### TOUCH, HANDS, KISS, SKIN: TACTILITY IN EARLY MODERN EUROPE

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#### ABSTRACT

### PABLO MAURETTE: Touch, Hands, Kiss, Skin: Tactility in Early Modern Europe (Under the direction of Jessica Wolfe)

The revaluation of the sense of touch is one of the most revealing intellectual phenomena of the early modern period. After over a millennium of neglect, accorded the last place in the hierarchy of the senses, touch acquires substantive epistemological, aesthetic, ontological, and moral prevalence in early modern discourse. It does so, I argue, to the extent that it becomes one of the foundations of a new cultural paradigm. Whereas the history of the "lower sensorium" has been the object of close attention lately, what has not yet received proper scrutiny are the negotiations between early modern authors and their classical sources that initiated such radical changes in the intellectual mindset of the period. It is only through a comprehensive study of the vindication of touch that we can understand the shift from authority to experience, the new conception of the human body and its place in the universe, and the aesthetic sensibilities that make this period exceptional in its provocative amalgam of literature, philosophy, science and religion.

To the memory of my grandmother,

Rosalía Fernández de Signorini

(1913-2003)

#### ACKNOWLEDGEMENTS

I feel tempted to make sense of the circumstances that brought me to UNC in the fall of 2007 – a convenient succession of opportunities and coincidences – by regarding them as a happy instance of the atomic swerve. Whatever it was, I can say that I came to the right place. During that first semester I met Jessica Wolfe, and immediately decided I wanted to extend my stay – originally meant to last one academic year – and work with her. Her intelligence, her generosity, and her erudition have contributed to making this a truly transforming experience for me. Soon after, I met Reid Barbour, whose passion and dedication inspire me, and will continue to inspire me as long as I am a scholar and a teacher. Working with Wolfe and Barbour has been an absolute privilege and to them I extend my most heartfelt gratitude. No less fortunate I feel for having met and studied under Eric Downing, a fantastic teacher and a wonderful writer with whom I share more than one interest, and whose support and insightful feedback has guided me along the winding road of the dissertation.

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I suppose touching something confirms its presence.

Its presence to us, but also our presence to it.

Gabriel Josipovici, Touch<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Josipovici 59

#### **INTRODUCTION**

In *Historical Grammar of the Visual Arts*, Viennese art historian Aloïs Riegl makes a powerful case for tactility, as he establishes that "the sense of touch alone offers unmediated confirmation"<sup>2</sup> of the fact that all existing things extend themselves in three dimensions. In other words: only touch gives us reality as it really is. Sight, on the other hand, deceives us by merely showing us two dimensions. Riegl then juxtaposes haptic cultures that tend to produce artifacts meant to be appreciated by their textures, from a closer range, to visual cultures, that privilege a more distant vantage point, and thus the effect of bidimensionality. Dated as Riegl's art historiography might sound to us, it is fair to say that in the past ten to fifteen years the interest on tactility has grown immensely, deserving it a privileged position as object of attention. Some of the most compelling examples of this are the ever-improving touch screen technologies,<sup>3</sup> a growing trend of museum exhibits catered to tactility,<sup>4</sup> a progressively more mainstream obsession with

<sup>&</sup>lt;sup>2</sup> Riegl 187

<sup>&</sup>lt;sup>3</sup> As I write this introduction *Tactus Technology*, in California, and *Senseg*, a Finnish firm, are elaborating new touch screens that produce feedback to the sense of touch, instead of to the sight: An actual haptic interface between screen and user.

<sup>&</sup>lt;sup>4</sup> In the summer of 2012 the Caravaggio exhibit at the Musée Fabre in Montpellier (France) included a tactile version of "Le Nouveau Née" (1648) a work by French caravaggista Georges De La Tour. It consisted of a plastic relief of the scene and a caption in Braille. This responds to an ever-growing trend to include touch, as well as smell and hearing, into the experience of art appreciation that started around the late nineties (Jütte 1). Recently, Lisa J. Murphy, a photographer who specializes in tactile images, conceived Tactile Mind, an erotic book for the blind. It is a "handmade thermoform book consisting of 17, 3-D tactile photographs on white thermoform plastic pages with the visual image and descriptive Braille accompaniment." (www.tactilemindbook.com) Who knows if she got the idea from Woody Allen's old joke in *Bananas* (1971): "I once stole a pornographic book that was printed in Braille. I used to rub the dirty parts".

skin,<sup>5</sup> and, last but not least, a remarkable surge in the number of publications dedicated to the matter.<sup>6</sup>

As intellectual historians, historians of science, art and literary critics make their contributions to the topic early modern scholars seem to be among the most prolific ones. The past decade and a half has produced an incredible amount of new studies on the body and the role of the "lower senses," especially touch, in the fifteenth, sixteenth, and seventeenth centuries.<sup>7</sup> These studies have focused on aspects of human culture as

<sup>&</sup>lt;sup>5</sup> Tattoos and plastic surgery grow more popular by the day, as made evident by the success of reality television shows like *L.A. Ink, Ink Master*, and *Extreme Makeover*. In the artistic sphere, a conspicuous example is Ella Clocksin, a British artist who experiments with visual and tactile perception, uses drawing, mark-making, texture, light and shadow, performative action and digital media to create works such as *Touch Together*, "a fabric that looks like skin but it is plastic, nylon and polyester thread." According to Clocksin, "skin's tactile intelligence provides a highly sensitive interface for non-verbal communication" (Bacci-Melcher, 3). Anish Kapoor, one of the most important contemporary sculptors, considers tactility, and the synesthetic effect of sight and touch, the main inspiration for most of his monumental creations. Finally, *HJuman Leather Products*, a company based in the UK offers a line of products made of human skin provided by voluntary donors. A wallet can cost up to \$14,000, a belt, \$16,000, and a pair of shoes \$27,000.

<sup>&</sup>lt;sup>6</sup> Some examples are Diane Ackerman's *A Natural History of the Senses* (1990), Kathryn E. Barnard and T. Berry Brazelton's Touch: The Foundation of Experience (1990), Helen E. Ross and David J. Murray's new edition and translation of E.H. Weber's classic On the Tactile Senses (1997), Gabriel Josipovici's Touch (1998), Yvette Hatwell, Arlette Streri and Edouard Gentaz's collection of essays *Touching for Knowing:* Cognitive Psychology of Haptic Manual Perception (2000), Claudia Benthien's Skin: On the Cultural Border Between Self and the World (2002), Steven Connor's The Book of Skin (2004), Constance Classen's The Book of Touch (2005), Robert Jütte's A History of the Senses (2005), David Howe's selection of essays on the history of the senses Empire of the Senses: The Sensual Culture Reader (2005), Nina G. Jablonski's Skin: A Natural History (2006) and Living Color: The Biological and Social Meaning of Skin Color (2012), Mark Paterson's The Senses of Touch (2007), and Daniel Heller-Roazen's The Inner Touch: Archaeology of a Sensation (2009). Two conferences dedicated to the role of the five senses in art, but also to the history of the senses were also of particular relevance: "The Sense of Senses" (Bonn, 1997), and "Art and the Senses" (Oxford, 2006) whose proceedings were recently published by Francesca Baci and David Melcher in Art and the Senses (2011). Of great interest are also Noël Burch's investigations on haptics in film, such as the classic essay "Building a Haptic Space" (Noël Burch, Life to Those Shadows. 1990). <sup>7</sup> For instante, Jonathan Sawday's *The Body Emblazoned: Dissection and the Human Body in Renaissance* Culture (1995). David Hillman and Carla Mazzio's The Body in Parts: Fantasies of Corporeality in Early Modern Europe (1997), Marjorie O'Rourke Boyle's Senses of Touch: Human Dignity and Deformity from Michelangelo to Calvin (1998), Norbert Schneider's Still Life: Still Life Painting in the Early Modern Period (1999), Katherine Rowe's Dead Hands: Fictions of Agency, Renaissance to Modern (1999), Claire Richter Sherman's Writing on Hands: Memory and Knowledge in Early Modern Europe (2000), Elizabeth Harvey's collection of essays Sensible Flesh: On Touch in Early Modern Culture (2003), Florike Egmond and Robert Zwijnenberg's essays on Bodily Extremities: Preoccupations with the Human Body in Early Modern European Culture (2003), Pamela H. Smith's The Body of the Artisan (2004), Martin Porter's Windows of the Soul: Physiognomy in European Culture, 1470-1780 (2005), C.M. Woolgar's The Senses

diverse as religion and medicine, sculpture and literature, politics and gender issues, and more. But if early modernity has proven such a fertile ground for historians of the senses is because early modern Europeans were themselves particularly concerned with the senses. Many groundbreaking discoveries, realizations, and innovations of the period come hand in hand with new ways to conceive the senses, and in particular with a revaluation of the traditionally neglected and even despised sense of touch. In 1749 Denis Diderot wrote: "And I found that of all the senses the eye was the most superficial, the ear the most haughty, smell the most voluptuous, taste the most superstitious and inconstant, and touch the most profound and philosophical."<sup>8</sup> This assessment must be understood as the product of three centuries of dramatic developments in philosophy, in science, in religion, and in art.

Whereas the history of the "lower sensorium" has been the object of close attention lately, what has not yet received proper scrutiny are the negotiations between early modern authors and their classical sources that initiated such radical changes in the intellectual *Weltanschauung* of the period. Eager hands found, dusted, salvaged, transported, and reproduced volumes long forgotten or virtually unknown in the West. Active minds manipulated the contents of these volumes, translating them to vernacular languages and turning them into the structure of the new intellectual and artistic edifice of modernity. The revaluation of touch appears thus in the context of a vibrant dialogue between early modern intellectuals and their classical sources. My dissertation presents four case studies that are especially revealing: touch, hands, kiss, and skin. In illustrating

in Late Medieval England (2006), Stuart Clark's Vanities of the Eye: Vision in Early Modern European Culture (2007), Joanna Picciotto's Labors of Innocence in Early Modern England (2010), and Matthew Milner's The Senses and the English Reformation (2011).

<sup>&</sup>lt;sup>8</sup> Letter on the Blind in Morgan 71

the particulars of each one I also attempt an etiology of the larger phenomenon, thearguments for which, far from being mutually exclusive, complement one another and sketch out a more encompassing explanation for why touch is put in the spotlight by poets, natural philosophers, and physicians in early modern Europe.

The revaluation of tactility in early modern culture came alongside a number of realizations that were the consequence of new milestones in scientific research, especially in anatomy and medicine. Towards the first quarter of the seventeenth century, the following notions concerning touch were considerably gaining acceptance:

- Touch is the first sense to manifest in the embryo. Skin, the organ of touch, appears around the eighth week of gestation. Touch is, thus, the cornerstone of human experience in the world.
- Touch is the only sense that we cannot lose. As long as we are alive, we are touching and we are being touched.
- Touch is the only sense that is not localized in one specific part of the body. Its organ is the skin, the largest, most complex organ in the human body.
- 4) Touch is the only sense capable of what can best be called a "sensory unfolding:" when we touch ourselves, we are both touching and being touched. This blurs the distinction between object and subject, as well as the distinction between active and passive.
- 5) Touch is the only sense that requires no medium (such as air, or light). Touch is pure immediacy, and this is the reason why it is without a doubt the most physically and emotionally mobilizing of all senses. In fact, it is common that

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when we are moved or deeply affected by something we see, hear or smell we feel it in tactile ways: hairs standing on end, goose bumps, the gut wrenching.<sup>9</sup>

In fact, by the first decade of the seventeenth century, the revaluation of tactility was popular and widespread enough for Thomas Tomkis, an English playwright, to include it in his most celebrated play, *Lingua: Or the Combat of the Tongue and the Five Senses for Superiority*. As each of the senses makes a case for their importance, Touch argues:

The instrument of instruments, the hand, courtesies' index, chamberlane to nature, the bodies' souldier, and mouthes' caterer, psyches' great secretarie, the dumbes eloquence, the blindmans candle, and his foreheads buckler, the minister of wrath, and friendships signe, this is my instrument: nevertheless my power extends itself, farre as our Queene commands, through all the parts and climes of microcosme.

I am the roote of life, spreading my vertue by sinewes that extend from head to foote, to every living part. For as a suttle spider closely sitting in center of her web that spreddeth round if the leaft flie but touch the smallest thred, shee feeles it instantly, so doth myself casting my slender nerve and sundry netts, over every particle of all the body, by proper skill perceive the difference, of severall qualities, hot, cold, moist and drie; hard, soft, rough, smooth, clammy and slippery. Sweete pleasure and sharpe pain profitable, that makes us wounded seeke for remedy: by these means do I teach the body flie from such bad things as may endanger it: a wall of brasse can be no more defence unto a towne than I to microcosme.

Tell me what sence is not beholding to me, the nose is hot or cold, the eyes do weepe, the eares do feele, the taste's a kind of touching, that when I please I can command them all, and make them tremble when I threaten them. I am the eldest and bigger of all the rest,

<sup>&</sup>lt;sup>9</sup> An example of such ideas as accepted principles can be found, for example, in a Richard Brathwaite's *Essaies upon the Fiue Sense* (1635) where the author calls touch "faculty of all others," one that "inheres in the substance of man" and that "cannot be separated or taken away from man" (Brathwaite 33). For this reason, continues Brathwaite, touch "may (...) be called the living sence" (Brathwaite 34).

the chiefest note, and first destinction, betwixt a living tree and living beast; for though one heare and see and smell and taste, if he wants touch he's counted but a block.<sup>10</sup>

But if touch needed such revaluation it is precisely because its complex history is one full of lacunae and oblivion. Two works from the very dawn of the Western canon include stories that, in an fascinating way, inaugurate the discussion around the five senses, and that convey a notion of tactility with which the West would struggle for millennia. The first one comes to us from the Old Testament, the second one from the Odyssey. In book twenty-seven of Genesis, an old and almost blind Isaac asks Esau to get him venison stew in exchange for his last blessing. Isaac's wife, Rebeccah, overhears the conversation and, after Esau has left to get the meal, asks Jacob, her favorite, to bring some goat stew to his father and get the blessing himself. In order to fool the old man, Rebeccah makes Jacob wear Esau's raiment and covers his hands and neck with lamb's skin, since Esau was considerably hairier than Jacob. As his younger son approaches him with the ruse, a weary Isaac says: "Come near me that I may touch (*wa a mus ka*) thee my son whether thou be my very first son Esau or not."<sup>11</sup> After he had felt him, Issac says: "Thy voice is Jacob's, but thy hands are Esau's; and he discerned him not because his hands were hairy, as his brother's Esau, so he blessed him."12 Immediately after Isaac asks his son to kiss him, and he confirms that it is Esau after smelling his raiment on Jacob. The old patriarch, deprived of sight, trusts his touch more than his hearing and before his smell. Notwithstanding the fact that he is ultimately deceived by touch, what is

<sup>&</sup>lt;sup>10</sup> *Lingua* Act 4, Scene 6. The play was written around 1602-3, and first published in 1607. Its popularity is evidenced by five editions in the following fifty years, as well as by contemporary translations into German and Dutch. It is believed that in a performance at Cambridge the role of Touch was played by none than Oliver Cromwell (Mazzio 163).

