual matters when we should,

³⁶⁰ “When our first encounter with some object surprises us and we find it novel, or very different from what we formerly knew or from what we supposed it ought to be, this causes us to wonder and to be astonished at it. Since all this may happen before we know whether or not the object is beneficial to us, I regard wonder as the first of all the passions. It has no opposite, for, if the object before us has no characteristics that surprise us, we are not moved by it at all and we consider it without passion.” (*Passions* II, art. 53, AT XI 373 : CSM I 350)

³⁶¹ “I have mentioned various examples of excitement and interest for a number of reasons. One is to help us see what makes an emotion an intellectual emotion may well not be the category of emotion—here, interest and excitement. The second is to borrow sustenance from these other examples: it is clear that a child’s interest in and excitement over a game involve emotions. My question is, What is missing from Watson’s and Crick’s interest and excitement that would lead us to deny that their excitement and interest are emotions? My reply is that nothing is missing; their excitement and interest are also emotions, intellectual emotions.” (p. 141)

instead, be working in nonintellectual areas. So too, they can be dangerous in the ways they get us to work in the wrong intellectual area or too much in one area. Here we need only think of the dangers of overinterest or overexcitement, or interest and excitement about the wrong facts, and the like. (p. 142)

Clearly unaware of his predecessors, Stocker considers this warning a clear departure from the “tradition” and even seems to credit himself with “recognizing” intellectual emotions, something which—even if he does not mean that he has revealed their existence for the first time (which is not clear)—seems also to constitute a historical distortion:

[I]ntellectual emotions are not dangerous as such; nor are they to be warned against as such. Perhaps, in fact, this is why intellectual emotions were not recognized. By not recognizing them, our tradition was able to warn against emotions, taken generally.

Having recognized them, we must modify our tradition as warning against only certain emotions. I will not offer a characterization of the difference between those emotions our tradition finds dangerous and those it does not. But I will offer this speculation, that difference is connected with the view that emotions, or the emotions we are warned against, are bodily, primitive, and essentially arational. (p. 142)

The last reference suggests that for Stocker, as for Descartes, intellectual emotions are not “bodily,” but, Stocker does not clarify in which sense this is so. Notice, however, that the opposition dangerous/non-dangerous as corresponding to bodily/intellectual shares something with Descartes’ own opposition between emotions (intellectual or internal) and passions (which are always caused by the agitation of the spirits). Although Descartes would not accept Stocker’s distinction in terms of degrees of dangerousness, emotions (since they are caused by the soul) do not depend on a (bodily) distorted representation of their object. In this sense they are more *reliable* than passions in general (not about objects, about the state of perfection of the mind-body union). On the other hand, Stocker’s *discovery* of a new class of *beneficial* passions would have seemed to Descartes to be based on a poor understanding of our nature.

Stocker, unlike Descartes, stops short from arguing on whether reason or emotion plays the “leading role” regarding “good intellectual work” (p. 144)—or, we can add, regarding any other matter. The limits he sets his discussion within (emotions only with respect to “intellectual work”) are probably an unrecognized major obstacle for him to be able to offer a broader account. Free from this restriction, Descartes’ account supports the idea that, regarding our natural happiness at least, the “leading role” is played by our passions. Reason comes after our passions, specifically to check whether the disposition the passion brings about inclines us to a true good or a true evil, that is, to a beneficial or harmful action—and

thus whether we should follow that disposition or not. Reason cannot but help us avoid harm. This reason is second to our passions (regarding our perfection) and also poorly equipped to offer guidance regarding our natural perfection.

Jon Elster has introduced in contemporary debates another idea in relation to the role of surprise in our emotional life. As discussed in Chapter 3, a major reason why Descartes seems to consider wonder (which is a “sudden surprise of the soul” [*Passions* II, art. 70, AT XI 380 : CSM I 353]) a *basic* passion seems to be its function in combination with, or within, other emotions. Joined with other passions, wonder “augments almost all of them” (*Passions* II, art. 72, AT XI 382 : CSM I 353). Surprise, which is what defines wonder (wonder is “a sudden surprise” [*Passions* II, art. 70, AT XI 380 : CSM I 353]) plays this role. Jon Elster has recently referred to this effect of surprise in order to explain ‘a paradox to emotional satisfaction that does not arise in the case of hedonic experiences.’³⁶² That paradox is that “[s]urprise has a multiplier effect on emotional satisfaction that it does not have on hedonic satisfaction.” (p. 160) This explains, for example, the “collective ecstasy” generated in Paris by the victory of France in the 1998 World Cup (p. 160): “because the *actual* utility of the event depends on its *ex ante* probability, that probability enters twice into its *expected* utility” (p. 160). This could explain why, according to Descartes, wonder “augments almost all of them [the passions]” (*Passions* II, art. 72, AT XI 382 : CSM I 353). The idea could be integrated into Descartes’ view by introducing *expectability* as a relevant factor to explain the occurrence of the passions. But Descartes did somehow introduce it already by making of wonder a primitive passion. According to the interpretation offered in Chapter 3, an important reason for this could be that wonder discriminates *unusual* objects, among which other passions discriminate those “important” for our natural perfection.

5.3.2. The *Passions* and demands placed on current theories of emotions.

5.3.2.1. Emotions in animals.

John Deigh has pointed out that “a successful theory of emotions” must be able to account, in particular, for two “facts” which, he thinks, have so far appeared to be irreconcilable:³⁶³ “[t]he first is that emotions

³⁶² Jon Elster, “Emotion and Action,” in R. Solomon, ed., *Thinking About Feeling*, p. 160.

³⁶³ John Deigh, “Primitive Emotions,” in R. Solomon, ed., *Thinking About Feeling*, p. 10.

are intentional states in the sense that they are directed at something” (p. 9); “[t]he second ... is that [certain] emotions are common to both humans and animals” (p. 9), namely the set of “primitive emotions” (p. 10). Primitive emotions are, in fact, defined by Deigh as those which are “common” to humans and animals (p. 10):

They are the emotions liability to which is instinctive. That is, a human’s or beast’s liability to them is an inherited trait whose development, to the extent that it depends on the existence of environmental conditions, depends only on those necessary for meeting basic biological needs. Fear, anger, and delight all have primitive forms. The terror of horses fleeing a burning stable, the rage of a bull after provocation by a tormentor, and the delight of a hound in finding and retrieving his quarry are all examples. (p. 10)

Deigh does not, however, attempt to defend or clarify these “facts”. As to the first one, he does not discuss what it means to say that an emotion is “directed at something”. And as to the second, no argument is offered in favor of its two basic assumptions, i.e. (a) that animals do have emotions and, especially, that (b) their emotions are of the same sort than some of ours.

The fundamental problem—in order to provide a theory that can satisfactorily account for both facts—is how to close the “gap between the way intentional states of mind are typically understood and the way primitive emotions are typically understood” (p. 10). The qualification “typically understood” is important here. It serves Deigh to narrow the scope of the problem to a discussion of how, in particular, “standard cognitivist theories,” on one hand, and those he calls the “Darwinians,” on the other, have failed to close the “gap”. Whether these views should be taken to represent what is “typically understood” by intentionality and animal emotions is, however, questionable. It is not either clear who these “standard cognitivists” and “Darwinians” are. Although Deigh may give the impression that he is dealing with the two current main *paradigms*,³⁶⁴ it is not obvious that any of the authors in the 2004 compilation by Solomon, for example, would easily accept to be classified under any of these two labels (at least as described by Deigh). Even the only person explicitly called by Deigh “one philosophical enthusiast for the Darwinians’ program” (which, according to the accompanying footnote, happens to be Paul E. Griffiths) would quite likely not feel at ease in that category.