<sup>&</sup>lt;sup>11</sup> Genesis 27:21

<sup>&</sup>lt;sup>12</sup> Genesis 27:22-23

important for my purposes here is not only that Isaac trusted his touch above the other senses but Rebeccah having anticipated it and scheming the ruse. The moral of the story seems to be: Beware of trusting your touch blindly, for touch is deceitful. But if this is the case then it means that the story lies on the assumption that most people trust their touch more than they do other senses, and thus marks the beginning in Western culture of a still ongoing debate around the struggle between the senses for epistemological primacy.

Book eleven of Homer's *Odyssey* deals with Odysseus's adventures among the dead. In order to talk to the dead, Odysseus performs a number of sacrifices. The smell of roasted flesh and the "black fuming blood"<sup>13</sup> attracts them to the surface, and once there the specters need to drink sacrificial blood before they can communicate with Odysseus. In the Homeric universe the dead can see and be seen, hear and be heard, smell, and taste. All this they can do, just like the living. What they cannot do is touch. Odysseus realizes this, much to his chagrin, as he thrice tries to embrace his mother and cannot hold her.<sup>14</sup> It appears that death was considered, among many other things, the end of touch, and thus, life defined by tactility. But touch is more than an ontological separation between life and death; it is also, as in Isaac and Jacob's story, the ultimate epistemological parameter. In book nineteen, Eurycleia becomes the first human character to recognize Odysseus's dog. And she does so by means of her touch. Penelope orders the maid to wash Odysseus's feet (he is disguised as a ragged vagabond at this point) and as she prepares to do so Eurycleia

<sup>&</sup>lt;sup>13</sup> Odyssey 11.35

<sup>&</sup>lt;sup>14</sup> Odyssey 11.204-208

says: "You look like Odysseus to the eyes, you sound like him."<sup>15</sup> In order to wash him she "grabs" (lambánein) his leg, passes her hand through Odysseus's famous scar and "recognizes" it.<sup>16</sup> As she touches his feet and "rubs" (*epimássein*) them, she recognizes her estranged master beyond a shadow of a doubt.<sup>17</sup> The relevance of this episode is twofold. On the one hand, touch is presented as the most reliable of the senses. Eurycleia perceived a resemblance between the stranger and her master as she saw him and heard him, but it is only when she touches that she has confirmation of his identity. Like in the story of Isaac touch prevails over the other senses – only in this case it even prevails over sight, which was not available to Isaac. On the other hand, it is the only time in the Odyssey that Odysseus fails to conceal his identity. Many, including his own wife and son, had seen him, heard him, presumably (and especially!) smelled him without recognizing him. But all of the many schemes that cunning Odysseus used throughout the epic nóstos to keep his identity a secret (schemes that make for some of the most memorable episodes in the poem, and that reinforce not only Odysseus's wit but also his power over others) amount to nothing when his old nurse touches his leg. In the Odyssey touch prevails not only over the other senses, but also, and perhaps more importantly, over wit. Words, appearances, smells can deceive, but touch does not lie.<sup>18</sup>

In most philosophical traditions that come to us from Classical Antiquity, however, touch is degraded and relegated to the last place in the hierarchy of the senses.

<sup>&</sup>lt;sup>15</sup> Odyssey 19.380-381

<sup>&</sup>lt;sup>16</sup> Odyssey 19.391-392

<sup>&</sup>lt;sup>17</sup> Odyssey 19.467-468. In Book 23 Eurycleia tells Penelope she "squeezed" (phrássein) the scar (23.75).

<sup>&</sup>lt;sup>18</sup> Odysseus knows this very well. Not only he anticipates his identity being revealed as soon as the nurse touches his scar, but also he finally managed to escape the cave of Polyphemus through the tactile ruse of hiding under a mutton to fool the cyclops's touch.

This position, on which Plato, Aristotle and the schools and traditions their works spawned agree, would continue through late antiquity into the middle ages and the Renaissance. What surely ensured the popularity of Plato and Aristotle's ocularcentrism was the endorsement these positions received from orthodox Christian theology. As a matter of fact, they can be found in the very root of Christianity. The Gospel of John includes a memorable episode that almost two thousand years of Christian exegetic and pictorial tradition misread in a fascinating way. After the death of Jesus, some of the Apostles comment on having seen the Lord resurrected to which apostle Thomas says that until he does not "see the mark of the nails in [the Lord's] hands, and thrust my finger into the mark of the nails and thrust my hand into his side I shall not believe."<sup>19</sup> Eight days later Jesus reappeared to his disciples and said to Thomas: "reach with your finger here and see my hands, and reach with your hands and thrust them in my side and be not faithless but believing."20 To which Thomas answered: "Oh my Lord and my God." And Jesus said: "You saw me and believed, blessed are they who have not seen me and yet have believed."<sup>21</sup> As Glenn Most convincingly shows, the text goes out of its way to stress the fact that Thomas does not touch Jesus, and yet "in over a thousand years of exegetical tradition only two authors entertained this idea."<sup>22</sup> Indeed, most commentators and artists, who depicted the scene, interpret that Thomas actually thrusts his fingers into the wounds of Jesus. Thomas not only did not touch, but he was reprimanded for his primitive epistemological prerogative. Earlier in John's Gospel, Mary Magdalen (who

<sup>&</sup>lt;sup>19</sup> John 20:25

<sup>&</sup>lt;sup>20</sup> John 20:27

<sup>&</sup>lt;sup>21</sup> John 20:28-9

<sup>&</sup>lt;sup>22</sup> One was St. Augustine, and the other Euthymius Zigabenus (Most 139-40).

was the first unto whom he appeared after the resurrection) had also been repined by Jesus as she tried to touch him. "Don't touch me – he said – for I have not yet ascended to my Father."<sup>23</sup> Philosopher Jean-Luc Nancy believes that the process of resurrection had to conclude before Jesus could be touched, or ingested in the form of bread and wine.<sup>24</sup> In the meantime one had to believe by the mere power of faith, or in its defect, by seeing. Touch might have been the most reliable sense for Isaac, who was blind, or for Homer's characters, but it was not anymore. When it comes to sensation, it is now sight that grants us immediate access to the truth.

But going back a few centuries one finds that the first Greek thinkers discussed the senses and established the hierarchy that would prevail until Early Modernity. Even though it was Aristotle who first distinguished the five senses, as we know them, in Plato's work one finds repeated references to sight as the sense that more closely mimics the mechanism of the *noûs*. In the *Republic* the sun and its light are a simile for truth and intellectual vision, and intellectual liberation comes when the prisoners abandon the cave and see the sun and the outside world.<sup>25</sup> The *Timaeus* includes a clear and enthusiastic endorsement of sight, considered the most philosophical sense:

Vision, in my view, is the cause of the greatest benefit to us, inasmuch as none of the accounts now given concerning the universe would ever have been given if men had not seen the stars or the sun or the heaven. But as it is, the vision of day and night and of months and circling years has created the art of number and has given us not only the notion of time, but also means of research into the nature of the universe. From these we have procured philosophy in all its range, than which no greater boon ever has come or

<sup>&</sup>lt;sup>23</sup> John 20:17

<sup>&</sup>lt;sup>24</sup> Nancy 15

<sup>&</sup>lt;sup>25</sup> *Republic* 516a-519c

will come, by divine bestowal, unto the race of mortals. This I affirm to be the greatest good of eyesight. As for all the lesser goods, why should we celebrate them? He that is no philosopher, when deprived of the sight thereof may utter vain lamentations! But the cause and purpose of that best good, as we must maintain, is this, -that God devised and bestowed upon us vision to the end that we might behold the revolutions of reason in the heaven and use them for the revolving of the reasoning that is within us, these being akin to those, the perturbable to the imperturbable.<sup>26</sup>

Right after saying this, Timaeus also enumerates the virtues of hearing, but stops there. The three "lower" senses are not discussed. In the *Symposium*, Socrates makes a joke that reveals his ideas concerning the epistemological value of touch. As soon as he arrives to the drinking party, after standing on the porch for some time in one of his notorious trances, Agathon asks him to sit next to him: "so that by contact with you (*haptómenos*) I may have some benefit from that piece of wisdom that occurred to you there in the porch."<sup>27</sup> To this, Socrates replies:

How fine it would be, Agathon, if wisdom were the sort of thing that could flow out of the one of us who is fuller into him who is emptier by our mere contact with each other.<sup>28</sup>

Ironically, towards the end of his own speech, Socrates, paraphrasing Diotima, describes the moment of apprehension of the truth, in both visual and tactile terms. The ultimate Beauty is described as a "marvelous vision" (*katópsetai ti thaumastón*),<sup>29</sup> but one must "almost grab it" (*schedón án ti háptoito*).<sup>30</sup> When approaching the highest epiphany, language is severely compromised and visual imagery does not suffice. It seems that, in

<sup>&</sup>lt;sup>26</sup> *Timaeus* 47 a-c

<sup>&</sup>lt;sup>27</sup> Symposium 175 c

<sup>&</sup>lt;sup>28</sup> Symposium 175 d

<sup>&</sup>lt;sup>29</sup> Symposium 210 e

<sup>&</sup>lt;sup>30</sup> Symposium 211 b

the end, the experience of being with the divine is as tactile as it is visual. This is also the case in Plato's brightest and most influential successor, Plotinus. "Anyone who has seen It knows what I mean when I say that it is beautiful," said the father of Neoplatonism about God, or the One.<sup>31</sup> In order to achieve the ultimate epiphany one must "shut [one's] eyes and change to and wake another way of seeing, which everyone has but few use."<sup>32</sup> Sight, once again, is the preferred medium. In his discussion of the senses and sense perception, Plotinus only refers to sight, hearing, taste and smell, snubbing touch just like Plato in the *Timaeus*.<sup>33</sup> His most mystical treatise, however, where he struggles with language and its inability to properly give an account of the ecstasy, finds Plotinus appealing to tactile imagery. The One, he says, can only be present to those prepared to receive it, to those able "to be in accord with it and as if grasp it (*ephápsasthai*) and touch it (*thigein*) in their likeness."<sup>34</sup>

With the revival of Neoplatonism in the fifteenth century comes one of the most devastating attacks on tactility. And it comes from the most influential Platonist of the time, Marsilio Ficino, in the *De amore*, a commentary on Plato's *Symposium*. Ficino's *De amore* follows Platonic traditional ocularcentrism, but it goes further. Towards the beginning, one of the characters, Cavalcanti, establishes that love is love of beauty, and beauty is three-fold: "of souls, of bodies and of sounds. That of souls is known through the intellect, that of bodies through the eyes, that of sounds through the ears, so what is

<sup>&</sup>lt;sup>31</sup> Enneads 1.6.7

<sup>&</sup>lt;sup>32</sup> Enneads 1.6.8

<sup>&</sup>lt;sup>33</sup> Enneads 4.6.2

<sup>&</sup>lt;sup>34</sup> *Enneads* 6.9.4

the point of smelling, tasting and touching?<sup>35</sup> The lower sensoria have no role whatsoever in the appreciation of beauty and, thus, in the mechanism of love. They are not vehicles for love, but for "appetite," "libido" and "frenzy.<sup>36</sup> For this reason the appetite for sexual intercourse and love not only are not of the same kind, "they are contraries.<sup>37</sup> As we shall see in chapter three, this view, although greatly influential and canonical, was also fiercefully contested during the sixteenth century by many philosophers and poets who wrote on love matters, including some with deep Platonic affiliations.

This Platonic position regarding the senses had echoes in some of the most influential Christian theologians. In the *Confessions* St. Augustine broaches the subject of how man knows God. We certainly do not know Him like we know something corporeal, that is through eyes, hearing, smell, taste, and touch, but we do perceive "a certain light, and a certain voice and a certain smell and a certain nourishment and a certain embrace (*amplexum*)."<sup>38</sup> The scale of the senses from sight to touch reappears in the chapters dedicated to the temptations of the senses, where touch is left out, so potent and ubiquitous its temptations are.<sup>39</sup> Those "certain" sensible ways to know the divine are attributed by Augustine in *De trinitate* to what he calls the interior man, who inhabits the spiritual sphere, opposed to the exterior man, who lives in the world. Sensible touch, the

<sup>&</sup>lt;sup>35</sup> *De amore* 25

<sup>&</sup>lt;sup>36</sup> "Thus the pleasures of taste and touch (...) love not only does not desire, but hates and shuns as things which because of their intemperante are contrary to beauty," concluyes Cavalcanti (*ibid*).

<sup>&</sup>lt;sup>37</sup> Ibid

<sup>&</sup>lt;sup>38</sup> Confessions 10.6

<sup>&</sup>lt;sup>39</sup> Confessions 10.31-35

lowest sense of the lower man, seems to be nothing but a a source of misfortune and sin: something that brings us closer to animals and farther away from God.<sup>40</sup>

Along with Platonism, Aristotle's thorough but derogatory treatment of tactility also contributed greatly to forging this enduring hierarchy of the senses. In De anima the philosopher tackles the senses and is particularly attentive to the difficulties presented by touch: Is it one sense, or many? What is the organ of touch? And its medium? What pair of contraries does it engage?<sup>41</sup> This comes however, after he has discussed the previous four senses in order of relevance and dignity, having started with sight. Touch is the last of the senses on account of being the most animalistic of them. However, after establishing the vexing characteristics of touch and concluding that both the organ and the medium of it are the flesh, and after warning against comparisons between thinking and feeling, Aristotle compares the soul with a hand, since they are both instruments that use other instruments (the soul is a form that employs forms).<sup>42</sup> Aristotle even recognizes the metaphysical importance of touch, as attested by his careful examination of it in the treatise De generatione et corruptione. The importance of touch, or contact, is fundamental to understand action, passion and commingling since things only mix when they come into contact.<sup>43</sup> This notwithstanding, Aristotle is clear on the epistemological primacy of sight. The famous beginning of book A of the *Metaphysics* says:

All men naturally desire knowledge. An indication of this is our esteem for the senses; for apart from their use we esteem them for their own sake, and most of all the sense of sight.

<sup>&</sup>lt;sup>40</sup> *De trinitate* 11.1 and 12.3

<sup>&</sup>lt;sup>41</sup> De anima 2.11

<sup>&</sup>lt;sup>42</sup> *De anima* 3.8

<sup>&</sup>lt;sup>43</sup> *De generatione et corruptione* 1.6

Not only with a view to action, but even when no action is contemplated we prefer sight, generally speaking, to all the other senses. The reason of this is that of all the senses sight best help us to know things, and reveals many distinctions.<sup>44</sup>

In the thirteenth century, St. Thomas Aquinas argues that sight is the most spiritual of the senses because it does not involve any physical change in the organ, whereas touch is the least because it does (we see fire and it does not burn our eyes, but we touch something hot and our hand gets hot).<sup>45</sup> But long before him a great number of some of the most widely read medieval authors expressed similar considerations upon the senses. Alain de Lille's twelfth century poem, the Anticlaudianus, constitutes an allegory of the creation of a perfect man, whose senses are five horses that carry the soul. The last one is touch, characterized as "feeble, asinine, always looking down and of dark complexion."46 And yet throughout the poem, references abound to nature as an artisan who manufactures this new man. Nature works with her "munificent hands"<sup>47</sup> to produce a virtuous man and a beautiful world: "The hand incites the mind, arouses genius, invites fitting ideas."48 The seemingly contradictory views of touch as the lowest sense and the hand as "instrument of instruments," to which I shall come back in chapter two, confirms the vexing relationship between intellectuals and tactility in the classical and medieval world.

<sup>&</sup>lt;sup>44</sup> Metaphysics 1.1

<sup>&</sup>lt;sup>45</sup> Summa Theologica 1a.78.3

<sup>&</sup>lt;sup>46</sup> Anticlaudianus 4.3. Another common image is that of the body as a besieged citadel and the senses as its guards, touch being consistently portrayed as the weekest and least reliable one. This image, that appears already in late anticue Christian writers and in Vincent of Beauvais's *Speculum Majus*, is also recurrent in early modern authors, such as Du Bartas (*La Sepmaine* 168-9, followed by a praise of the hand), and Spenser (*Faerie Queene* 2.11).

<sup>&</sup>lt;sup>47</sup> Anticlaudianus 1.3

<sup>&</sup>lt;sup>48</sup> Anticlaudianus 3.1

Going back to he notion of spiritual senses, those senses developed by what Augustine called "the interior man," one finds that it ran through the Middle Ages and is usually found in the most mystical writings of some Christian thinkers. Tactile and gustatory mystical images abound in the works of Hadewijch of Brabant, Mechtilde of Magedeburg, Margarete Ebner,<sup>49</sup> as well as in sermons by Bernard of Clairvaux, and Hugh of St. Victor. The latter, towards the end of a soliloquy directed at his own soul, calls upon God with these words: "come so I can touch you (not so I can be seen by you) and taste you."<sup>50</sup> As in Diotima's speech in the *Symposium*, or in Plotinus's most mystical passages, the call on tactility reveals a strong contradiction: on the one hand, a call to elevate the soul unto God, leaving the senses behind, and knowing that of all five of them touch is the offers the most resistance, the most pernicious one. But on the other hand, when trying to express in words the *unio mystica*, touch and taste, overpowering and immediate as they are, provide the most accurate images to describe an experience essentially ineffable. Christians find the subterfuge of the "spiritual sense," a "certain kind of touch, taste, etc..." whereas Plato and Plotinus simply, and uncritically, rely on tactile idioms in which the Greek language, like English and most Romance languages, abounds.

<sup>&</sup>lt;sup>49</sup> Hadewijch of Brabant wrote: "Inseparable satiety and hunger/ are the appanage of lavish love/ as is ever well known by those/ whom love has touched by herself" (Dreyer 111). For more on this see Gordon Rudy's *Mystical Language of Sensation in the Later Middle Ages* (2002). Also Stephen G. Nichols, Andreas Kablitz, and Alison Calhoun's collection of essays, *Rethinking the Medieval Senses: Heritage, Fascinations, and Frames* (2008), and Niklaus Largier's "*Tactus Spiritualis*: Remarques sur le toucher, la volupté et les sens spirituels au moyen age," in *Micrologus: Natura Scienze e Società Medievali* (XIII, 2005), 233-249.

<sup>&</sup>lt;sup>50</sup> Hugh of St. Victor, *Solliloquium de arrha animae* 25. Bernard of Clairvaux says: "tasting God's sweetness entices us more to pure love than does the urgency of our own needs" (*On loving God* 9.26).

In this way, the mainstream intellectual traditions in the West relegate touch to the last place in the scale of the senses, and yet, be it tacitly, surreptitiously, or openly (as in the case of Aristotle) admit its exceptionality and importance. But then there are the atomists. As I will show in chapter one, the atomistic tradition inaugurated by Leucippus and Democritus, and that continues with Epicurus and Lucretius, privileges touch among the senses, and places it at the center of the philosophical enquiry. For a number of reasons atomism was shunned and mocked by mainstream intellectuals for many centuries. Whether the key surviving texts of this tradition were completely lost and forgotten during the first millennium and a half of our common era, or not, is not the main issue at hand. The fact remains that even if intellectuals in late antiquity and the middle ages knew Democritus's surviving fragments, Epicurus's life and letters, and Lucretius's *De rerum natura*, they either chose to not comment on them, or they simply decided to perpetuate disqualifying slanders and fallacies ad hominem about the authors. The reason for this animosity (an animosity that runs well through the seventeenth century, when atomism already was a consolidated item in the intellectual canon) is really quite simple. Atomist philosophers believed that reality is made of material bodies and void space in between them. Consequently, they argued that the soul too was material, and therefore mortal. And even if the gods exists, not only they are made of matter: they have absolutely no relevant agency when it comes to the natural world. The endeavor to understand the world must leave divine matters to the side and focus on the material, which is available to us through the senses. Of all the senses, the most important one is touch, on the one hand because all other senses are variations of it, and on the other hand

because the processes of generation and corruption happen as a succession of instances of physical contact between bodies.

For a number of reasons (several of which I attempt to propose in this dissertation) many early modern intellectuals found in atomism the expression of crucial intellectual intuitions and convictions. We often hear about Poggio Bracciolini's discovery of Lucretius in a German monastery in the first quarter of the fifteenth century. Bracciolini, however, did not unearth a Classical statue like some of his contemporaries were doing in their villas all over Italy; finding the manuscript was not as remarkable as realizing that he had found something that his fellow humanists would appreciate. He was right. Lucretius and Epicurus were published relentlessly through the sixteenth and seventeenth centuries. The father of modern epidemiology, Girolamo Fracastoro, in his works on contagion was perhaps the first intellectual to appropriate and translate the atomistic epistemology into early modern terms: this is the subject of my first chapter.

Less than a hundred years later, one of the first theorists of the scientific method, Francis Bacon, notorious for his appeals to overthrow the tyranny of classical knowledge, rescued atomism as perhaps the only ancient school to whose ideas he could subscribe. Later on, men like Gassendi, Boyle, Newton, and Diderot express enormous sympathy with and gratitude to the legacy of Democritus and his followers. In fact, atomism has done nothing but become more and more relevant since its massive divulgation in early modernity. In the words of physicist Erwin Schrödinger, one of the founders of quantum mechanics, "if we apply the standard of the natural philosopher and not the myopic perspective of the specialist (...) all the basic features of ancient [atomism] have survived in the modern one, greatly enhanced and widely elaborated but unchanged,"<sup>51</sup> and this is because, throughout its millenary history, "atomism has performed the task of facilitating our thinking about palpable bodies."<sup>52</sup> But atomism did not produce such a stir purely because, as Schrödinger rightly points out, "it was a means for bridging the gulf between the real bodies of physics and the idealized geometrical shapes of mathematics;" it also gave scientists, humanists and intellectuals in general the courage to slowly but surely start eliminating the divine as a decisive power broker in the game of natural philosophy. And it constituted a more "modern" theoretical foundation than Aristotelianism, and Galenism, which also favor first-hand experience and direct observation, and which survived well through the seventeenth century, because atomism eliminates the final cause, which is based on teleology and potentially leads scientists into debates that fall outside of their realm of expertise.

Thus, the atomistic approach became one of the main theoretical pillars of the scientific revolution. It was purely based on sensible data, disregarding of all teleology, and weary of metaphysics, and it only needed early modern intellectuals to adapt it to their needs, which oftentimes also meant baptizing it. A new science, based on experiment that relies first and foremost on the senses, was to be based especially on sight and touch. As I will try to show throughout this dissertation, the revaluation of tactility does not entail a privileging of it over the other senses, but a leveling of it alongside the rest. The vertical hierarchy of the senses, inherited from antiquity and the middle ages, starts crumbling down along with other hierarchical structures that articulate

<sup>&</sup>lt;sup>51</sup> Schrödinger 81

<sup>&</sup>lt;sup>52</sup> Schrödinger 86

systems of morals, politics, art, and last but not least, ontology. One of the clearest examples of intellectuals advocating for a science based on sight and touch is the anatomical revolution of the sixteenth century, which is the subject of my second chapter.

In early modern Europe intellectuals found themselves standing at the threshold of three realms, the intricacies of which had been until then, and for more than two thousand years, subject of speculation, eager reckoning and heated debate. These three realms of which Europe caught a first tangible glimpse in this period, not unlike someone peeping through a keyhole, were the world, the heavens and man. Voyages of discovery and conquest, maritime circumnavigations and the exhibition of its spoils all around the old continent (especially in the form of chronicles, made available to many by the also recently invented and diffused printing press) made it possible for Europe to experience with its five senses the most exotic and recondite nooks of the world. The mathematical genius of Copernicus, later complemented by the invention of the telescope and the astronomical genius of Galileo made it possible for men of science to see up close the surface of planets, stars, satellites and comets. Finally, the anatomical revolution brought about by the gradual acceptance and eventual standardization of the practice of dissection of human cadavers, uncovered the dark secret world of the human insides and revolutionized anatomy, surgery, and medicine for ever. The common denominator in all three endeavors is a yearning for proximity, an urgent need for the object of study to be at hand. Not surprinsingly, in the works of the pioneers of the anatomical revolution there is a consistent and urgent appeal for young physicians to learn how to manipulate the human body by themselves, instead of merely through the lens of Aristotle, Galen, and like authorities. The instruments of the revolution were the eyes and the hands.

As Pamela Smith's work on craftsmanship and hand-labor shows, the so-called scientific revolution in the early modern period involved a fundamental change in the way man interacted with knowledge and with nature: this change involved the use of the body as a practical tool of intellectual discovery. Smith gives examples drawn from all sorts of disciplines, from magic and botany, to chronicles of Indias and the fine arts. One of them, however, outshines the others on account of its clarity. It is a quote from Ambroise Paré (the father of modern French surgery) who says: "Thou shalt fare more easily and happily attain to the knowledge of these things by long use and much exercise, than by the reading of bookes, or daily hearing of teachers. For speech how perspicuous and elegant soever it be, cannot so vively express any thing as that which is subjected to the faithfull eyes and hands."<sup>53</sup> Andreas Vesalius, arguably the most influential anatomist of the sixteenth century, had pointed out the same idea in his letter to emperor Charles V that opens the De humani corporis fabrica (1543). He was in turn following some of his own predecessors. The hand and the eye are the tools of the anatomist; they constitute the only roadmap in the unknown terrain of the human body, as well as the key to healing it. This is why that the first explicit apologies of the long-debased sense of touch come to us in the works of anatomists and surgeons. At first they came in isolated remarks, or digressions, sometimes in between the lines, but eventually they became a trope, and finally they were the basis for a new paradigm.

The vindication of tactility found very vocal advocates also in the world of fine arts, especially within the context of the great *paragone*: the debate on whether painting (associated with sight) or sculpture (the most tactile form of art) was a higher expression

<sup>&</sup>lt;sup>53</sup> The quote comes from Paré's *Ten Books of Surgery* (1564), see Smith 18, and 156.

of the human soul. Men like Michelangelo Buonarroti and Benvenuto Cellini have left us written testimonies of their praise of the "noble hand," instrument of the soul.<sup>54</sup> But it is in the work of a fifteenth century sculptor and art critic where we find what perhaps constitutes the earliest, most explicit and self-aware defense of the aesthetic value of tactility, what Rosalyn Driscoll calls the "aesthetic touch."<sup>55</sup> In one of Lorenzo Ghiberti's commentaries on painting and sculpture, written around 1447, the author refers to a statue that he saw and touched in Padua. The artifact had been found in an actual tomb under the house of the Brunelleschi family in Florence, presumably buried by a pious pagan around the time when Christianity became the official religion of the Roman Empire. In describing the statue with great admiration Ghiberti says: "It has so many sweet qualities (*dolcezze*) that our sight does not grasp neither in strong nor in dim lighting, and that only the hand discovers when it touches it."<sup>56</sup> But the *paragone* between sight and touch was not just a matter of aesthetics.

We learn from one of the first works entirely dedicated to the five senses, the *Pentaestheseion* by Paduan physician Giulio Casserio (1609), that throughout the sixteenth century and in his own time there were two very well-defined and opposed factions when it came to ordering the senses by their importance: philosophers and physicians. Philosophers, Casserio tells us, believed that sight ought to be placed first for

<sup>&</sup>lt;sup>54</sup> On the occasion of Michelangelo's funerals, Cellini gave a speech and said: "All the works of nature made by God in heaven and earth are works of sculpture, works that are tonda, palpable and visible" (Cellini 229). In one of his poems, the very own Michelangelo sings: "Non ha l'ottimo artista alcun concetto/c'un marmo solo in se non circonscriva/col suo superchio, e solo a questo arriva/la man che ubbidisce all'intelletto" (Michelangelo 151). According to Pomponius Gauricus, in one the first treatises on sculpture (*De sculptura*, 1504), the perfect sculptor has imagination and manual ability (Gauricus 58-62).

<sup>&</sup>lt;sup>55</sup> See Bacci-Melcher 114

<sup>&</sup>lt;sup>56</sup> Ghiberti 55

its importance and dignity, since it was related to the element fire, whereas touch should be last since its element is earth. Physicians and anatomists, on the other hand, thought that touch must be placed first, since it is the "first one according to nature," the one that all living beings share and the first one to develop in the embryo. Casserio (who takes the anatomist's side) offers the reader a quite elegant praise of touch, reminiscent, and consciously so, of Lucretius, in the context of which he even associates it with Jesus's healing hands. On one aspect both groups agree, though: sight and touch must be the two ends of the spectrum since they are the senses that differ the most.<sup>57</sup> It is precisely this exceptionality what makes them perfect partners for the task of discovering the intricate microcosm of the human body. Elizabeth Harvey says: "The early modern period is especially significant as a historical moment for this investigation on touch because we can witness then the nascent stages of a consolidation of beliefs about the body's relation to knowledge, sexuality and reproduction, artistic creativity and contact with other worlds, both divine and newly discovered geographical realms."<sup>58</sup>

The debate around the importance of touch also makes an unusually powerful appearance in Mario Equicola's *Book on the Nature of Love* the first encyclopedia of love matters, written in the 1490's but first published in 1525. As he discusses the role of the senses in love, Equicola says concerning touch: "Many believe that the main one of the senses is touch. If I were to be allowed, and the arrogance of those whose words are

<sup>&</sup>lt;sup>57</sup> Casserio 12-18. Helkiah Crooke reproduces this pasaje almost in its entirety in his gargantuan epitome of anatomy, the *Microcosmographia* (1615). He also adds some details: "The sight and touch be the extremes because they are most distant from one another by reason that the object of touch is corporeal and material, and the object of sight incorporeal and spiritual; the organ of touch is placed within but the organ of sight without, the organ of touch is covered with a most rare and thin vaile, that of the sight with a most dense and thick cover, because sight useth a mean, but touch none at all" (Crooke 660-661).