³⁶⁴ “A successful theory of emotions must account for both of these facts. It cannot skirt them. Yet accounting for both has proven to be surprisingly difficult. Some theories, particularly the cognitivist theories that have been so influential in philosophy and psychology over the last thirty years, use their first fact as their point of departure and leading idea, but they then have trouble accommodating the second. Other theories, particularly those that have developed under the influence of Darwin’s seminal work *The Expression of the Emotions in Man and Animals*, take the second fact as their springboard, but they then have trouble accommodating the first.” (p. 10)

Deigh sums up the view on intentional states held by the “standard cognitivist theories” in these terms: “On standard cognitivist theories, an intentional state of mind is either a thought or a compound state that includes a thought as a component, and in either case the content of the thought is represented as a proposition.” (p. 10) This is also the fundamental reason why the cognitivists, according to Deigh, are not able to account for emotions in animals. “They [the cognitivists] must ... take the thoughts in virtue of which primitive emotions are intentional states to be radically unlike the thoughts in virtue of which the emotions they take as paradigms of their subject are intentional states” (p. 14).

He rejects the apparently easy *solution* that a cognitivist could simply “assume that the thoughts primitive emotions contained were like the thoughts contained in the distinctively human emotions that her theory takes as the paradigms of its subject, except that they lacked propositional form” (p. 11). According to Deigh, not even this would free ourselves of the consideration of thoughts as propositions.

[Y]ou might think that the thoughts contained in the former [i.e. in “distinctively human emotions”] were just unencoded versions of the thoughts contained in the latter. To think this, however, would be a mistake. The concept of an encoded thought is that of a thought expressed in the words of some language or its equivalent. When the thought is a complete one, then it is expressed by a complete, declarative sentence of that language. Consequently, if there is a version of this thought that is unencoded, it must be a complete thought in abstraction from every complete, declarative sentence that expresses it, and this is just what logicians mean by a proposition. A proposition, on their understanding of it, just is the meaning of a complete, declarative sentence of some language. It is what one grasps when one understands the sentence and what one preserves when one accurately translates it into a sentence of another language. (p. 11)

The problem of this argument is mainly in the starting point. Even if we accept that to say that the only alternative to a propositional thought is an “unencoded” one and that “unencoded” *must* be understood as propositional; and even if we accept that we should follow this reasoning if we want to preserve the “likeness” of the thoughts involved in both human and animal emotions,³⁶⁵ it is still not clear why we should think about intentionality in the terms of the “standard cognitivist theories”.

The “Darwinians, by contrast, start with a conception of emotions as common to humans and beasts and indeed as having first occurred in beasts millions of years before the first language using

³⁶⁵ “[T]o think that we could so [like the thoughts contained in human emotions “except that they lack propositional form”] understand them [animal emotional thoughts] is to suppose that there is some way in which they and the thoughts that these distinctively human emotions contain are alike, and it is unclear what the form of this likeness could be. Of course, both are alike in being identical with or a component of an intentional state of mind, but to say that they are alike in this way is merely to reaffirm what is true of both types of emotion in virtue of their being intentional states. It is merely to reaffirm that intentional states are or include thoughts.” (p. 11)

animals appear on the earth. They will therefore have no interest in this or any explanation that is based on the emotions distinctive of human beings.” (p. 19) The problem of intentionality for the Darwinians is then how to explain that the dog’s anger is “directed at the stranger”: “The dog’s anger, in this case, is directed at the stranger, and what the Darwinians must explain is how to understand this feature of the dog’s emotion, given that it cannot be explained by a belief the dog has or a judgment that the stranger has invaded his territory” (p. 19).

According to this, Deigh thinks, the Darwinians “would locate its object [the object of the dog’s anger] in the perceptions that excited and sustained that event, which is to say, in the sensory images that activated the neurophysiological mechanisms whose operations, on the Darwinians’ view, it consisted of” (p. 20). Those “perceptions that excited and sustained the event” have, according to Deigh, two features: “your being the object of his attention and his tracking you by virtue of his sensitivity to some property you have” (p. 20). As it can be expected, Deigh argues that this is not enough to explain intentionality, to explain the dog’s anger *at you*. His reason is simply that intentionality cannot be explained in terms of “sensory images”: “in identifying the emotion as anger, we identify *how the object appears to the dog* and not simply that its object is the object of the dog’s attention and is being tracked by him” (p. 21 [my emphasis]). The failure to account for “this intelligibility condition” is the main reason Deigh offers to defend that the Darwinians are unable to account for intentionality in beasts’ emotions.³⁶⁶

The way Deigh analyzes the dog’s anger at you (when you invade his territory) from the point of view of those he calls Darwinians is particularly unconvincing. He concludes that Darwinians cannot capture the intentionality since only two “features” of the situation could be taken as “sufficient to constitute you as the object of that emotion” (p. 20): “[1] your being the object of his attention and [2] his tracking you by virtue of his sensitivity to some property you have” (p. 20). This is how the Darwinians “would locate its object in the perceptions that excited and sustained that event, which is to say, in the sensory images that activated the neurophysiological mechanisms whose operations, on the Darwinians’ view, it consisted of” (p. 20). And since sensory images are, obviously, not enough to account for the

³⁶⁶ “The real problem, then, with the explanation that we are assuming the Darwinians would endorse is that it misses this intelligibility condition on something’s being the object of an emotion. As far as the explanation goes, you could be the object of someone’s attention, that person could be tracking you, and these features could be features of perceptions that activated neurophysiological mechanisms whose operations produced the facial movements that were the true facial expressions of a certain type of emotion, and yet you might still not be the object of an emotion of that type. For it might still be the case that you do not appear to its subject in any way that makes his feeling an emotion of that type intelligible.” (p. 21).

object of emotions, the Darwinians fail to account for intentionality in beasts' emotions.³⁶⁷ However, nothing in the central position of the Darwinians, as presented by Deigh, seems to indicate that they *must* provide an explanation only in terms of "sensory images":

What separates the Darwinians from Darwin is their belief that the study of an emotion's true expressions illuminates the very nature of the emotion. Darwin ... conceived of emotions as analogous to sensations in accordance with traditional British empiricism, and on that conception an emotion's true expressions no more illuminate its nature than swollen gums illuminate the nature of a toothache. The Darwinians, however, conceive of emotions differently. An emotion, on their conception of it, is a neurophysiological event whose manifestations typically include the facial and overt bodily movements that are the emotion's true expressions. The event that is the emotion occurs when certain neurophysiological mechanisms are activated, and activating the mechanisms produces these movements along with covert physiological changes such as changes in heartbeat and electrogenic activity. (p. 18)

Deigh does not discuss why the Darwinians would only be satisfied with an explanation based exclusively on "sensory images" when it comes to animals. Thus presented, the problem would imply also a serious obstacle for the Darwinians to distinguish sensory perceptions from emotions in humans. The assumption that if we cannot explain intentionality in terms of sensory perceptions a Darwinian would not be pleased, imposes an enormous unjustified restriction on the discussion.

Summing up, as Deigh puts it, the main obstacle for the cognitivists to account for the emotions in animals is their commitment to explain intentional states in terms of propositional thoughts. And the main obstacle for the Darwinians to account for intentionality in animals is that, as Deigh presents it, they are committed to provide a purely mechanical account ("as a neurophysiological event" [p. 20]) of the emotions where *how things appear to us (humans and beasts)* cannot be taken into account. Deigh does not, however, explore an important possibility compatible with both the cognitivists's and Darwinians's view, namely, that the emotions of animals and humans could be of different kinds. Once the idea of "primitive emotions" (as those shared by beasts and animals) is accepted by Deigh, there is no room for this option. Why take for granted that the "terror of horses fleeing a burning stable" is of the same kind than, say, the terror to address a crowd before giving a speech, for example?