<sup>&</sup>lt;sup>58</sup> Harvey 2

uttered to be heard did not prevent me, I would say that touch comes from those celestial parts that Plato calls ethereal, and Aristotle the fifth element. But since I do not wish to allow those who scorn to show their malevolent nature, I shall say (according to the common opinion) that touch is of earthly roughness and a mere instrument of life. But while the other senses were given to us as ornaments of our essence, touch is the condition of our being."<sup>59</sup> For Equicola, as for physicians in general, without touch there is no life, but more importantly, touch is more spiritual than most think, it actually operates in the very border between the material and the spiritual. Equicola goes on: "[Touch] is the main sense, the summum of sensatory experience, the greatest and most vehement pleasure, and above all other senses the most voluptuous."60 As he moves on to discuss sexual intercourse, he concludes: "Coitus is the son of touch and Nature hid pleasure in it so that love would force us to procreate, and so that in producing genital semen all animals would feel joyous sweetness."<sup>61</sup> And if coitus is the ultimate, most intimate and sweetest form of touch, the kiss is the second most intimate touch. Even though the kiss is surprisingly absent from Equicola's encyclopedia, two sixteenth century authors explored it in detail, and found in it a clear instance of what constitutes yet another early modern, humanistic, and in this sense very Platonic, concern: liminality.

Chapter three moves the focus of attention to more sensual accounts of early modern tactility, as it explores the tangible aspects of spirituality. The main topic is the sixteenth century's unique and unprecedented obsession with kissing. The erotic poetry

<sup>61</sup> Ibid

<sup>&</sup>lt;sup>59</sup> Equicola 167

<sup>&</sup>lt;sup>60</sup> Equicola 170

of the Neo-Latin tradition constitutes a reaction against Petrarchan poetics based on a love that is melancholy, disembodied, and never consummated, that is based on intangibility. Poets such as Giovanni Pontano, Michele Marullo, Angelo Poliziano, and Johannes Secundus return to the rich tradition of Latin amatory poetry and re-discover the aesthetic value of flirtation and innuendo, of dirty talking, of kissing, of bussing, and of all sorts of forms of touching. Influenced by this they inaugurate a love poetry of consummation, of tactility and tangibility. But this poetic phenomenon is accompanied by another intellectual reaction, one against the canonical, and anti-tactile, reading of Plato's *Symposium* by Marsilio Ficino and two of his main followers, Pietro Bembo and Baldasare Castiglione. In the treatises and dialogues on love by Mario Equicola, Agostino Nifo, Flaminio Nobili, and especially, Francesco Patrizi, one finds a vigorous attempt to redeem the sense of touch in love matters, delivering it from its millenary reputation as the dirty, animalistic sense through which the worst vices enter the body.

The sixteenth century gave us two works that are quite unique, and they are so for the same two reasons. One, no one had ever dedicated a whole work to such a topic before, and has not attempted it since. Two, they both deal with the kiss. Johannes Secundus's *Basia* (1539) is a collection of poems purely dedicated to the act of kissing. Francesco Patrizi's *Delfino* (ca. 1577) is a philosophical dialogue specifically dedicated to the subject of the kiss. Both works discover that in the act of kissing a liminal space is revealed; a space where several dichotomies seem to be resolved, a space where contraries seem to converge. Matter and spirit, life and death, masculine and feminine, body and soul come together in the kiss, and in a mechanism not unlike Hegelian dialectics, they momentarily lose their qualities, becoming one with their opposite, only to regain them, and reconsolidate themselves in them immediately after. Be it in Johannes Secundus's verse, or in Patrizi's prose, these two works on the kiss shine for their originality and bespeak one of the main philosophical, and spiritual, concerns of early modern thinkers: how does mediation operate? Where, and how, exactly do the material and the spiritual realms border? A fresh approach to tactility, in this case one that focuses on the kiss, is the road these two authors open to explore the question.

This early modern concern with liminal spaces and borders finds another expression in the growing interest for skin that characterizes the sixteenth and seventeenth centuries. This is the subject of my fourth and last chapter. More sophisticated anatomical practices, the birth of dermatology (reflected in Girolamo Mercuriale's 1572 groundbreaking work On the diseases of the skin), and a set of new scientific works on physiognomy reveal a fascination with the skin as both border and bridge between the body and the outside world. According to the Galenic tradition skin is a wrapping that protects the body against the harmful environment, and that, through its ability to sweat, regulates the healthy balance of the organism. This notion prevails well into the seventeenth century, but it is complemented with a fresh insistence on the fact that the skin is also the organ of touch, and therefore, one of our main means to interact with the world. In this way, early modernity brings two major advancements in the field of dermatology: on the one hand the skin is, for the first time, considered a vital organ in itself, susceptible to diseases. On the other hand, the theory that it also happens to be the organ of touch gains prevalence and becomes almost uncontested in a very short period of time.

However, along with the medical interest in skin comes a wave of generalized enthusiasm for an ancient lore: physiognomy. Physiognomy is based on the belief of the interdependence between spirit and body, between matter and intellect. Its study allows the physiognomist to deduce characteristics of a person's inner self by carefully analyzing the features of their face (and of their hands, in the case of chironomy). Thus, physiognomy supposes a close observation of the complex geography of the skin, and acuteness in the discernment of textures. In this sense, physiognomy constitutes a synesthetic approach, an eye trained in study of textures: yet another collaboration between sight and touch. But for some authors physiognomy was a discipline not just applicable to man. Neapolitan polymath Giambattista della Porta, produced throughout his life a *physiognomia universalis*, structured in four works that analyze the epidermic features of plants, animals, human beings, and planets. Della Porta, a firm believer in natural sympathy and antipathy, wished to demonstrate how the outside aspect of things, their peculiar textures and idiosyncratic colors not only bespoke their most intangible characteristics, but also how they proved a universal correlation between beings. To finalize, the work of English physician and polymath, Sir Thomas Browne, a great admirer of Della Porta and a dermatology enthusiast, constitutes, towards the end of early modernity, a perfect synthesis between new anatomical knowledge, compliance to the scientific method based on first-hand experience, and a fascination with everything related to the skin and its vicissitudes. It is with him that I conclude the last chapter, and the dissertation.

As I will try to show, the revaluation of tactility in early modern Europe is a cultural phenomenon that explodes across many different fronts. A careful study of it is

essential to understand the ways in which intellectuals conceived dichotomies such as body and soul, matter and spirit, and theory and practice. More importantly, with the advent of the privileged "touch" comes perhaps the most groundbreaking endeavor of early modernity, an endeavor so radical that resonated throughout the whole spectrum of human life. That endeavor was secularization. Secularization is, of course, a tremendously vexing, and in many ways ongoing process. Charles Taylor defines a secular age as one in which the belief in God is not axiomatic anymore, especially because God and religion have moved more and more from the public to the private sphere.<sup>62</sup> Early modernity's systematic, and then methodic concern with finding the anwers to questions posed by the world *in* this world, as well as the gradual abandonment of Aristotelian-Galenic teleology (arguably the principal legacies of the so-called scientific revolution), were crucial milestones on the road to our secular age. I believe that this phenomenon came along with a revaluation of the role of the senses in general, but especially of tactility. That yearning for proximity felt by the early modern man was transformed into science first, and eventually into a universal interdisciplinary method thanks to, among other factors, the secular lesson of the atomists. We find it in Fracastoro's contagion theory, and in the writings of the men who carried out the anatomical revolution, with their fiery emphasis on the work of the hand and with their insistence on trusting only what you see and touch - the formulaic vidi et tetigi. This constitutes the death certificate of the teleological worldview that had ruled human knowledge in the West for almost two millenia; early modernity, with its passion for using old ideas to demolish old creeds, and its yearning to see and to touch for itself
pushed the Aristotelian final cause into the bottomless pit of obsolescence. And the final cause was God.

There is, however, a second reason for why the early modern revaluation of tactility was a fundamental step towards secularization. It has to do with the topic of chapters three and four, the early modern efforts to delineate and describe the liminal spaces between matter and spirit, soul and body, life and death. A renewed appreciation of the body, and a focus on sensual love, not as the first step of the ascending ladder of Diotima, but as a phenomenon complex enough to bespeak some of the greatest philosophical issues, contributes to a larger process by which the ancient and medieval conception of reality as a vertical hierarchy (at once ontological, moral, and aesthetic) was to be demolished. What is left is horizontality on the one hand (what Charles Taylor would call immanence), and God on the other, separated by an abyss that we may call faith, grace, or just plain mystery. Here in the natural world the early modern man believed that reality was accesible to the senses. This belief came alongside a new and fresh approach to the importance of tactility and a strong conviction that the intensity of the real is in its tangibility and the power of the real is in its touch. Since touch is the very first sense that we develop as embryos, as well as the only sense that we cannot lose, and an enquiry into the genesis of touch takes us back to the mythical nanosecond when mankind came into existence, does it not make sense to side with the anatomists and say that in the beginning there was touch? And if so, the importance of a history of tactility becomes more apparent than ever, since the history of touch is our history. This dissertation attempts to shed light over one of the most important chapters in that history.

# Chapter 1:

Touch

Tactus enim, tactus, pro divum numina sancta, Corporis est sensus<sup>63</sup> Lucretius, De rerum natura 2.434-5

Among the many factors that allowed for a revaluation of the sense of touch in early modernity, the rediscovery and popularization of Lucretius's *De rerum natura* is perhaps the most intangible one. Very few intellectuals explicitly point out the strong connection between Lucretian, or epicurean, ideas on tactility and the development of new epistemologies based on first-hand observation and experience. But as Passannante suggests in *The Lucretian Renaissance*, Lucretius's influence in early modern Europe was "pervasive."<sup>64</sup> Therefore, I will argue that there is no better theoretical context than epicurean philosophy to understand the revaluation of touch in early modernity. And nowhere are epicurean ideas more concisely, more clearly, more thoroughly, and more beautifully expressed as in Lucretius's poem.

<sup>&</sup>lt;sup>63</sup> "For touch, touch, by the holy will of the gods, is the sense of the body..."

<sup>&</sup>lt;sup>64</sup> Passannante 157

Today, it is fair to say, early modern scholarship has entered the age of Lucretius. This past decade has seen an incredible resurgence of scholarship dedicated to the reception of the Latin poet in early modernity.<sup>65</sup> Works by Valentina Prosperi, Lisa Piazzi, Alison Brown, Gerard Passannante, Stephen Greenblatt, Catherine Wilson, along with Stuart Gillespie and Philip Hardie's *Cambridge Companion to Lucretius*, Michael Screech's edition of Montaigne's annotated copy of *De rerum natura*, and the upcoming proceedings from the conference on the Early Modern Lucretius, held at Oxford in May 2012, have ignited a new and stimulating dialogue on the Roman poet and his return to the West.<sup>66</sup> This notwithstanding, one key issue concerning both Lucretian thought and its reception in the late Renaissance still remains almost unanimously neglected: the importance of touch.

To Lucretius "things" (*res*) are bodies, and bodies are, first and foremost, textured material entities. The purpose of his poem is to teach about their nature, the laws that rule their vicissitudes, all of which involve physical contact. Last but not least, touch *is* the sense *par excellence (tactus... corporis est sensus)*,<sup>67</sup> in other words, all the senses are

<sup>&</sup>lt;sup>65</sup> It is fair to say that Italian scholars have been pursuing this line of research for quite some time now. See Enrico Flores, *Le scoperte di Poggio e il testo di Lucrezio* (Naples: Liguori Editore, 1980); and Benedino Gemelli, *Aspetti dell'atomismo clasico nella filosofia di Francis Bacon e neil seicento* (Florence: L.S. Olschki, 1996). Among other pioneers one should mention Charlotte Goddard's unpublished Cambridge dissertation ("Epicureanism and the Poetry of Lucretius in the Renaissance," 1991), and Reid Barbour, *English Epicures and Stoics: Ancient Legacies in Early Stuart Culture* (Amherst: University of Massachusetts Press, 1998).

<sup>&</sup>lt;sup>66</sup> See Stuart Gillespie and Philip Hardie (eds), *The Cambridge Companion to Lucretius* (2007). Lisa Piazzi, *Lucrezio: Il* De rerum natura *e la cultura occidentale* (2009). Alison Brown, *The Return of Lucretius to Renaissance Florence* (2010). Gerard Passannante, *The Lucretian Renaissance: Philology and the Afterlife of Tradition* (2011). Stephen Greenblatt, *The Swerve: How the World Became Modern* (2011). Reid Barbour and David Norbrook (eds), *The Works of Lucy Hutchinson. Volume One: The Translation of Lucretius* (2011).

<sup>&</sup>lt;sup>67</sup> *De rerum natura* 2.434-5. All the quotes and references to Lucretius are from Cyril Bayley, *Titi Lucreti Cari: De rerum natura libri sex*, 3 Vols (1947). Translations are from W.H.D. Rouse, unless stated otherwise.

variations of touch. De rerum natura is the product of the convergence of a subtle and acute poetic sensibility that is essentially tactile, and the dogmatic apparatus of a school of thought, ie. Epicureanism, purely materialistic and that privileged touch above all the other senses. That is why, in the hope of shedding some new light over an ancient poem it is my objective in this chapter to explore the crucial importance of touch in three main spheres of the poem: the ontological, the epistemological and the poetic sphere. This will set ground for a discussion of Lucretius's return to western Europe in the fifteenth and sixteenth centuries. Among the many poets, thinkers and men of science on whom the reading of *De rerum natura* produced a very strong and long-lasting impression, one in particular, Girolamo Fracastoro, constitutes an especially exceptional case. Fracastoro is considered to be the father of modern epidemiology and his theory of contagion, according to which all modes of contagion are the product of direct contact between an infected, or an infection-carrying entity and a non-infected one, shows clear signs of Lucretian infuence. Thus, by basing his own scientific research on contagion as a tactile phenomenon, Fracastoro proves to be the first and one of the only close readers of Lucretius who perceives and stresses the key, central place that touch has in the work of the Latin poet. Moreover, in removing the divine from the equation of cause and effect in the natural world, Fracastoro both continues the Lucretian project of a secular science and reveals himself as one of the earliest champions of the new scientific paradigm that develops in early modernity and whose main traits and ideological groundings subsist to the day.