³⁶⁷ "One could, to be sure, revise the explanation again to resolve the problem. But one could not do so and still maintain the Darwinians' conception of emotions. And this gets to the heart of the trouble the Darwinians have in trying to accommodate the fact that emotions are intentional states. Because they conceive of an emotion as a neurophysiological event whose type is determined by certain facial movements, namely those that are produced by the operations of the neurophysiological mechanisms that the emotion consists of, they have to allow, as a conceptual possibility, that those operations and the facial movements they produce can occur, and occur in response to perceptions of a particular object, even though the object does not appear to the subject in any way that makes his feeling the emotion intelligible." (p. 22)

More importantly, even within “certain neurophysiological mechanisms” there is room for much more than just “sensory images”. There is room, in particular for past experience, for memory, for recognition, and for association of images, among other things. And all this, part of the *nature in progress* of animals may directly affect those “neurophysiological mechanisms”. Your dog’s joy when you arrive home is, of course, not explainable in terms of his seeing you *only*, unless seeing *you* means also perceiving you in association, or *together with, all he has learned about you*. That Darwinians must avoid explaining in terms of “belief” and “judgment” does not imply there are not other options. Could animals, for example, have representations of the “second kind” (Descartes), that is of the sort that triggers emotions? Those representations are not beliefs or judgments. Those representations could well carry the content of its emotion. Natural constitution and past experience could account for the difference between the representations proper of sensations and those proper of emotions.

Insofar as animals, according to Descartes, do not have minds, they cannot, in principle, have passions strictly speaking (since they require representations). However, as suggested above, Descartes is not—at least in the *Passions*—firm in his denial that animals have thoughts (*Passions* I, art.50); he is firmer on the denial that they have “reason” (i.e. free will). This would suggest that animals could have *passive* minds only, and thus could have representations, but not volitions or any thought resulting from them (such as beliefs and judgments).

5.3.2.2. The unification of the theory of emotions

Paul Griffiths has presented probably the most forceful objection to the assumption that philosophers of emotions are talking about the same thing, and that their object can be scientifically studied. Griffiths has argued that “emotions are not a natural kind”³⁶⁸--and “the same is probably true of many specific emotion categories, such as anger and love” (p. 233). A “natural kind” is a “distinct kind for the purposes of scientific enquiry” (p. 234). According to Griffiths there are, at least, two kinds of emotions: basic and “complex” (p. 237), but there could more. “[W]e should accept that there are two or more different kinds of psychological process involved in emotion, and if research into complex emotions suggests that, like basic emotions, they can be classified into emotion types, then there are two or more different kinds of emotions.” (p. 237)

³⁶⁸ See e.g. Paul E. Griffiths, *What emotions Really Are: The Problem of Psychological Categories* (Chicago: University of Chicago Press, 1997), 14-17 and 241-47; and “Is Emotion a Natural Kind?” in R. Solomon, ed., *Thinking About Feeling: Contemporary Philosophers on Emotions*, pp. 233-49.

That basic emotions should be considered such is not in question for Griffiths. “Basic emotions are rapid acting, failsafe devices that produce evolved behavioral, physiological, *and cognitive* responses tailored to certain critical features of the environment. They are faster and more reliable than the slower, but arguably more accurate, responses tailored to certain critical features of the environment.”(p. 240) What is not clear to him is that all emotions are of the same “kind” basic emotions are.

Griffiths sees the distinction in kind between basic and complex emotions in four main features. (1) “it is characteristic of some complex emotions that they occur in response to complex properties of the stimulus situation and so need a more sophisticated appraisal of the environment than would be obtained by adding together the appraisal criteria for the basic emotions” (p. 239); (2) “some complex emotions endure much longer than the basic emotions. What is more, they endure as real psychological processes, not mere dispositions” (p. 239); (3) “I denied that all complex emotions result in blends of the facial action associated with the known basic emotions”; and (4) “while basic emotions have reciprocal interactions with more complex cognitive processes, some complex emotions are more directly involved in the control of long-term, planned action” (p. 239). Notice, first of all, that Griffiths does not affirm that *all* complex emotions exhibit *all* these four features. In fact he does not even attribute any of the four features to all complex emotions, not even clearly to a majority of them (see the qualifiers in all cases: [1]“characteristic of some complex emotions”; [2]“some complex emotions...”; [3]“I denied that all complex emotions...”; and [4]“some complex emotions...”).

Jenefer Robinson has addressed Griffiths’ objection to a *unified* theory in a way that would be similar to how Descartes would probably answer today:³⁶⁹

My suggestion is that there is a set of inbuilt affective appraisal mechanisms, which in more primitive species and in neonates are automatically attuned to particular stimuli, but which, *as human beings learn and develop*, can also take as input more complex stimuli, including complex “judgments” or thought. Furthermore, although these affective appraisals are at the heart of the emotion process, they always give way to cognitive appraisals and reappraisals that may put an end to the emotion episode or modify it in various ways. The fear system responds not just to “large black bear” but also to much subtler threats requiring cognitive processing, such as the veiled insult from my boss or potential loss on the stock market. And although its results may always include some of the symptoms of the emergency reaction (and increased heart rate and so on), subsequent cognitive appraisal and reappraisal may result in a wide variety of other behaviours. (p. 41 [my emphasis])

³⁶⁹ Jenefer Robinson, “Emotion: Biological Fact or Social Construction,” in R. Solomon, *Thinking About Feeling*, pp. 28-43.

By saying that “affective appraisals are at the heart of the emotion process” Robinson means that “it is the affective appraisal that ‘evaluates’ a situation in terms of a few simple categories (‘That’s an enemy!’ ‘That’s a friend!’ ‘I like this!’ ‘I don’t like this!’) and that sets off the physiological activity, action tendencies, and changes in facial expression that constitute the emotional response.” (p. 43) This affective appraisal does not need to be always one in terms of “simple categories”. It “may itself be an appraisal of some cognitively complex information (‘My boss insulted me’)” and even “give way to further cognitive activity, which will modify my responses.” (p. 41)³⁷⁰

Descartes would probably also assign to “past experience” (broadly understood) the *task* of building, out of “automatically-attuned” mechanisms, the ability to have complex emotions. And he would probably also accept the idea of the “inbuilt affective appraisal mechanisms” as part of our natural constitution. According to the genealogical account he provides in the *Passions*, together with his distinction between the function of the passions in relation to the body and in relation to the soul, we can say that our “inbuilt system” would be an “affective appraisal mechanism,” as Robinson says, able to appraise *only* bodily sensations of pleasure and pain. The rest of the passions, the ones which are not about the body, would be learned. Thus, the joy caused by pleasurable sensations would be part of that “inbuilt system”; the joy caused by passing a test would not (i.e. it would be learned). In Descartes’ terminology the former is about the body (or the state of the mind-body union) and the latter about the soul (or the state of the soul-object or soul-world union). Descartes is, thus, somehow addressing the problem of the complex emotions by distinguishing levels of aboutness and their relationship to either our natural capacity or our learned one.

Interestingly enough, one of Griffiths’s suggestions to reunify the theory of emotions is to consider “multilevel models of emotional appraisal” (p. 245)--against “a key assumption of most philosophical reasoning about emotion, which is that emotional cognition manipulates emotional representations on the basis of their content, and thus that emotional processes can be explored via the semantic ‘logic’ of emotions” (p. 245). The basis of the proposal is this: “How emotional and other representations interact, if they interact at all, depends on details of cognitive architecture as well as on

³⁷⁰ “In short, I am suggesting that it is always an affective appraisal that *initiates* an emotional response, but that this affective appraisal may itself be an appraisal of some cognitively complex information (‘My boss insulted me’). Furthermore, although it causes physiological changes willi-nilly, it will give way to further cognitive activity, which will modify my responses. (Although my heart is racing, I realize it’s best if I smile cheerfully.) In retrospect an emotion process of this sort may be catalogued in recollection as one of the emotions we recognize in our folk psychology (in this case, fear).” (p. 41)

the content of the representations” (p. 245). That “cognitive architecture” is what the “multilevel models of emotional appraisal” capture, according to Griffiths. “Multilevel models of emotional appraisal suggest that the same stimulus can be represented in several places in the human brain by different representations. Hence it is vital to understand not only what these multiple appraisals have in common, but also how they *differ* and how they *interact*.” (p. 245)

Accordingly, Griffiths distinguishes “low-level” and “high-level” emotional appraisals. He points out two main differences: (1) “low-level emotional appraisal seems to involve action-oriented representation” (pp. 246-247): “I suggest that it is simply misleading to describe low-level appraisal as evaluative judgment, or using any other locution derived from a psychology that presumes a fundamental distinction between data and goals” (p. 246). And (2) “low-level emotional appraisal may differ from high-level ... in terms of the narrow inferential role imposed on low-level representations by the task specific architecture in which they occur” (p. 247). Griffiths points out three senses in which he thinks “low-level representations” may be “imposed” this “narrow inferential role”: (a) “low-level appraisal processes do not have access to most of what is represented elsewhere in the brain, which is why knowledge that the cockroach in my drink has been completely sterilized does not eliminate the disgust response” (p. 247); (b) “the processes of affective computing, as opposed to their final output, are not available for inspection by other cognitive subsystems” (p. 247); and (c) “the inferential principles used in affective computing are not truth-preserving, but heuristically survival- enhancing” (p. 247). As to the latter Griffiths explains: “It does not follow by any reasonable deduction that if I have been poked hard and unexpectedly in the small of my back then I have suffered ‘a demeaning offence to me and mine’ but the automatic appraisal mechanism for anger will reliably draw that conclusion” (p. 247). Notice the not-so-clear, and almost assumption, that “affective computing” is “survival-enhancing”.

Descartes perceived also different levels of appraisal, which could probably serve as basis to talk also about different “kinds” of emotions. He does not however refer to different physiological processes for each type—although they could probably be incorporated in the view. According to Descartes there are two main levels of appraisal: of the state of the body and of the state of the soul (or the mind-body union). And within the latter we could still distinguish (a) appraisal of the state of perfection of the mind-body union, (b) of the union of the mind-body and certain objects and (c) of the mind-body union and the world.

However, the case Griffiths gives to illustrate an “automatic appraisal” would not be the simplest one, nor even “automatic” for Descartes (if “automatic” means reaction based purely on the constitution

of *any* mind-body union). According to Descartes, we would need to learn to be offended by being poked on our back. An example of an “automatic” one for Descartes would probably be the joy produced by the state of health of the body, or the sadness produced by physical harm.

We do not either need to think of Descartes’ “composed” passions simply as clusters of different primitive ones—a major charge of Griffiths against the usual understanding of “complex” emotions (“these states and processes are unlikely to be reduced to the basic emotions or understood as blends or elaborations of them” [p. 237]). The imagination, our judgments, and any other beliefs we may have play an important direct causal role in altering the representation that will determine the passion (and the accompanying bodily changes) (see e.g. *Passions* III, art.153 [generosity]; III, art. 157 [vanity]; III, art.167 [jealousy]). These factors could, in fact, account for Griffiths’ “high level” forms of appraisal, that is, for those cases in which “‘having an emotion’ is responding in a more cognitively complex way to more highly analyzed information” (p. 236).

5.3.2.3. Intentionality and its anomalies

Although there seems to be general agreement that a theory of emotions must account for their intentionality, what this exactly means is very rarely discussed. The intentionality of our emotions, it is generally accepted, is their *object*—which quite often also means an *identifiable* object. If you forget to wake me up on time to run the annual marathon, my ensuing anger—we usually say—is *at* you, and/or *about* missing the marathon. We also may say that my (indirect) anger at you *for having missed the marathon* seems also to be different, although it might be related, from my anger at you *for not having woken me up*. Whether I asked you or not to wake me up is not necessary for me to be mad at you. I could just think I did ask you, or see you for some other reason responsible for my having missed the race. How should we understand intentionality when it comes to emotions? What counts as object of our emotions? How do objects become *emotional objects*? And is it meaningful to think that we can be *wrong* about the object of our emotions? Can I be wrongly mad at you?

Jesse Prinz uses the expression “intentionality of the emotions” to address “the fact that emotions have intentional content” (p. 54) but does not, however, consider necessary to define “intentional content.” According to John Deigh, “emotions are intentional states in the sense that they are directed at something” (p. 9). For Robert Solomon, “intentionality” refers to the *aboutness* and *engagement* of

emotions (which happen also to be their most fundamental features). “Emotions are not just *about* (or ‘directed to’) the world but actively entangled in it.”³⁷¹ Martha Nussbaum also thinks that “aboutness” is not enough to characterize “an intentional object,” which she understands as the object that “figures in the emotion as it is seen or interpreted by the person whose emotion it is” (p. 188). And she clarifies: “[e]motions are not *about* their objects merely in the sense of being pointed at them and let go, the way an arrow is let go against a target. Their aboutness is more internal and embodies a way of seeing. My fear perceived my mother both as tremendously important and as threatened; my grief saw her as valuable and as irrevocably cut off from me.” (p. 188) It is not clear, though, what Nussbaum means by “more internal”. More internal than what? Than other perceptions? Do other perceptions not imply also a “way of seeing”? Since emotions are “judgments” according to her, it could mean “more internal” than other judgments? But what does it mean to talk about “internal” judgments? The expression “my fear perceived my mother...” seems also a bit confusing, since it might be difficult to accept that emotions are *perceiving* subjects. Why not say, simply, “my fear made me perceive” or “my fear represented to me my mother as...”?

The term *intentionality* by itself, insofar as it is an abstract noun, seems to refer more to a property or feature something has than to an *object*. The expression “intentionality of the emotions” forces one to think that it is a property of the emotions—although it leaves open whether emotions would *have* it or *confer* it. Is this a conscious assumption or just meaning unconsciously carried by that particular expression? Peter Goldie offers a definition of “intentionality” which is more sensitive to the grammar of the terms used. “Intentionality is the mind’s capability of being directed onto things in the world.” (p. 93)³⁷² This means we should rather talk of “intentionality of the mind,” not of the emotions. Notice, in any case, the *passive* character Goldie assigns to this “capability,” as opposed, for example, to Nussbaum’s *active* understanding of intentionality: For Nussbaum, “[t]his aboutness comes from my active way of

³⁷¹ “Emotions, I have always insisted, are *about the world*. With my concept of judgment I had tried to make clear that this was not a marginal fact about (some) emotions but the essence of all of them (including oneself, of course, as part of the world). [...] The Scholastic concept of ‘intentionality’ was also an attempt to make this explicit, to insist that the emotions are always ‘about’ something (their intentional *object*). Thus, judgments have intentionality, but I think that the traditional notion of intentionality—and, I now suspect, the concept of judgment, too—still lacks the keen sense of *engagement* that I see as essential to emotions, keeping in mind that thwarted or frustrated engagements characterize many emotions. Emotions are not just *about* (or ‘directed to’) the world but actively entangled in it.” (p. 77)

³⁷² “When you think about your spouse or partner, and about what he or she is doing at this very moment, or when you remember the tree house that you played in that summer when you were twelve, your thoughts and memories are directed toward these people or things as being a certain way; they are presented to you under a certain aspect.” (Goldie 2004, p. 93)

seeing and interpreting: it is not like being given a snapshot of the object, but requires looking at it, so to speak, through one's own window." (p. 188)

Aaron Ben-ze'ev, rather than using "intentionality," talks about "types of intentional reference."³⁷³ He identifies three types: "cognition, evaluation, and motivation" (p. 252). And he thinks that the three of them are "essential components of typical emotions, but an emotion is not identical to any of them" (p. 252).³⁷⁴ "The cognitive component consists of information about the given circumstances; the evaluative component assesses the personal significance of this information; the motivational component addresses our desires, or readiness to act, in these circumstances" (p. 252).