## Tactus

In the only major article dedicated exclusively to the importance of touch in Lucretius, written almost half a century years ago, Ursula Schoenheim calls attention to the fact that, although touch seems to have played a key role in the philosophies of Empedocles and Anaxagoras, it is only in the "atomic theory" of Leucippus, Democritus and Epicurus that it acquires a unique importance, since atomism is the first true materialistic system.<sup>68</sup> The importance of touch in atomistic philosophy, a tradition to which Lucretius explicitly suscribes,<sup>69</sup> did not escape the keen eye of Aristotle. In *On sense* Aristotle says: "Democritus and the majority of the natural scientists commit the most extreme absurdity in what they say about perception, they make all the objects of sense objects of touch, and yet it is obvious that, if this be so, each of the other senses is a kind of touch."<sup>70</sup> This particular concern with touch would persist through several generations of atomistic philosophers. Diogenes Laertius gives testimony that Epicurus, the most prominent name of the third generation of atomists, wrote a treatise dedicated exclusively to touch, the *Peri haphes*, which is lost,<sup>71</sup> and in the Epicurean papyri found

<sup>&</sup>lt;sup>68</sup> Schoenheim 71. A clear indication of the neglect the issue of touch in Lucretius in particular, but also in Epicureanism in general has suffered is G. Giannantoni & M. Gigante (Eds) *Epicureismo Greco e Romano: Atti del Congresso Internazionale (Napoli, 19-26 Maggio 1993) Vol. 2.* Bibliopolis, Naples, 1996. One will exhaust both volumes in vain looking for mentions of the issue. *The Cambridge Companion to Lucretius* (2007) also ignores the issue blatantly.

<sup>&</sup>lt;sup>69</sup> See the repetitive praises of Epicurus in *DRN* 1.78; 3, 1-30; 5, 1-28; and 6.1-42. There is also a deferential reference to Democritus in 3.371.

<sup>&</sup>lt;sup>70</sup> On Sense 442 a 29

<sup>&</sup>lt;sup>71</sup> Diogenes Laertius, *Lives* 10.28. According to De Witt, the "gist" of this lost treatise probably was "that only the corporeal can deliver a stimulus and only the corporeal can receive one" which has as inevitable consequence "reducing all sensation to the level of touch (De Witt 204)."

in Herculanum dating from the late first century AD there are repeated references to touch thought to be by Philodemus.<sup>72</sup>

The Greek notion of touch, *haphe*, from the verb *haptomai*, can also be translated as "contact" or "grasp" depending on whether it is passive or active. Aristotle engages with it in *De generatione et corruptione* and accepts that *haphe* is the *conditio sine qua non* for the mixture and combination of things that produces generation.<sup>73</sup> However, for Aristotle neither touch nor contact are necessarily recyprocal. Something can touch something else without being touched by it in turn. Immediately after saying this, Aristotle differentiates himself from Democritus who, in regards to touch and to the notions of action and passion, "in disagreement with all other philosophers, held a view peculiar to himself, for he says that the agent and the patient are the same and alike."<sup>74</sup> The exceptionality of Democritus's view, according to Aristotle here, seems to be that he considered touch and contact, the conditions of action and passion, to be invariably reciprocal. Everything that touches is touched in return.

Epicurus (ca. 341 BC- ca. 270 BC) left merely a handful of very short writings that were greatly influenced by his forefathers in atomism, but he was the first to systematize a tradition that would survive for way over a millenium and that still arises scientific, moral and metaphysical interest today. It is mainly from his *Letter to Herodotus* that his followers and detractors have extracted his views on the natural world. The cosmos consists of a void space (*topos*, or *kenon*, or *chora*) and bodies (*somata*), the

<sup>&</sup>lt;sup>72</sup> See Agra-Koenen-Schrijvers 163 (note 1)

<sup>&</sup>lt;sup>73</sup> De generatione 322 b 28

<sup>&</sup>lt;sup>74</sup> De generatione 323 b 11-13

existence of which is made evident to us thanks to the senses.<sup>75</sup> There are two types of bodies, simple and composite, but both can potentially affect the senses. Simple bodies, atoms (the qualities of which are form, weight and size),<sup>76</sup> are in constant movement<sup>77</sup> and intertwine with one another generating composite bodies *ab æterno*.<sup>78</sup> Epicurus also affirms that vision is the result of an image (*eidolon*) colliding against the eye.<sup>79</sup> Hearing and smelling happen in the same way, by material *effluvia* from things that impact our respective senses.<sup>80</sup> One of the extant fragments reads: "The atom is solid body with no empty crevices. The void is what cannot be touched."<sup>81</sup> This distinction will prove crucial to Lucretius. Finally, in explaining Epicurean epistemology and the utter certainty of the senses in his *Life of Epicurus* Diogenes Laertius says that: "seeing and hearing is to us as real as feeling physical pain."<sup>82</sup> The senses are the only legitimate and truthful gate to the outside world, and they all seem to operate like, or through touch. Unfortunately Epicurus's treatise *Peri haphes* is lost. Luckily, Lucretius picked up where Epicurus left off.

Lucretius (ca. 99 BC- ca. 55 BC), one generation older than Philodemus, most likely composed his poem towards the end of his life and addressed it to a young noble

<sup>&</sup>lt;sup>75</sup> Epicurus 39

<sup>&</sup>lt;sup>76</sup> Epicurus 54

<sup>&</sup>lt;sup>77</sup> Epicurus 43

<sup>&</sup>lt;sup>78</sup> Epicurus 44

<sup>&</sup>lt;sup>79</sup> Epicurus 50

<sup>&</sup>lt;sup>80</sup> Epicurus 52-3

<sup>&</sup>lt;sup>81</sup> Epicurus Fr. 16<sup>a</sup>

<sup>&</sup>lt;sup>82</sup> Lives 10.32

disciple or mentee of his by the name of Memnius. As Diskin Clay shrewdly pointed out, the poem "declares itself the continuation of a tradition and not a Roman copy of any individual philosophy."<sup>83</sup> Lucretius is a proud follower of Epicurus and Democritus and his poem *De rerum natura*, a crafty and deferential divulgation of their philosophical teachings. The main purpose of the work, says Lucretius towards the beginning of book one, is to refute religious superstitions about the nature of the world, about life and death and about the after life. The best way of doing this, according to Lucretius, is by exposing the true nature of things and the immutable laws that rule generation and corruption.<sup>84</sup> He who unraveled and communicated these laws more clearly and more systematically than anyone was Epicurus, who was schooled in the principles of atomism, a philosophical tradition founded by Leuccipus and Democritus a couple of generations before him.

It is a major challenge in any philosophical system to make clear cut distinctions between the independent nature of reality and how men have access to it; that is between an ontological and an epistemological sphere. Lucretius, following his predecessors, establishes that reality is composed of two principles: bodies and void. And we know this thanks to our bodily senses, but especially thanks to touch (*tactus*). Bodies are of many sizes and shapes, but among them there are some whose main characteristic is that they are indivisible. These, the atoms or first principles, are the stuff of which the world is made and although we cannot see them, we can feel them, they touch us and we touch them, constantly. The wind is a good example, says Lucretius. Even though we cannot see the wind, we feel its pressure against our face and we see it tear down trees and stir

<sup>83</sup> Clay 83

<sup>&</sup>lt;sup>84</sup> DRN 1.50-79

up the sea.<sup>85</sup> Void, on the other hand, is the space in between bodies that allows bodies to move, get together, regroup, separate, touch and be touched. Lucretius's conclusion is that the main difference between bodies and void is that bodies are tangible, whereas void is intangible: "For nothing can touch or be touched save body (*tangere enim et tangi, nisi corpus, nulla potest res*)."<sup>86</sup>

Not only the proof of the existence of void also comes from our sense of touch. Things are not as solid as they appear to be, notes the poet, and composite bodies are invariably porous and permeable. Sound, for example, can go through walls and "in rocks and caves the liquid moisture of waters oozes through and the whole space weeps with plenteous drops."<sup>87</sup> First bodies, however, differ from the composites they form precisely by being impenetrable and everlasting. In conclusion, there are only two natures (*natura*), or forms of existence, bodies and void; bodies are subject to touch (*tactus*) and they touch other bodies, whereas void is intangible (*intactus*)<sup>88</sup> and the condition for bodies to touch one another and produce new bodies.<sup>89</sup> In order to illustrate, and demonstrate this in an even clearer manner, Lucretius appeals to the dychotomy *coniuncta/eventa* (properties/accidents). A *coniunctum* is an inseparable characteristic of something, it is

<sup>87</sup> DRN 1.348-9

<sup>89</sup> DRN 1.430-9

<sup>&</sup>lt;sup>85</sup> DRN 1.268-71

<sup>&</sup>lt;sup>86</sup> DRN 1.304. I mainly use Rouse's translation. Esolen's recent verse translation is inadequate, and this particular line is a very clear example: "Matter alone can touch or can be touched (Esolen, 33)." Esolen ignores two crucial terms here: *corpus* and *res*, and instead chooses the philosophically loaded "matter," betraying rather than translating Lucretius' Latin.

<sup>&</sup>lt;sup>88</sup> Bayley believes that *intactus* is Lucretius' translation of the Epicurean term *anaphes* referred also to void (Bayley Vol. 2, 669).

essential to the thing, "like weight to a stone, heat to fire, fluidity to water, like tangibility (*tactus*) to all bodies and intangibility (*intactus*) to void."<sup>90</sup>

Later on in the poem, when Lucretius is trying to prove that even mind (*animus*) and spirit (*anima*) are bodily, he goes back to this basic notion of bodily nature as tangible nature:

The nature of mind and spirit is bodily for when it is seen to drive forward the limbs, to arouse the body from sleep, to change the countenance, to rule and sway the whole man, and we see that none of these things can be done without touch (*sine tactu*) and further that there is no touch without body (*nec tactum porro sine corpore*) must we not confess that mind and spirit have a bodily nature?<sup>91</sup>

But what does *tactus* really mean? What does it actually refer to? And what is the most accurate translation for it? In a way, the ambiguities that the Greek term *haphes* presented are the same as those posed by *tactus*. The participle of the verb *tango*,<sup>92</sup> *tactus* refers literally to actual physical contact and the sense of touch, and metaphorically to a certain emotional influence or effect that a person's words or gestures can have on another. When Lucretius says that bodies have *tactus* just like fire has heat, or stones have weight, the verb "to have" is almost a variant of the verb "to be." The relationship of *coniunctum* is a form of identity by metonymy. Stones have weight, they are heavy and if one could take weight out of the equation then stones would cease being stones.

<sup>&</sup>lt;sup>90</sup> DRN 1.453-4

<sup>&</sup>lt;sup>91</sup> DRN 3.161-7. Clay argues quite convincingly that this argument is taken directly from Epicurus (*Letter to Herodotus* 66.5-67.12) (Clay 122).

<sup>&</sup>lt;sup>92</sup> Meanings of this verb include: to come into physical contact with something/someone, to be immediately next to someone, to touch with a substance so as to leave a trail, to touch in a sexual or erotic way, to lay hands on something or take possession, to deprive fraudulently of something, to reach out and touch, to affect with emotion, to be influenced by something, to make a slight mention of something. (*Oxford Latin Dictionary*, ed by P.G.W. Glare, OUP, 1982, 1904-5).

Fire has heat; it is, in essence, hot. Bodies have *tactum*, they are tangible. Void has *intactus*, it is intangible. *Tactus* and *intactus* are, therefore, touch and its contrary, but perhaps in this more strictly ontological context they ought to be translated as tangibility and intangibility: the essential capability of touching and being touched.

It should be noted though that "tangibility" might bear too much of a passive connotation as it stresses the capability of atoms to be touched. Atoms, as Lucretius shall argue throughout book one, are first beginnings because they have contact with other atoms. Furthermore, the first principles are *insensilia*,<sup>93</sup> they do not touch and are not touched like composite bodies are, which means that they are tangible in the sense that they actively come in contact with other atoms in order to create composite bodies, and are not affected in their indivisible and impermeable materiality by this tangibility, or capability of being touched by other atoms. *Tactus*, in fact, although it is the most essential characteristic of bodies according to Lucretius, is different in atoms and in composite bodies. Schoenheim is therefore right to point out that in this case "contact" would be a more accurate translation than "touch."<sup>94</sup> To this one might add, as David Glidden accurately notes, that "atoms make contact with one another but they are certainly not tangible"<sup>95</sup> until they form a composite body.

In conclusion, by establishing that first beginnings, or atoms, have *tactus* as an essential property, or *coniunctum*, Lucretius wishes to stress their capability of *being in* and *coming in* contact with other atoms. Given that for Lucretius as for his atomistic

<sup>93</sup> DRN 2.865-7

<sup>&</sup>lt;sup>94</sup> Schoenheim 72

<sup>&</sup>lt;sup>95</sup> Glidden 178 (note 15)

predecessors, *tactus* is by definition reciprocal, the capability that atoms have to come in contact and be contacted by other bodies seems to be one and the same from an ontological perspective. The question that remains now concerns the degree of activity or passivity that atoms display in their coming in contact with one another.

Composite bodies are generated, develop, grow, deteriorate, become corrupt and eventually perish due to the interactions of atoms through void. Lucretius describes atomic interaction with imagery that evokes the vicissitudes of warfare. Atoms come in contact with one another with "blows" (*plaga*), "strikes" (*ictus*), "they assail" (*queunt*), " they shake" (*labare*) each other.<sup>96</sup> The famous opening lines of book two, where the poet pictures himself on the top of a mountain watching sea storms and armies clash by night, and enjoys the perspective on life and death that he gets from contemplating others toiling in the distance, might very well be a metaphor of the philosopher who arrives at a perfect understanding of the ways in which atoms interact and bodies are generated and perish.<sup>97</sup> The metaphor, however, far from being merely visual and spatial actually refers to a temporal vantage point that allows the philosopher-poet to contemplate generations and generations of births and deaths, of creations and destructions that successively and harmonically rule the ever-lasting becoming in the world.

According to the essentially tactile nature of Lucretius's ontology generation, growth and corruption of bodies is described in terms of atomic contact. Corporeal first

<sup>&</sup>lt;sup>96</sup> DRN 1.528-31

<sup>&</sup>lt;sup>97</sup> DRN 2.1-13. In book two (114-122) Lucretius again compares in martial terms atoms in motion to specks of dust colliding against each other, "in ever lasting conflicto, struggling, fighting," as one sees them when the sun light enters through a window. Bacon uses the famous beginning of book 2 in *The Advancement of Learning* when praising the never-ending pleasure of learning, thus portraying the Lucretian sage as the model savant (*The Major Works* 167).

principles come in contact with one another interlacing and forming composite bodies, and then disgregate causing the body in question to disintegrate. There are three conditions for this cycle of contact and detachment to come about. The first one is the existence of that other, intangible nature: void. The second one is movement, enabled by the existence of void. The third one is the strange phenomenon that Lucretius calls *clinamen*, or "swerving."<sup>98</sup> If one could reach that privileged and temporally detached vantage point from which the poet watches the world as a succession of sea storms and fierce battles, one would observe, as in a fast-motion cinematographic sequence, how bodies are in perpetual movement (*mobilitas*) increasing and decreasing in size. And "we would perceive all things as it were almost ebbing through length of time (*et quasi longiquo fluere omnia cernimus aevo*)."<sup>99</sup> Time, therefore, *is* movement.