An exploration of the *objects* of emotions and how they become such, may help understand what is usually called their intentionality. There is not agreement on what objects can be emotional objects. The range of criteria goes from Greenspan's strong restriction of the content to "propositional content" (p. 131)³⁷⁵ to Solomon's willingness to accept as objects "ordinary objects of perception (imagination, memory, etc.)" (p. 82).³⁷⁶ According to Goldie "[t]he object [of an emotion] can be a thing, or a person, a state of affairs, or an action or event: when you fear a burglar, the object of your fear is a person; when you are angry about the level of unemployment, the object is a state of affairs (or a fact); and when you are disgusted at the drunken behavior of a man on the train, the object of your emotion is an action." (p. 96)

Peter Goldie's way of talking reflects well a common feature of the usual way of talking about objects of emotions: one object per emotion. Although it may appear as an inconsequential omission, the habit of talking in this way might be actually leaving something substantial aside. The burglar may, in fact, be not only one of several objects of the same fear, but also be feared differently from the other objects. A state of affairs without my computer—which could mean, among many other things, the possibility of missing the deadline to submit a paper--might be my *real* fear. That this is my real fear can be revealed to me if backing up all my files in a second computer every night, in fact, reduces my fear of

³⁷³ Aaron Ben-ze'ev, "Emotion as a Subtle Mental Mode," in R. Solomon, ed., *Thinking About Feeling*, p. 252.

³⁷⁴ "There is not a cognitive, an evaluative, or a motivational feature that is present in emotions and not in any other mental mode. Accordingly, I do not think that there is a necessary and sufficient cognitive, evaluative, or motivational condition in light of which emotions can be defined. Emotions should be characterized by referring to more than one of these components." (p. 252)

³⁷⁵ "Even if there is a more ultimate explanation of emotional intentionality in naturalistic terms, I think we need to speak in terms of propositional content in order to address normative questions of rationality" (p. 131)

³⁷⁶ "Emotions as judgments must accept as their 'objects' both propositions and ordinary objects of perception (imagination, memory, etc.)." (Solomon 2004, p. 82)

the burglar. Paul Griffiths has recently warned about the “core methodological assumption of much current philosophical work on the emotions” (p. 248) according to which “all emotions are intentionally directed at aspects of the environment *in the same sense*” (p. 248).³⁷⁷

Descartes’ account indirectly sets certain general rules on the way we should talk about the object of our emotions. Each emotion requires, to be aroused, a particular type of representation: whereas joy, for example, requires the representation of a good to be aroused, sadness requires the representation of an evil. Thus, to the possible objection that *schadenfreude* is “joy at another’s suffering” (Neu 2004, p. 164), Descartes would say that this is an erroneous definition, at least insofar as the object is presented in it. Since joy can only be aroused by the representation of a present good, the right definition should include it. It could be explained, for example, as joy at a state of the world where others’ misery may mean an advantage to me.

How does an object become an *emotional* object? According to Prinz “emotions are intentional in two senses. They have formal and particular objects. All fears concern dangers (the formal object), and each particular episode of fear concerns a particular danger, such as an assailant, a great height, a loud noise, a dental visit, an upcoming exam, and so on (particular objects).” (p. 54) This means that my fear of loud noises has “danger” as its formal object and the loud noise as its particular object. Prinz does not discuss the status of danger as an *object*.

This distinction seems reminiscent of Descartes’ causal account of passions *caused* by external objects. In these cases, two different representations must occur in the mind, one responsible for the perception of the (particular) object and one responsible for the perception of the “importance” of the object (which would probably correspond to Prinz’s “formal object”). Thus, only those objects which *arouse* a representation of their importance (for our natural happiness) would become *emotional* objects. And this supposedly occurs thanks to the *confluence* of both representations. Descartes’ account seems to indicate that it is not just by temporal confluence in the mind how these representations relate to each other. Recall that, the two factors that can affect this second representation according to Descartes—our imagination and “past experience”—can alter the impression in the brain caused by the external object. That alteration could result in two representations (perception and passion) or one complex one. This

³⁷⁷ “[T]he idea that all emotions are intentionally directed at aspects of the environment *in the same sense* is a core methodological assumption of much current philosophical work on the emotions. If I am correct, then we should be more concerned with the distinctive properties of the different kinds of emotional intentionality and with how these different kinds of emotion process interact in real emotional episodes.” (p. 248)

means that, leaving aside imagination and other causes of emotions, determining what is “important” for a subject as well as all his past experience should help identify the set of his potential emotional objects.

Ronald de Sousa has drawn a conclusion sympathetic with Descartes’ two-representation view from cases of the so-called Capgras syndrome.³⁷⁸ “Subjects affected by Capgras syndrome insist when they see their parents or loved ones that they are seeing an impostor” (p. 67). Sousa interprets this as similar to failing to recognize a valid ID card:

Think of this on the analogy of an ID card that carries both a signature and a picture. Both have to match: if one of them fails to match, the other is automatically suspect. Thus the recognition of those close to us rests on two marks: the cognitive or visual representation and the emotional “signature.” If the signature fails, the visual representation is deemed fraudulent. (pp. 67-68)

According to Sousa, this “suggests that emotions present us with an entire information processing system on its own, *a parallel representational system for understanding the world.*” (p. 68 [my emphasis]) Descartes’ account, though, does not imply *completely* parallel systems insofar as the impression on the brain does not have to be double. The same impression on different brains may arouse either only a sensory perception or both a sensory perception and an emotion.

The idea of two parallel systems of representation could also support the view that we can have *objectless* emotions, i.e. emotions without any object we might at least recognize as such. These would be cases of emotions in which the first “signature” (in Sousa’s terms) or the first representation (in Descartes’ terms) would be missing. Only the second mark, the “importance,” so to speak, would be represented. Annette Baier, in fact, claims to be the first to have recognized that we can have such emotions, which she calls “a feeling for the important”.³⁷⁹

Did any writer about emotion recognize this emotion I am discovering or inventing? Aristotle has the *spoudaios*, the person who is serious about things, but this is an ongoing attitude, for the Stoics a virtue, rather than an emotion. Descartes thinks forms of wonder and awe are of great importance, but does not, as far as I know, mention a feeling for the important as such, as distinct for the admirable or the despicable, the providential and the catastrophic. If the feeling I am postulating is the antithesis of nonchalance, we could call it “chalance.” (Or, if you prefer, “souciance,” the antithesis of insouciance, but that

³⁷⁸ Ronald de Sousa, “Emotions: What I Know, What I’d Like to Think I Know, and What I’d Like to Think,” in R. Solomon, ed., *Thinking About Feeling*, pp. 61-75.

³⁷⁹ Annette Baier, “Feelings That Matter,” in R. Solomon, ed., *Thinking About Feeling*, p. 203.

sounds too close to *souci*, worry or concern. The French *soin* may be better.) As nonchalance is temporary lightness of being, chalance or seriousness may be granted to be a temporary state of being bowed down with some weighty matter. (The German *wichtig*, meaning “important,” is related to *gewichtig*, meaning “heavy.”) (p. 203)

As far as Descartes is concerned, it is true that he does not talk about the “feeling for the important,” first of all, because he does not refer to emotions or passions as “feelings”. Descartes refers, however, to the perception of the “importance” of the object (representation of the “second kind”) as necessary for a passion to occur, and a fundamental characteristic common to all passions. All passions are *about* what is important for us. “[A]n enumeration of the passions requires only an orderly examination of all the various ways having importance for us in which our senses can be stimulated by their objects” (*Passions* II, art.52, AT XI 372 : CSM I 349). For Descartes “important” means important to increase our natural perfection, which seems to include, or at least it is perfectly compatible with, the vaguer sense of “importance” Baier has in mind: “What matters is what we mind about, have minded about, will mind about” (p. 210); “[w]hat matters to us is what we and those we can be in touch with take to matter” (p. 212).

Another question is whether Descartes identifies one specific passion *about* what is important. He does not. Wonder, as discussed above, is about “novel” or “very different” things (*Passions* II, art. 53; AT XI 373 : CSM I 350) not “important” ones. But Baier does not either offer good evidence in favour of this new emotion. It seems that either she is only referring to a “feeling,” not to an emotion (she uses the expression “feeling for the important”), or she is referring to cases where the “importance” is only neutral (objectless) if we make a theoretical abstraction. This is what she offers as a paradigmatic case of the *new* emotion she claims to be bringing to light:

Consider this case: a person receives a long distance phone call from a close relative. When she answers the phone the first words her caller says, after greeting her, are “Are you sitting down?” At once she knows that the message to come is of importance, and she feels an appropriate emotional disturbance. As she finds a chair and seats herself, she may reply. “Why? Has someone died?” But she may not jump to that conclusion, and the news may be momentous but good, say that a son listed missing in action has after many years been found safe and well. She certainly feels strongly while awaiting the news that is about to be given her. She will go on, once the news is broken to her, to feel joy or sorrow, but the first feeling seems neither joy nor distress. Interest, concern, anticipation, and nervousness, yes, but more than that, some sort of shock and intent seriousness. For what she now anticipates is no ordinary good or bad news, unlikely to cause her to need support. Nor is uncertainty alone enough to explain the emotion she feels even before the

big news is given her. But what name has this emotion, felt as the important, simply as such? *Interest* seems not quite right, since one can be interested in quite trivial news, or relayed gossip, which one could with no danger receive while on one's feet. *Concern* in its older sense of "what regards one" would be close, but in its contemporary English sense it is too close to anxiety for the hedonically neutral emotion I am after. (p. 201)

The example seems to be far from showing that, in these circumstances, a "hedonically neutral" emotion is occurring or has occurred. That neutrality is in question from the very beginning. Factors such as the time of the call, the type of greeting one might hear, and the tone of the voice of the caller, may already be enough to *color* the "importance," to provide an object and thus to arouse an emotion—one which would be based, in Cartesian terms, on the representation of a *possible* good or a *possible* evil. Past experience may also be crucial from the first moment. "Are you sitting down?" may not usually precede the news of tragic events this particular caller gives, but it may precede her usual accounts of happier ones. Particularly difficult to believe is that by the time the recipient of the call asks whether anybody has died we can still talk about "neutrality". Given all this *context*, and easily recognizable causes (and objects, regardless of whether some are only possible) available to the person who receives the call, it is also quite difficult to think about this case as just an objectless "feeling" in James' sense, something which, furthermore, is not what Baier wants to show. She emphasizes that, despite the label used to name it, she is talking about an *emotion* and

emotions are felt occurrent mental states with intentional objects, and that, while not themselves beliefs, they involve beliefs, or sometimes merely suspicions or wishful thinkings. While not themselves wants or resolves, they tend to lead on to them. Fear, for example, involves the belief that one is danger from what one fears, and usually the desire to escape it. Emotions are felt, and they are episodic, lasting minutes rather than days. Moods, like them in many respects, are longer lasting and have very vague and general intentional objects, or none at all. Attitudes, like emotions and moods, affect motivation but need not be felt by the one who has them, who may be completely unaware of her attitude. In this last respect attitudes are like beliefs. Emotions, unlike any of these other mental states (except perhaps moods and attitudes), tend to have not just typical physiological accompaniments outside the brain—ones that might, like butterflies in the stomach, be unobservable to an onlooker—but also stereotyped involuntary cross-cultural bodily expression. (pp. 203-204)

From Descartes' causal and functional account of the passions, we can say that an object becomes an emotional object once the mind either is passively *directed* towards an object, or actively *directs itself* to one and this passion or action maintains or strengthens the representation of that object (i.e. of its

importance). Mechanically, to say that the mind is *directed* to an object means that it has entered, or perceives itself as having entered, into a rope-like relationship with it, that is that the mind holds, or perceives itself as holding, one side of the rope that leads to the object. The movements of the rope *represent* the object to the mind (passion). But the mind may also actively direct itself to the object, i.e. actively search for an object (of the, so far, feeling). My anger at you for not waking me up even if I never asked you to do so might be in part due to my belief that I did ask you. But it might also result from my attempt to *explain* certain (objectless) feeling which appears to be similar to the one which I usually have when I think I am experiencing anger. Looking for an object of my feeling I may also eventually be angry at Mary if I recall she was the one who promised to wake me up on time.

The mechanical model also would explain why in these cases (in which the mind directs itself to objects) the *search* for an object seems to be done under certain constraints, i.e. why not all objects appear to the mind to be equally good candidates to explain that “feeling”, that is, equally good emotional objects. We (i.e. our mind) usually search for an object that may take to be the cause or part of the causal chain of events that may have brought about the emotion. This would be compatible with a more literal reading of the often-discussed “we refer to” (*nous rapportons à*) in the *Passions* as in: “[W]e refer these sensations to the subjects we suppose to be their causes in such a way that we think that we see the torch itself and hear the bell, and not that we have sensory perception merely of movements coming from these objects” (*Passions* I, art. 23, AT XI 346 : CSM I 337). But in the case of the passions of the soul, we do not “refer” them only to external objects, according to Descartes. This is so, because, unlike sensations, we do not search for the cause of our passions only in external objects.³⁸⁰

The fundamentally passive character of the *passions* could also explain why this search (this attribution of causality) leads the mind towards *agents*, that is objects with minds, when we look for causes (objects) of our passions. If we are (passively) holding an end of the rope, something else must have (actively) shaken it on the other end. “[A]lthough an agent and a patient are often quite different, an action and passion must always be a single thing which has these two names on account of the two different subjects to which it may be related” (*Passions* I, art. 1, AT XI 328 : CSM I 328). We are not usually mad *at* things—although we might be mad *about* things, of course. We do not usually say that our sadness in a rainy day is sadness *at* the rain, or that our joy on a sunny day is *at* the sun. There seems to

³⁸⁰ “The perceptions we refer only to the soul are those whose effects we feel as being in the soul itself, and for which we do not normally know any proximate cause to which we can refer them. Such are the feelings of joy, anger and the like, which are aroused in us sometimes by the objects which stimulate our nerves and sometimes also by other causes.” (*Passions* I, art. 25, AT XI 347 : CSM I 337)

be an implicit difference between these expressions and, say, causal ones such as “I am sad *because* it is raining”. They distinguish causality and agency. I can, however, be angry *at* you and *about* you.

Thus, things would appear, specially from a Cartesian point of view, clearer if we (1) attributed intentionality to the *mind* rather than to the emotions, and (2) acknowledged both a *passive* and *active* way of *intending* towards objects of emotions. Understanding mechanically intentionality as a rope-like relationship with an object helps explain also the different relationship with the object when the mind is active or passive, why certain objects are better candidates to be in principle objects of our emotions, and how not-so-good candidates can become such.

5.3.3. The *Passions* within current debates: overview

A characterization of Descartes’ theory of passions in contemporary terms would not allow for it to be classified in any of the two major current competing paradigms. Although he insisted that, if we have to choose between the mind or the body, passions are primarily thoughts, it is clear at the end of the treatise that they are not purely mental or physical events: they are physiologico-mental processes. Bodily changes, or the awareness of those changes, are not, in any case, enough to characterize the *essence* of what passions are for him. Although *necessary* those changes are not sufficient to have passions.

On the other hand, thinking of passions as thoughts would seem to support the idea that we should place the *Passions* on the cognitive side. But thoughts are not either causally sufficient for Descartes to have passions or to describe them. It would not be, in any case, adequate to classify him under the current form of the main cognitive paradigm, i.e. the “judgment theory” of emotions. Passions cannot be judgments for Descartes precisely because the latter are, within his theory of mind, actions of the soul (judgments can, however, trigger passions, according to Descartes). However the distance with respect to the judgment view does not seem so wide if we consider that the content of the representations proper of passions, and how that content can be affected by our natural constitution and past experience, seems to indicate that they are, in a sense, *perceptive evaluations*. Passions represent the “importance” of the object for our natural perfection. This evaluation must in any case be clearly placed on the *passive* capability of the mind (not on its free will). Thus, the proponents of the judgment theory would have to justify their assumption that, if judgments are *actions* of the mind, we would be *actors*, not patients, when we are having emotions. In Cartesian terms, being actors would imply that we are always *deciding* to

have emotions (the will is free), something which few proponents of the judgment theory may be willing to accept. It is interesting to observe in the current debates that for the judgment theory the passivity of the passions is probably a more serious problem—of which they are aware as we have seen—than giving an account of the feeling that accompanies the bodily motions. If we have to use a label, a *perceptual model* could be the Cartesian alternative to the judgment and feeling theories.