As for *clinamen*, one should first say that first principles are of a solid and simple character (*solida primordia simplicitate*),<sup>100</sup> and they move swiftly through the void, "carried downwards by their own weight in a straight line."<sup>101</sup> However, were it not for this mysterious swerve (*declinare*), they would simply fall straight to the ground like raindrops and never come in contact with each other producing composite bodies. Thanks to the swerve atoms come in contact, collide and these blows (*plaga*) and collisions (*icta*) originate bodies. Thus *clinamen* is the ontological precondition for contact, and contact at this atomic level comes in the form of impacts and collisions. Nevertheless, in the first of

<sup>&</sup>lt;sup>98</sup> As pointed out by Bayley, the Greek notion of *parenklisis*, which is the equivalent of the Latin *clinamen*, is not to be found in any of the texts by Epicurus that have made it to the present time, although it is mentioned by Cicero (*De finibus* 1, 6, 19, and *De natura deorum* 1, 25, 70) (Bayley, Vol. 2, 839).

<sup>&</sup>lt;sup>99</sup> DRN 2.69

<sup>&</sup>lt;sup>100</sup> DRN 2.157

<sup>&</sup>lt;sup>101</sup> DRN 2.216-218

two major recapitulations that Lucretius produces for a potentially drowsy or distracted Memnius, Lucretius reminds his mentee that the only thing in this world that lasts forever are the first principles, and this is so because they are solid and they "reject blows" (*respuere ictus*).<sup>102</sup> Atoms, Lucretius concludes, are free from assaults (*expertia plagarum*) and always remain intact "like void" (*sicut inane est qui manet intactum*).<sup>103</sup> But had he not differentiated atoms and void before precisely by establishing that the former have *tactus* as their more intrinsic property and the latter *intactus*?

The question of whether atoms are in contact with each other or not was already a long-standing one by the time Lucretius wrote *De rerum natura*. In his commentary on Aristotle's *De generatione et corruptione* Philoponus says that, according to Democritus atoms are not in contact with each other because they are totally separated by the void. "The followers of Leucippus – Philoponus continues – [however] maintained that atoms touch one another and are separated by the void, through which they affect and are affected, except that the followers of Leucippus did not use the term touch in the strict sense."<sup>104</sup> Lucretius seems to accept that atoms have touch (*tactus*), meaning that they are in contact with other atoms, and the use of metaphors such as "blows" and "collisions" and "strikes" seems to aim at illustrating their coming in contact. Contact between atoms produced by that unpredictable swerve is what causes generation in the world; it is the origin of composite bodies. Cicero seems to confirm this idea in a reference to atomism slightly posterior to Lucretius's poem. He says that "atoms are bodies indivisible and

<sup>&</sup>lt;sup>102</sup> DRN 5.352

<sup>&</sup>lt;sup>103</sup> DRN 5.357-8

<sup>&</sup>lt;sup>104</sup> Testimonia 54 c-e

solid that travel in an infinite void (...) where they collide and stick together from which results everything that there is and is perceived."<sup>105</sup> So why does Lucretius compare atoms and void in that which before had dramatically differentiated them? Why does he say they remain intact and unaffected by the blows of other atoms?

When showing that nothing comes from nothing and that the first principles need to be everlasting and indestructible Lucretius had hinted at the fact that atoms are resilient to any exterior affections: "They can neither be dissolved by blows when struck from without, nor again be pierced inwardly and decomposed, nor can they be assailed and shaken in any way."<sup>106</sup> But this only means that they are impermeable, impervious, immutable, always unscarred; it does not mean that they are not in contact with one another. In fact, when Lucretius establishes that first principles are devoid of all color he says to Memnius: "You may be sure that the first beginnings have no need of colors, but that they give forth (edere) various kinds of touch (variis formis... tactus) with their various shapes."<sup>107</sup> The verb *edere* here can be understood as the counterpart of that elided habere when Lucretius said that contact was to bodies (meaning atoms and composite bodies) like heat was to fire.<sup>108</sup> Atoms both produce contact and have it as their innermost quality. The "poverty" (egestatem) of the Latin language, of which Lucretius warns Memnius towards the beginning of the poem forces him to make do with the term *tactus* for the main characteristic of all bodies (*tangibility*), the permanent and explosive activity of atoms through the void (contact) and one of the senses that bodies

<sup>&</sup>lt;sup>105</sup> De finibus 1.6.17

<sup>&</sup>lt;sup>106</sup> DRN 1.528-30

<sup>&</sup>lt;sup>107</sup> DRN 2.815-6

<sup>&</sup>lt;sup>108</sup> DRN 1.453-4

have (*touch*).<sup>109</sup> It is fair then to say that when the poet says that atoms are free from assaults and remain intact, like void,<sup>110</sup> he is thinking of *touch*, not of *contact* or *tangibility*. Atoms are not penetrated, pierced, split like composite bodies are. They come in contact with each other but they are not affected in their ultimate singularity by *tactus*. By comparing atoms to void in their character of *intactus* Lucretius is simply emphasizing the fact that for atoms to be everlasting they need to differ from composite bodies in one crucial aspect: they are unaffected by vicissitudes.

Composite bodies, on the other hand, are profoundly affected. They are tangible and touched in a way that causes them to change, transform and eventually perish. Lucretius explains this by saying that "things abide with body intact (*incolumis*) until a force meet them that is found vigorous enough to affect the texture (*textura*) of each."<sup>111</sup> This force (*vis*) that one body imposes on another body causing it to change, at an atomic level, is a result of multiple and diachronic collisions of atoms that come in contact with one another. They do not penetrate one another, or split one another in half or deteriorate one another, but they do come in contact, they do engage in this primordial *tactus*, and this contact generates, affects and finally dismantles composite bodies.

The nature of things for Lucretius is ruled by *tactus*. At the basis of Lucretius's ontology there are atoms, simple impenetrable everlasting bodies whose essential quality is their ability to come in contact with other atoms, and void, that which is not corporeal and, therefore, incapable of having any sort of contact. First principles fall through the

<sup>&</sup>lt;sup>109</sup> DRN 1.136-145

<sup>&</sup>lt;sup>110</sup> DRN 5.357-8

<sup>&</sup>lt;sup>111</sup> DRN 1.246-7

void space and thanks to the mysterious swerving, or *clinamen*, they are attracted to each other and come in contact with each other producing composite bodies. This unfathomable swerving that brings upon generation is the equivalent, at the atomic level, of the attraction that pushes composite bodies towards one another causing them to slowly disintegrate and eventually die. In dealing with sexual attraction and the minutiae of procreation at the end of book four, Lucretius notes that bodies in heat wish to penetrate one another and be absorbed by each other, but fail to even "rub off" (*abradere*) anything from the other body while they strive and "their limbs melt under the power of delight."<sup>112</sup> It is *rabies* and *furor* that ignite the sexual act.<sup>113</sup> Bodies in heat, driven by erotic *furor* and the blind unconscious drive to multiply themselves, are thus not unlike atoms that clash and assail one another in the night of times, giving birth to the natural world. In both cases the coincident and crucial factor is *tactus*. The most primal drive in bodies, both simple and composite, seems to be a drive to come in contact with other bodies, strike other bodies, split them, penetrate them, become one with them, taking full possession over them, assimilating them, annihilating them. As seen at an atomic level, however, but also in the paradigmatic example of sexual intercourse, it is impossible to fulfill this primordial drive. Bodies are composed of indestructible and impenetrable elements. The main difference between these elements and composite bodies is that the latter eventually come apart and become something else, whereas the former always remain intact. Intact but in contact, since, for Lucretius, that primal drive that all bodies share is *tactus*, an impulse to come in contact, to touch. In Lucretius's worldview, the genesis and palingenesis of the real is the product of contact.

<sup>&</sup>lt;sup>112</sup> DRN 4.1110-5

<sup>&</sup>lt;sup>113</sup> DRN 4.1117

### Touch as Sense and the Sense of Touch

In De rerum natura the Latin word tactus refers to at least four different mechanisms. The first two are ontological, the other two epistemological. Although *tactus* is the main characteristic of all bodies that can be touched and touch in return, it differs from atoms to composite bodies. First, it is the permanent activity that atoms engage in through void, without being affected in their everlasting and indestructible natures.<sup>114</sup> Second, touching and being touched is the means by which composite bodies are altered, grow, multiply, deteriorate, etc. Third, Lucretius believed that *tactus* equaled sensitivity: touch is the sense of the body. Finally, tactus refers to one of the five bodily senses, whose organ is the hand. In accordance with Epicurean ontology and epistemology, Lucretius establishes early on in *De rerum natura* that nothing can be more certain, more accurate than sense perception (sensus) "to mark us from truth and falsehood."<sup>115</sup> Later on in the poem he reiterates this view and insists to Memnius that it is from the senses that we get the notion of truth, and that the senses cannot be refuted: "What moreover can be held to be of a greater credit than the senses? (quid maiore fide porro quam sensus haberi debet).<sup>116</sup> David Glidden has explored the meaning of sensus in Lucretius's Latin, and concluded that by it the poet refers to three different things: objective perception, subjective feelings, and the sense organs with its complex mechanisms.<sup>117</sup> As it was the case with the polysemic term *tactus*, Lucretius has to make

<sup>&</sup>lt;sup>114</sup> As bodies, atoms have touch. However, they lack sensation, they are *insensibilia* (*DRN* 2.866). In this sense, atomic *tactus* might be be translated as "contact."

<sup>&</sup>lt;sup>115</sup> DRN 1.699-700

<sup>&</sup>lt;sup>116</sup> DRN 4.482-3

<sup>&</sup>lt;sup>117</sup> Glidden 170

do with *sensus* to explain a very complex array of operations. This notwithstanding, Glidden also agrees in that "physical contact is the mechanism for the operation of the sense organs."<sup>118</sup> The ontological basis of this, as explored in the previous section, is atomic contact. At the level of composite bodies, however, *sensus* is *tactus*, and *tactus* means the capacity of affecting other bodies (ie. touch) and the capacity to be affected by them (ie. tangibility).

*De rerum natura* has as its main goal to eliminate nonsensical fears from mankind by means of exposing the truth in all its simple glory. The truth is given to us by means of sense perception, or *sensus*. Our *sensus* is touch. This brings Lucretius to an explosion of poetic ecstasy, perhaps the most inspired and unexpected one in the whole work:

Tactus enim, tactus, pro divum numina sancta,

## Corporis est sensus<sup>119</sup>

"For touch, so help me the holy power of the gods, touch is the bodily sense..."<sup>120</sup> This praise to *tactus* not only makes perfect sense in the context of Lucretius's thought, but it also demands much more attention than it has received by critics until today.<sup>121</sup> In reading the exalted invocation to the gods, whose status and importance for Lucretius is as hazy as it is controversial, as merely poetic and not philosophical Bayley, who admits that the *pro divum numina sancta* "sounds oddly in the mouth of Lucretius the

<sup>&</sup>lt;sup>118</sup> Glidden 162

<sup>&</sup>lt;sup>119</sup> DRN 2.434-5

<sup>&</sup>lt;sup>120</sup> Esolen misses the meaning yet again and translates: "For touch it is, by the holy powers! touch, when we feel an object from outsider the body work its way in (Esolen 69)."

<sup>&</sup>lt;sup>121</sup> Bayley says: "the repetition of *tactus* and the exclamation lay emphasis on the supremacy of touch as the foundation of all sensation (Bayley 873)." Even in her article dedicated to *tactus* in Lucretius Schoenheim notoriously neglects this invocation.

Epicurean,"<sup>122</sup> dodges any philosophico-poetic implications that the solemnity of this verse might have.

With the exception of Venus, invoked at the beginning of the poem as the great inspirer of ardor and the impulse to multiplication among bodies in the world, and therefore the main ruler of the nature of things,<sup>123</sup> and Mother Cybeles,<sup>124</sup> symbol of the earth and its insensible yet prolific nature, Lucretius systematically avoids any type of praise to the gods. Like Epicurus, he believed that the greatest evils that afflict mankind were a product of organized religion and the belief in gods and spirits.<sup>125</sup> The gods exist and are material but they dwell in quiet isolation and peace,<sup>126</sup> they do not get involved with this world, and just like death they do not concern us at all. The main reason why they do not concern us has to do, precisely, with *sensus*, that is with touch. Towards the beginning of book five, while discussing the material nature of the gods, the poet points out that the divine cannot live in this tangible universe "being thin and far removed from our senses is hardly seen by the mind's intelligence and since it eludes the touch and impact of the hands (quae quoniam manuum tactum suffugit et ictum) it cannot possibly touch anything that we can touch (tactile nil nobis quod sit contingere debet): for that cannot touch which may not be touched itself (tangere enim non quit quod tangi non licet

<sup>&</sup>lt;sup>122</sup> Bayley 873

<sup>&</sup>lt;sup>123</sup> DRN 1.1-62

<sup>&</sup>lt;sup>124</sup> DRN 2.598-660

<sup>&</sup>lt;sup>125</sup> See DRN 1.62-126; 3.1-93; 5.55-125; 6.1-95

<sup>&</sup>lt;sup>126</sup> DRN 2.1090 ff

*ipsum*).<sup>"127</sup> The gods are nothing to us because we cannot touch them, and given that touch is essentially reciprocal, they cannot touch us. The true reverential miracle of nature, that which not only sparks generation but also allows us to have access to the world, be affected by it and affect it, and rightly understand it is *tactus*. As a matter of fact, the merely idiomatic invocation to the gods gives away an instant of relaxation in Lucretius's anti-religious dogmatism product of the very strong emotion of a thinker who has suddenly come to his *eureka*.

It should be noted, though, that Lucretius's notion of touch as *sensus corporis* is not at all a naïve one. The poet knows that he is going against the grain, since sight was traditionally considered the most privileged, highest, or most paradigmatic of the bodily senses. In Lucretian epistemology, however, sight is not only just another form of touch, but it is also a more conditioned one, a hindered and unsatisfactory form of touch. Lucretius is aware that his epistemology of touch needs to be properly justified against an epistemology of sight, and he repeatedly gives examples of the limitations of vision. Even though Lucretius does use visual imagery to refer to intellectual awareness and acuteness,<sup>128</sup> he also repeatedly stresses the limitations of sight. In fact, when addressing the causes of the human fear of the gods and its seemingly capricious and tyrannical decrees, the poet partly blames the shortness of our sight: "Humans are in fear because they cannot *see* the causes of things happening in the skies, and think it must be the gods. (...) So once we see (*viderimus*) that nothing comes from nothing, we'll perceive (*perspiciemus*) the source from which things come and the manner in which they are

<sup>&</sup>lt;sup>127</sup> DRN 5.150-2

<sup>&</sup>lt;sup>128</sup> When he explains his task the poet says to Memnius that he is composing his poem "to display clear lights befote your mind (...) whereby you may see into the heart of things hidden (*res quibus occultas penitus convisere possis*) (*DRN* 1.144-5)."

made.<sup>"129</sup> Indeed, the atoms cannot be detected by our eyes.<sup>130</sup> They are bodily, which means that they touch us. We also smell the various odors of things and cannot see the fragrances, or see the heat that scorches, or the cold that freezes, or sounds that please or upset us:<sup>131</sup> "Yet all these must consist of bodily structure, since they can act upon our senses (*quae tamen omni corporea constare necessest natura, quoniam sensus inpellere possunt*)."<sup>132</sup> Sight, called by Lucretius an *invida* (niggardly)<sup>133</sup> faculty gives us no access to the atomic level since "nature works by means of bodies unseen."<sup>134</sup>

Touch is the bodily sense *par excellence* and we know this, points out Lucretius, thanks to the way other bodies impact on ours producing pleasant or unpleasant sensations. Pleasure and pain, in all its varied range of levels of intensity, are the indicators of a connection with the outside world and they are the thermometer of touch. In order to prove this, when discussing flavors, and why some are bitter and others sweet, Lucretius appeals to the forms of the atoms and says: "those bodies which can touch (*tangere*) our senses pleasantly are made of smooth and round atoms, but contrariwise all that seems to be bitter and rough are held in connection by atoms more hooked, and are therefore wont to tear open their way into our senses and to break the texture by their intrusion (*proptereaque solere vias rescindere nostris/sensibus introituque suo*)

<sup>&</sup>lt;sup>129</sup> DRN 1.153-7

<sup>&</sup>lt;sup>130</sup> DRN 1.268

<sup>131</sup> DRN 1.298 ff

<sup>&</sup>lt;sup>132</sup> DRN 1.302-3

<sup>133</sup> DRN 1.321

 $<sup>^{134}</sup>$  DRN 1.328. The fact that atoms are colorless also proves that sight is nothing but a weaker variety of touch that cannot really give us access to unraveling the nature of things (DRN 2.730-814).

*perrumpere corpus*)"<sup>135</sup> and "all things that are agreeable to our senses and those which are disagreeable to the touch are in conflict being made of dissimilar shapes."<sup>136</sup> Everything that pleases the senses comes from atoms that have *levore*,<sup>137</sup> "smoothness," but what is rough and unpleasant comes from atoms with *squalore*,<sup>138</sup> "roughness." And some atoms are made in a way that they "tickle" (*titillare*)<sup>139</sup> our senses rather than hurt them. This applies to colors (sight), sounds (hearing), flavors (taste) and smells (odor). Also hot and cold "prick" (*compungere*)<sup>140</sup> our bodily senses. And at this point is that Lucretius bursts in the exalted appeal:

> Tactus enim, tactus, pro divum numina sancta, Corporis est sensus, vel cum res extera sese Insinuat, vel cum laedit quae in corpore natast Aut iuvans egrediens genitalis per Veneris res, Aut ex offenso cum turbant corpore in ipso Semina confunduntque inter se concita sensum; Ut si forte manu quamvis iam corporis ipse Tute tibi partem ferias atque experiare. Quapropter longe formas distare necessest

- <sup>135</sup> DRN 2.401-7
- 136 DRN 2.408-9
- <sup>137</sup> DRN 2.423
- <sup>138</sup> DRN 2.425
- <sup>139</sup> DRN 2.429
- <sup>140</sup> DRN 2.432

Principiis, varios quae possint edere sensus<sup>141</sup>

The translation of the full passage reads as follows: "For touch, so help me the holy power of the gods, touch is the bodily sense, whether when a thing penetrates from without, or when hurt comes from something within the body, or when it gives pleasure in issuing forth by the creative acts of Venus, or when from a blow the seeds make riot in the body itself and confuse their sense by their turmoil, as you might try for yourself now if you strike any part of your body with your hand. Wherefore it is necessary that the beginnings have widely different shapes, since they can produce varying sensations."

Composite bodies, as opposed to atoms, are porous, and they can be penetrated by atoms, which, according to their shapes produce pleasant or unpleasant feelings. Even colors that affect our sight, flavors that affect our taste and smells that affect our sense of smell do so by "penetrating" us,<sup>142</sup> by touching us. Touch is, therefore, *sensus corporis* and Lucretius goes deeper into this idea when, in book four he explains one by one the mechanisms of the separate senses. As he surveys the senses Lucretius engages only with vision, hearing, taste and smell. He does not dedicate a special section to touch, simply because touch *is* bodily sense, and bodily sense *is* touch. All four senses are variations of touch. Vision, whose organ is the eye, works by means of *simulacra* (images) that peel off from things, like the bark from the tree, like a serpent shedding its skin,<sup>143</sup> and move

<sup>&</sup>lt;sup>141</sup> DRN 2.434-43

 $<sup>^{142}\,</sup>DRN\,2.683\,\,\rm{ff}$ 

<sup>&</sup>lt;sup>143</sup> DRN 4.26-52

through the air impacting on the eye.<sup>144</sup> On hearing, whose organ is the ear, he concludes: "we must confess that voice and sound are also bodily, since they can strike upon the sense (*quoniam possunt inpellere sensus*) (...), and they can even hurt (*laedere*) it."<sup>145</sup> In fact, voice and sound in general penetrate (*penetrat*) the ears.<sup>146</sup> Taste, whose organ is the tongue, involves bodies that we squeeze out (*exprimimus*) and that touch (*attingunt*) the tongue<sup>147</sup> either sweetly, or by pricking (*pungunt*) the sense and tearing it (*lacerant*).<sup>148</sup> Finally smell, whose organ is the nose, engages odors that "assail" (*lacessit*)<sup>149</sup> and "penetrate" (*penetrant*)<sup>150</sup> the nostrils. All senses are, thus, characterized as variations of touch and contact. So, if vision, hearing, tasting and smelling are nothing but different types of touch, then is there such a thing as an independent sense of touch? Are there five senses, or is there simply one sense that functions at several different levels depending of which part of a body comes in contact with the external world?

There has been considerable debate regarding whether Lucretius deemed touch to be a separate sense, or not. According to Masson, Lucretius says nothing of the sense of touch because Epicureans regarded it not as an independent sense, but "as an auxiliary to the other four and present in each."<sup>151</sup> Even though Schoenheim acknowledges, that "the

- <sup>147</sup> DRN 4.618-624
- <sup>148</sup> DRN 4.625
- <sup>149</sup> DRN 4.686
- 150 DRN 4.719

<sup>&</sup>lt;sup>144</sup> DRN 4.240-5

<sup>145</sup> DRN 4.526-34

<sup>&</sup>lt;sup>146</sup> DRN 4.613

<sup>&</sup>lt;sup>151</sup> Masson 255

various sensations are nothing but modifications of *tactus*<sup>152</sup> she dismisses Masson's claim and convincingly shows that Lucretius refers to touch on repeated occasions as a sense in its own right.<sup>153</sup> Indeed, Lucretius in several passages suggests that he considered touch to be a sense like the other four, by referring to "the five (...) senses,"<sup>154</sup> and by enumerating the senses and including *tactus* along with the other four.<sup>155</sup> The problem for Schoenheim, as for other critics, arises when Lucretius leaves touch out in the general survey of the senses.

It has been argued that Lucretius chose not to discuss touch in this section of book four because atomists in general deemed the subject "too difficult to explain."<sup>156</sup> Schoenheim, instead, concludes that Lucretius might have left the sense "undiscussed systematically not because he decided that it was too difficult (...) but because he did not perceive how difficult it really was."<sup>157</sup> However, Lucretius's problem was far more structural: he was writing in Latin. He had one word at his disposal, *tactus*, to name an extremely complex process and mechanism, that operates on many different levels, and that is absolutely fundamental to his view of the world and of the nature of things. It is both unfair, and unwise to assume that Lucretius was unaware of how important, how vexing and how multi-layered the question of touch really was. Lucretius was very aware of this complexity and his attempts to engage with it are to be found in his references to

<sup>&</sup>lt;sup>152</sup> Schoenheim 77

<sup>&</sup>lt;sup>153</sup> Schoenheim 81

<sup>&</sup>lt;sup>154</sup> DRN 3.626

<sup>&</sup>lt;sup>155</sup> DRN 4.486-488, and 6.777-80

<sup>&</sup>lt;sup>156</sup> Beare 183

<sup>&</sup>lt;sup>157</sup> Schoenheim 86

hands. Indeed, when he refers to touch as one of the five senses he always makes reference to touch's organ, the hand. When he is trying to demonstrate that the mind is mortal because it is material, he argues that were it the case that the mind was immortal it should have "five senses" like the body. Immediately after he adds: "But apart from the body there can never be either eyes or nose or hand by itself (*nec manus ipsa*) for the spirit, nor tongue apart from the body, not can the ears by themselves perceive by hearing or exist."<sup>158</sup> In going over the five senses, Lucretius chooses to use the synecdoche. Touch *is* hand.

However, hand is also touch, understood here as one of the five senses. Later on in book four, when he establishes the grounds for a criterion of truth, Lucretius says that it comes purely from the senses and that the senses cannot be refuted: "What moreover must be held to be of greater credit than the senses?"<sup>159</sup> And senses neither refute one another not they reprehend themselves, since equal credit must always be allowed to them: "Will the ear be able to convict the eye, or the touch (*tactus*) the ear? Will the tongue's taste again refute the touch (*tactum*), will nose confound it or eye convince it? Not so, I think."<sup>160</sup> In the context of the five senses *tactus* and *manus* are interchangeable terms.<sup>161</sup> But the distinction between touch as *sensus corporis* and touch-hands as the particulat sense of each body is better illustrated when Lucretius says that they the gods

<sup>&</sup>lt;sup>158</sup> DRN 3.631-3

<sup>&</sup>lt;sup>159</sup> DRN 4.482-3

<sup>160</sup> DRN 4.486-9

<sup>&</sup>lt;sup>161</sup> For this see also *DRN* 6.777-80. At the end of book four, upon discussing the ardor that lovers are seized by before and during copulation, Lucretius illustrates the confusion appealing to the senses and points out that they (ie. lovers) "hesitate what first to enjoy with eye or hand (4.1076-8)."

"elude the touch (*tactum*) and the impact of the hands (*manuum...ictum*);"<sup>162</sup> in short, they do not affect us in a any way. Lucretius is here distinguishing between two instances of touch: the general bodily sense of which the five senses are variations, and the bodily sense whose organ is the hand.

This distinction, however, was already in the invocation to touch in book two: "For touch, so help me the holy power of the gods, touch is the bodily sense, whether when a thing penetrates from without, or when hurt comes from something within the body, or when it gives pleasure in issuing forth by the creative acts of Venus, or when from a blow the seeds make riot in the body itself and confuse their sense by their turmoil, as you might try for yourself now if you strike any part of your body with your hand."<sup>163</sup> The first touch referred to here is the bodily sense (sensus) that all bodies share and that defines their existence and determines their generation, their corruption and their relationship with other bodies. One can corroborate this with one's own hands, organs of the sense of touch. By hitting our leg we experience through our sense of touch *tactus* as sensus corporis. The hand is the active organ of touch's awareness, and constitutes a criterion of truth. Its mechanism, as that of the other four senses functions by means of blows, strikes and contact in general; it is, as the other four senses, purely tactile. In conclusion, if Lucretius did not include the sense of touch with the other four senses in book four it is because it would have been redundant: he had already explained the mechanism of touch in books one and two.

<sup>&</sup>lt;sup>162</sup> DRN 5.150

<sup>&</sup>lt;sup>163</sup> DRN 2.434-41

Lucretian epistemology, as Lucretian ontology, revolves around the polysemic notion of *tactus*. Generation and corruption in nature are the products of atomic movement and contact (*tactus*). Man perceives and then understands this thanks to sense perception (*sensus*), an all encompassing tangibility (*tactus*) that allows us first to be affected by the outside world, and then, by means of our hands, permits us to actively corroborate the different textures of the world (*tactus*). However, in order to understand Lucretius's profound concern with tactility I will now focus on his poetics. A glimpse at what can be called a *poetic of touch* will show that Lucretius's Epicurean engagement with touch cannot and should not be separated from his very primal impression of the world as a textured environment, and of nature as something that touches us and that we invariably and constantly touch.

### De rerum textura

In an article published in 1938, Bayley wrote: "The key to understanding Lucretius's mind seems to me to be that it was visual rather than logical, that concrete images appealed to him more than abstract arguments, in short that he was a poet rather than a philosopher."<sup>164</sup> Bayley is right in pointing out the need to focus more on Lucretius as a poet, and to look more closely on his imagery than on his logic. However, as I will argue, his mind is *tactile* rather than logical, and his colorful and elaborate imagery more a product of a deep sensibility to touch than to sight. The strong emphasis on touch that sections one and two have explored at an ontological and epistemological level can only

<sup>&</sup>lt;sup>164</sup> In Classen 5

be understood as the product of a personal and unique aesthetic sensibility that is predominantly tactile. This section will explore this sensibility through a series of examples from the poem. By looking closely at some of Lucretius's metaphors and images this primal experience of the natural world, which sparks in the author the need to write poetry, will come out in its clearly tactile nature.

The best place to begin tracking this tactile poetics is the two almost identical passages where Lucretius explains to Memnius the didactic and social role of poetry:

Nunc age, quod super est, cognosce et clarius audi. nec me animi fallit quam sint obscura; sed acri percussit thyrso laudis spes magna meum cor et simul incussit suavem mi in pectus amorem Musarum, quo nunc instinctus mente vigenti avia Pieridum peragro loca nullius ante trita solo. iuvat integros accedere fontis atque haurire iuvatque novos decerpere flores insignemque meo capiti petere inde coronam, unde prius nulli velarint tempora Musae; primum quod magnis doceo de rebus et artis religionum animum nodis exsolvere pergo, deinde quod obscura de re tam lucida pango carmina musaeo contingens cuncta lepore.<sup>165</sup>

<sup>&</sup>lt;sup>165</sup> DRN 1.921-34

"Come now, mark and learn what remains, and hear it more clearly. Not that I am unaware how obscure these matters are; but the high hope of renown has struck my mind sharply with holy wand, and at the same time has struck into my heart sweet love of the muses, thrilled by which now in lively thought I traverse pathless tracks of the Pierides never yet trodden by any foot. I love to approach virgin springs and there to drink; I love to pluck fresh flowers, and to seek an illustrious chaplet for my head from fields whence ere this the muses have crowned the brows of none: first because my teaching is of high matters, and I perceive to unloose the mind from the close knots of religion; next because the subject is so dark and the lines I write so clear, as I touch all with the Muses's grace."<sup>166</sup>

These verses describe the genesis of a poetic project with metaphors that are strikingly tactile. The poet was simultaneously struck (*percussit*) in his heart by hope of fame, and penetrated (*incussit*) in his chest (*incussit*) by love of the Muses. This drove him to traverse (*peragro*) pathless areas never before trodden (*trita*) by any foot. In case the image of the poet's feet sinking into this virgin land and inaugurating, marking a trail with his footprints was not tactile enough, Lucretius adds three very images that appeal directly to touch: drinking fresh water from springs, plucking flowers, and covering his head with wild crowns. Finally, anticipating the Horatian idea of *dulce et utile* he concludes that he "touches everything with the Muses's charm." The form *contingere* can be the infinitive of *contingo* (to soak, or make wet, to dye) or of *contango* (to touch). In

<sup>&</sup>lt;sup>166</sup> Book four begins with almost exactly the same verses (*DRN* 4.1-9).

using is *contingo* and that by it he means that, "he not so much touches the surface of his work with sweeteners, as he tries to permeate [the whole poem] with the beauty of poetry."<sup>167</sup> Permeating is, of course, a form of touching, it is an indelible touch that stretches far and captures the object touched transforming it. Lucretius hopes to take a hold of reality and laminate it with poetry thus containing it, exposing its laws and making it comprehensible to a layman such as Memnius.