Taking into account Descartes' study of passions could bring to contemporary discussions on emotions attention to a number of aspects so far widely neglected. (1) The need for an overall theory of mind where (a) the passions find a place in relation to other mental events and functions, especially in relation to perceptions, (b) the *passivity* of the passions (a feature on which there seems to be general agreement today) is accounted for, and (c) the relationships between reason and passions and between the will and passions are made explicit.³⁸¹ (2) The potential value (especially for discussions on levels of appraisals) of a good number of distinctions, absent or not fully explicit in current debates, such as passions “regarding the body” vs. passions “regarding the soul” or “passions” vs. “emotions”. (3) Acknowledgment of the crucial role *past experience* plays in the individuation and identification of emotions (which can explain almost any non-natural individual differences). (4) The urgency of providing a *complete* account of the *aboutness* of emotions—one that goes beyond the mere recognition that their objects have *importance* or *value* for us--and which should include an analysis of (a) their function (as a whole and, in particular, of the bodily motions themselves), (b) their content, and (c) the “disposition” they bring about. And (5) a possible reconsideration of the assumption that the purpose of our passions is only survival (specially those *about the mind*).

³⁸¹ Among contemporary philosophers Aaron Ben-Ze'ev's work is a rare example of an attempt to account for the emotions within a comprehensive theory of mind. See “Emotion as a Subtle Mental Mode,” in R. Solomon, ed., *Thinking about Feelings*, pp. 250-268.

FIGURES

The Cartesian mind

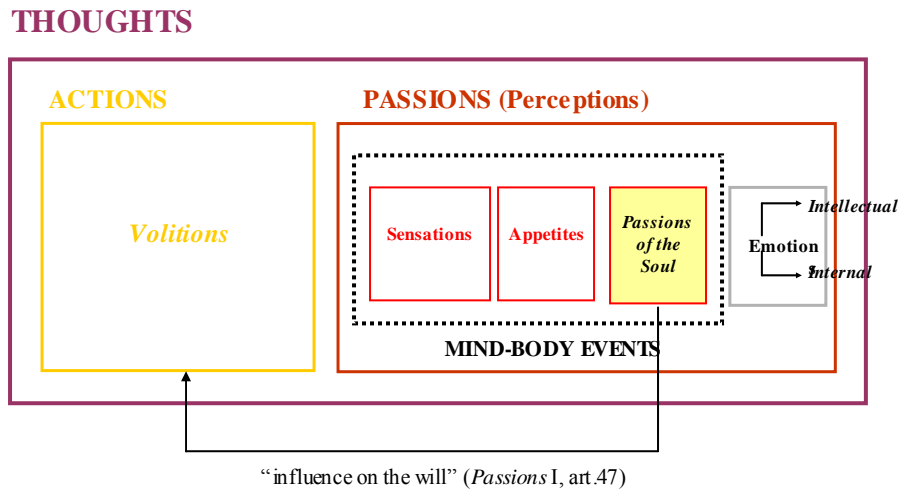


Figure 1. The Cartesian Mind

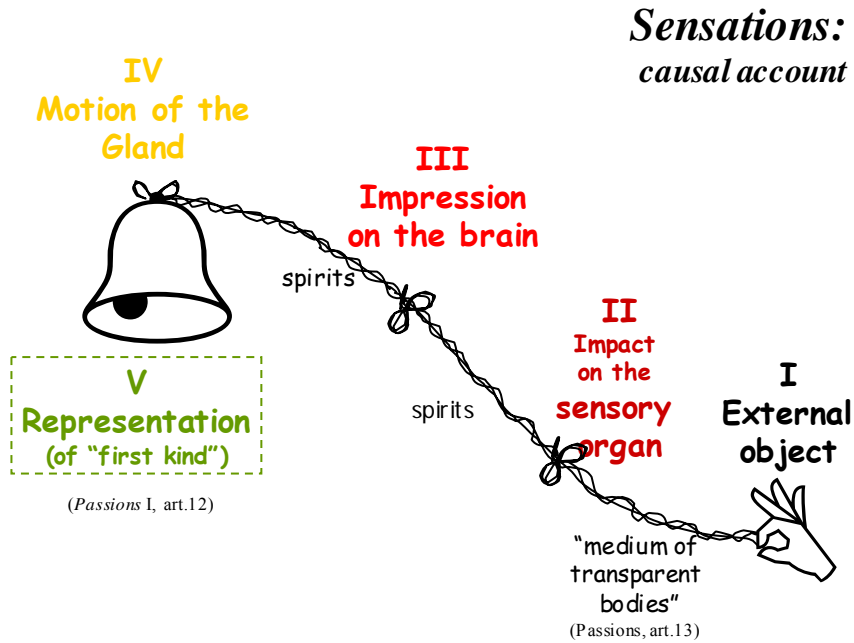


Figure 2. Sensory perceptions according to Descartes' rope-like mechanical view

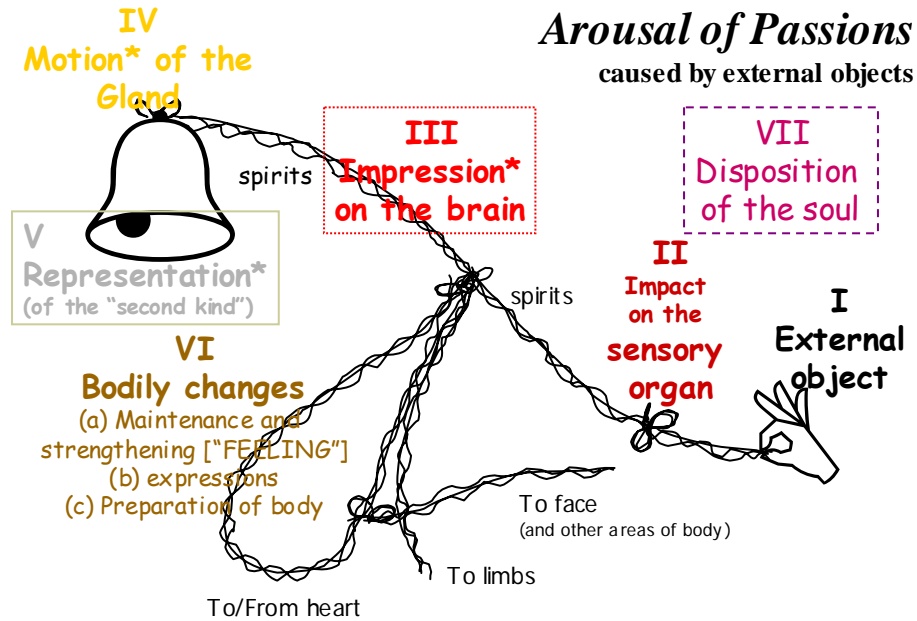


Figure 3. Causal account of passions aroused by sensory perceptions

Institution of Nature natural associations between representations and passions

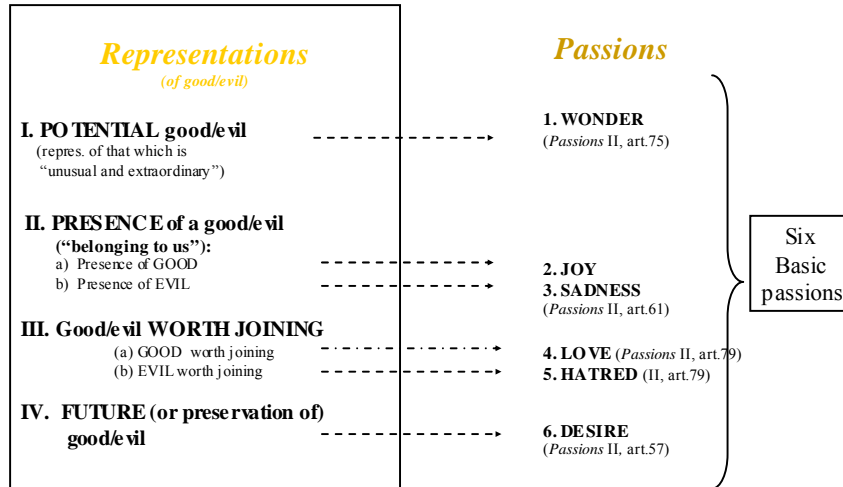


Figure 4. Natural associations between representations and passions

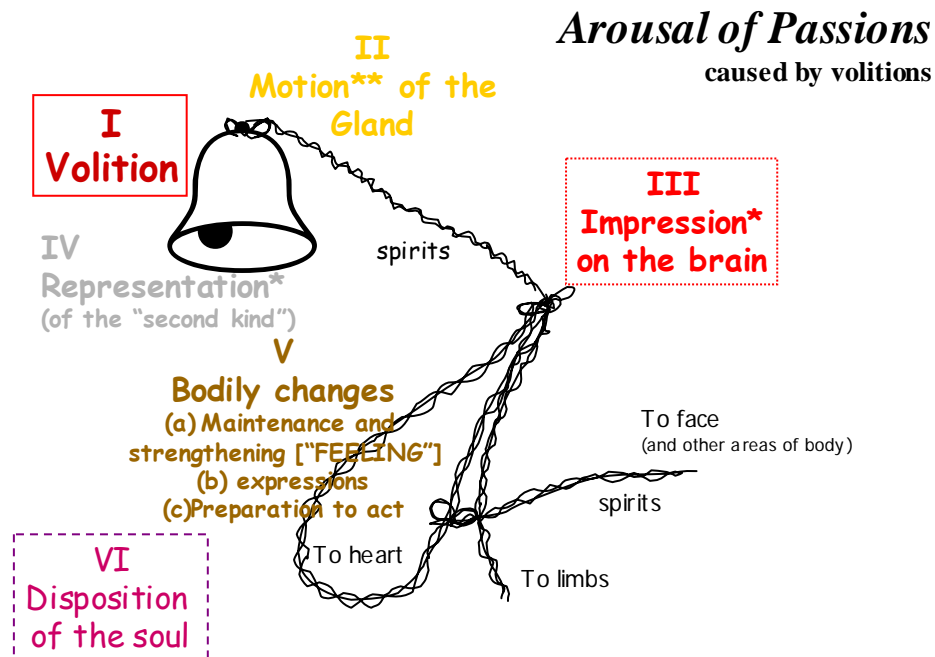


Figure 5. Arousal of passions caused by volitions

Will vs. Passions:

conflict volitions/dispositions

(Passions I, art 47; AT XI 366 : CSM I, 346)

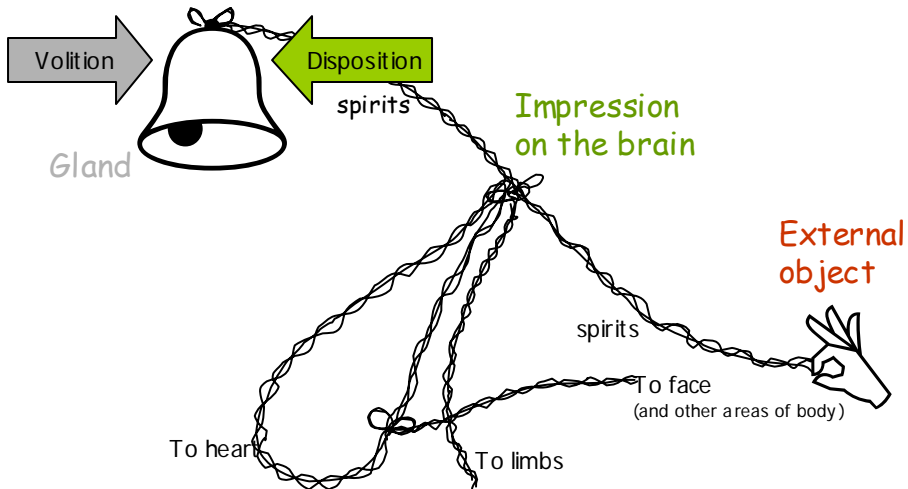
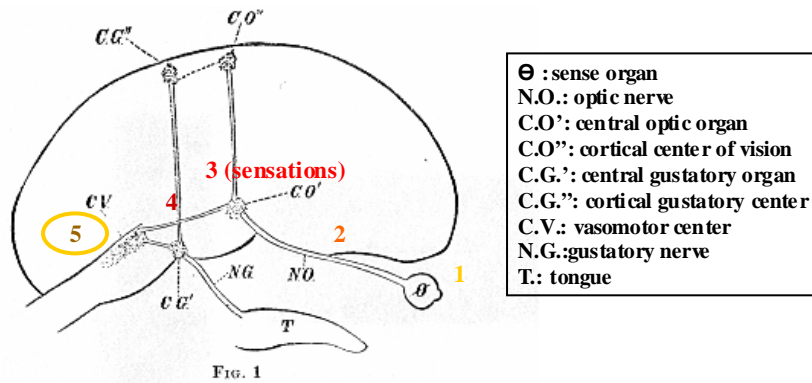


Figure 6. Conflict between the will and passions

C. G. LANGE

Emotions aroused by a "simple sense impression"

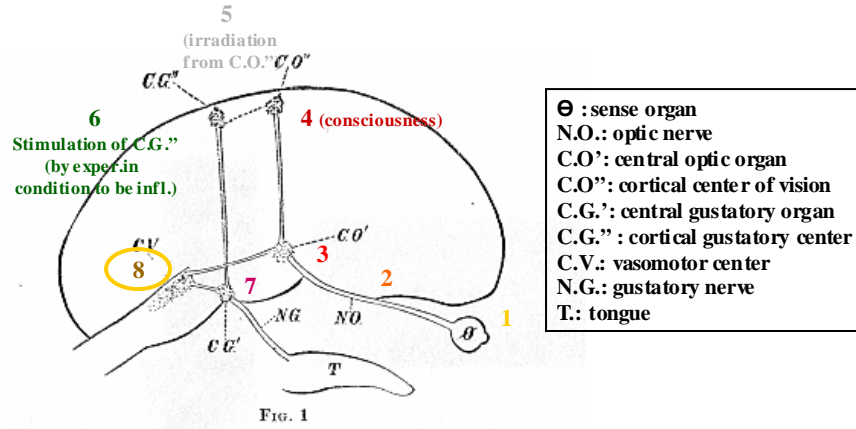


From C. G. Lange, "The Emotions," in C. G. Lange and W. James, *The Emotions* (Hafner: New York and London, 1967), p.74.

Figure 7. Emotions aroused by a "simple sense impression" (C. G. Lange)

C. G. LANGE

Emotions aroused by a sense-impression and a “mental process”
 (e.g. hatred aroused by the vision of the spoon that carries nasty medicine)



- Θ : sense organ
- N.O.: optic nerve
- C.O': central optic organ
- C.O'': cortical center of vision
- C.G.': central gustatory organ
- C.G.'': cortical gustatory center
- C.V.: vasomotor center
- N.G.: gustatory nerve
- T: tongue

From C. G. Lange, "The Emotions," in C. G. Lange and W. James, *The Emotions* (Hafner: New York and London, 1967), p.75-78.

Figure 8. Emotions aroused by a sense-impression and a “mental process” (C. G. Lange)

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