Tactile poetic images also come into play when Lucretius establishes the principles of his ontology of contact. After the basic distinction between the two types of bodies (ie. atoms and composite bodies),<sup>168</sup> based on the former's solidity and the latter's permeability, or porosity, the poet illustrates the difficulty to believe in solid bodies appealing to a series of compellingly tangible images. Stones splitting in the heat, gold softened and melted by fire, copper liquefied in furnaces are proof that "we cannot see anything solid in the world."<sup>169</sup> Most of the things we see in the world can be affected, split, traversed, penetrated, and melted by the touch of external agents. Only atoms are solid, but they are also unseen, which brings us back some one hundred lines back when Lucretius established that "nothing can touch or be touched, save body."<sup>170</sup> After this conclusion there comes a beautiful succession of images of bodies deteriorating through rubbing against other bodies. Rings on fingers thinning due to extensive wear, bronze

<sup>&</sup>lt;sup>167</sup> McIntosh Snyder 334

<sup>&</sup>lt;sup>168</sup> DRN 1.483-4

<sup>&</sup>lt;sup>169</sup> DRN 1.497

<sup>170</sup> DRN 1.304

statues eaten away by eons of kisses and caresses of pious worshippers,<sup>171</sup> the sea salt corroding rocks, and the pavement slowly wearing away under the endless rubbing of men's feet.<sup>172</sup> Sight does not give us access to this because "nature works by means of bodies unseen (*corporibus caecis igitur natura gerit res*)."<sup>173</sup>

Lucretius also illustrates atomic contact in its essentially tactile nature by means of martial and bucolic metaphors. The famous beginning of book two in which the poet contemplates stormy seas and armies clashing at night,<sup>174</sup> as discussed before, serves as metaphor for the constant state of distress and collision in which atoms interact and come in contact with one another. Later on in book two the poet returns to the image of the passive observer, but in this case to stress also the dangers of being deceived by the weak and hindered sense of sight:

> nam saepe in colli tondentes pabula laeta lanigerae reptant pecudes, quo quamque vocantes invitant herbae gemmantes rore recenti, et satiati agni ludunt blandeque coruscant; omnia quae nobis longe confusa videntur et velut in viridi candor consistere colli. praeterea magnae legiones cum loca cursu camporum complent belli simulacra cientes,

<sup>173</sup> DRN 1.328

<sup>&</sup>lt;sup>171</sup> DRN 1.318

<sup>&</sup>lt;sup>172</sup> DRN 1.311-320

<sup>&</sup>lt;sup>174</sup> DRN 2.1-13

fulgor ubi ad caelum se tollit totaque circum aere renidescit tellus supterque virum vi excitur pedibus sonitus clamoreque montes icti reiectant voces ad sidera mundi et circum volitant equites mediosque repente tramittunt valido quatientes impete campos; et tamen est quidam locus altis montibus, <unde> stare videntur et in campis consistere fulgor.<sup>175</sup>

The woolly sheep with their well-fed lambs prancing on the mushy fields are seen as a large white frozen spot in a sea of green, but in reality they are moving, grazing, headbutting each other. The same thing happens when armies conduct their exercises, marching, galloping and stomping on the ground: from a distance they seem to be immobile. The contrast here is between sight and touch. From afar one misses the lambs playfully colliding against each other, the soft contact of sheep's wool against sheep's wool, the impact of hooves and feet against the ground. From afar one misses touch. Just like the layman fails to comprehend the ubiquitous colliding and clashing among first principles and believes the nature of things to be a series of whims of the gods. The image of the wise man sitting atop a hill and contemplating the turmoil in the distance with which Lucretius opens book two has then to be read as a metaphor. The distance is not spatial, but temporal, since, as he already established in book one: atoms essentially move and movement happens in time. The poet-philosopher needs to place himself close

<sup>&</sup>lt;sup>175</sup> DRN 2.317-332

enough to bodies as to be able to touch them and be touched by them, but far enough as to comprehend their vicissitudes from the only fruitful vantage point: timelessness.

Only from the vantage point of timelessness can one understand how touch is the means of generation and corruption in the world of composite bodies. Life, understood as a process of deterioration that is finite in time, is nothing but the history of clashes and encounters that a body has with other bodies, and that the organs of the body have among themselves. The lifespan of bodies is determined by their texture and by the frequency and intensity of their clashing and rubbing against other bodies. For Lucretius, therefore, the cycle of life and death is a matter of textures that come in contact and rub against other textures: "But as it is, since the bonds which combine the elements are different and their matter is everlasting, things abide with body intact until a force meet them that is found vigorous enough to affect the texture (textura) of each."<sup>176</sup> Precisely because bodies, by definition, touch and are touched, are tactile and tangible, is that Lucretius's world is a world, first and foremost, of textures. Bodies are combinations of textures. Vivid descriptions of bucolic textures follow this conclusion. Trees heavy with fruits, leafy woods (frondiferas [...] silvas), fat and weary flocks and cattle lying over rich pastures, their udders swollen (uberibus [...] distentis) with white milk that drips, illustrate this hypersensitive tactility.<sup>177</sup> Attributes such as heaviness in tree branches, leafiness in the woods, puffiness in fat flocks and herds and the swollenness of the udders, albeit visual images, are clear appeals to the hand of the reader, to the sense of touch.

<sup>&</sup>lt;sup>176</sup> DRN 1.244-7

<sup>&</sup>lt;sup>177</sup> DRN 1.252-9

According to Lucretius each individual is absolutely unique. Sheep might all look the same to us, but each lambkin knows who its mother is, in any given ear of corn one can perceive that the grains are not all alike, and the shells that carpet large portions of a beach are all different from one another, points out Lucretius.<sup>178</sup> In conclusion: "Wherefore again and again I say that the first beginnings of things (*primordia rerum*) in the same way, since they exist by nature and are not made by hand after the fixed model of one single atom must necessarily be somewhat different from one another in shape as they fly about."<sup>179</sup> Once again composite bodies are a metaphor for atoms. Thanks to our sense, to our *tactus*, we corroborate that the variety of textures in the world make for a state of almost absolute exceptionality. Lucretius concludes that the fact that all textures are different proves that atoms have to be differently textured as well.<sup>180</sup>

Immediately after this Lucretius discusses flavors, why some are bitter and others sweet, at which point he appeals to the shapes of first principles and says: "those bodies which can touch (*tangere*) our senses pleasantly are made of smooth and round atoms, but contrariwise all that seems to be bitter and rough are held in connection by atoms more hooked, and are therefore wont to tear open their way into our senses and to break the texture by their intrusion" and finally, "all things that are agreeable to our senses and those which are disagreeable to the touch are in conflict being made of dissimilar

<sup>&</sup>lt;sup>178</sup> DRN 2.367-76

<sup>&</sup>lt;sup>179</sup> DRN 2.377-80

<sup>&</sup>lt;sup>180</sup> The theory of the existence of infinite worlds is closely connected with this notion of total exceptionality in the natural world, as it can be seen in DRN 2.1048-86. "...there is no one thing in the whole sum of things which is produced unique (*unica*), and grows up unique and alone (DRN 2.1077-8)."
shapes.<sup>181</sup> Everything that pleases the senses comes from atoms that have *levore*, or "smoothness,"<sup>182</sup> but what is rough and unpleasant comes from atoms with *squalore*, ie. "roughness."<sup>183</sup> The climactic invocation to touch comes as a conclusion to this realization: *Tactus enim, tactus, pro divum numina sancta, corporis est sensus*.<sup>184</sup>

Touch allows us to feel the many textures of the world, thus granting us access to the essence of bodies, to their innermost characteristic, which is texture and tangibility. By touching and being touched we grasp the movement and the clashes and collisions of the first principles, which are invisible. Touch is the *sensus corporis*, it is sight and it is smell, and it is taste and it is hearing. The task of the poet is to touch with vision from afar, and to come close and touch with the hands and feel the textures of bodies. The task of the poet is to experience at first hand the exceptionality of each individual and to sing it. Finally, the task of the poet is to "traverse the pathless country of the Pierides, where no other foot has ever trod,"<sup>185</sup> and to teach others by means of verse about the nature of things, which is, in the end, nothing other but *the texture of things*.

## The Seeds of Lucretius

Over a millennium and a half went by between the time when *De rerum natura* was written by Lucretius, and the time when the text was rediscovered in Italy, published,

- <sup>183</sup> DRN 2.425
- <sup>184</sup> DRN 2.434-5
- <sup>185</sup> DRN 4.1-2

<sup>&</sup>lt;sup>181</sup> DRN 2.408-9

<sup>&</sup>lt;sup>182</sup> DRN 2.423

and eventually made popular. During this time the poem never disappeared completely from the intellectual stage, but readings of it that paid special attention to the privileged role of touch are conspicuous for their absence. Since immediately after the poem was composed and published the main topics that arise interest in famous readers of it such as Cicero, Ovid, Horace and Boethius are those that pertain style and the idea of poetry as both pleasant and didactic, that would later develop into the Horatian notion of *dulce et utile*. Christian authors demonized Lucretius for his atheism and anti-providentialism. The myth, according to which the poet drank a love potion, went mad, and committed suicide was most likely forged by Lactantius and it survived until the Renaissance.<sup>186</sup>

The very few scattered references to the poem that come to us from the middle ages are mostly concerned with matters of meter and scansion.<sup>187</sup> Dante ignores it completely, Petrarch quotes it six times and Boccaccio twice but, according to Piazzi, this does not necessarily mean that either of them had read Lucretius.<sup>188</sup> It is believed by some that this manuscript might have circulated in the Padoan *cenaculum* of Lovato Lovati's pre-humanists in the early fourteenth century.<sup>189</sup> 1417 is the key year for Lucretius's own personal renaissance.<sup>190</sup> It was in this year that Poggio Bracciolini found the manuscript of *De rerum natura* at a library of a monastery in Fulda, Germany. In 1437 Niccolò de Niccoli produced the first copy of it and the first printed edition came

<sup>&</sup>lt;sup>186</sup> Lactantius, *De opificio dei* (6,1). For more on the story of Lucretius's death see Canfora and Solaro.

<sup>&</sup>lt;sup>187</sup> Reeve 205

<sup>188</sup> Piazzi 77

<sup>&</sup>lt;sup>189</sup> Piazzi 78 (n.106)

<sup>&</sup>lt;sup>190</sup> In 1416 Diogenes Laertius's *Lives of Eminent Philosophers* (which incluyes the "Life of Epicurus" one of the most popular sources for epicureism in the Renaissance) was brought from Constantinople. Ambrogio Traversari translated it into Latin in 1433. There are at least 48 fifteenth century manuscripts of it that survive, and seven printed editions between 1472 and 1497.

out of Brescia in 1474. Beretta points out that "for the whole of the fifteenth century *De rerum natura* never left Italy (...) and there are 54 codices that date from this century, all dating back to Poggio's and Niccoli's Florentine codex."<sup>191</sup> Lucretius's popularity did nothing but grow in the centuries following Poggio's discovery with sixty-seven editions (twenty two of them being ghost editions) published between the year of the *editio princeps* and 1650.

As Lucretius's popularity grew, however, so did the controversy concerning his staunch anti-clericalism. Marsilio Ficino, for example, disqualifies him for having died insane by his own hand<sup>192</sup> but he also admits to having read him, enjoyed him and even written a "little commentary," or a least a set of notes, to *De rerum natura* that he eventually "gave to Vulcano."<sup>193</sup> Lorenzo Valla, Pomponio Leto, Giovan Battista Pio, Denys Lambinus, and Girolamo Frachetta praised and commented his poetry. Macchiavelli made a manuscript copy of *De rerum natura* (around 1497), and was also one of the very few early readers who paid explicit attention to atomic theory in the poem.<sup>194</sup> Politician and historian Bartolomeo Scala was writing a "Lucretian"<sup>195</sup> poem around the time of his death in 1497, and Marcello Adriani lectured on him in Republican Florence. Neo-Latin poets such as Giovanni Pontano, Michele Marullo, Lorenzo Bonincontri, Angelo Poliziano, Scipione Capece, Aonio Paleario, knew him well,

<sup>&</sup>lt;sup>191</sup> Beretta 130. Poliziano was one of the lucky owners of a copy of the manuscript.

<sup>&</sup>lt;sup>192</sup> Theologia Platonica 14.10

<sup>&</sup>lt;sup>193</sup> Epistolae 11.25. For more on Ficino's views on Lucretius see Alison Brown's *The Return of Lucretius* to Renaissance Florence (Chapter 2), and Passannante's forthcoming "Burning Lucretius: On Ficino's Lost Commentary."

<sup>&</sup>lt;sup>194</sup> Palmer 412-3

<sup>&</sup>lt;sup>195</sup> Brown 69

admired his verse, and imitated him in their poetry.<sup>196</sup> None of them, however, dealt either directly or indirectly with Lucretius's poetico-philosophical predilection for *tactus*.<sup>197</sup> With very few exceptions, Lucretius's readers in the fifteenth and early sixteenth centuries paid considerably more attention to the poet than the philosopher. As Brown points out, throughout the fifteenth century Lucretius's influence in Italy "was restricted to a group of scholars who liked the medium of his poetry but not the message."<sup>198</sup>

In 1517 the poem was banned from schools in Florence but incredibly enough, it never made it to the infamous *Index librorum prohibitorum* despite its atheism, and its staunch anti-religiosity. A letter from 1549 gives us a fascinating insight to the miraculous history of *De rerum natura*. Giovambattista Busini reports to art critic Benedetto Varchi from Rome that, during a meeting to decide which works were to be added to the Index, someone proposed Lucretius but Cardinal Marcello Cervini refused considering its atomistic mythology harmless.<sup>199</sup> In a brilliant work from 2004, Valentina Prosperi analyzes Lucretius's recovery and diffusion during the Renaissance by closely reading the reception of a motif from the end of book one of *De rerum natura*. Apologizing for the obscurity of his topic, Lucretius says:

<sup>&</sup>lt;sup>196</sup> Haskell 75. See Goddard's unpublished dissertation (1991), a meticulous study on the Lucretian influence in fifteenth century Italian poetry.

<sup>&</sup>lt;sup>197</sup> Brown shows that Florentines in the fifteenth century were drawn by basically three themes in Lucretius: fear of death, evolutionary primitivism and the cosmological implications of atomism.

<sup>&</sup>lt;sup>198</sup> Brown 15. In an article published this summer, Ada Palmer shows through the study of *marginalia* in Renaissance manuscripts, that an overwhelming majority of Lucretius's fifteenth-century readers was not interested in issues regarding atomism. In her study of 52 of the 54 extant Renaissance manuscripts of *De rerum natura*, Palmer concludes that most fifteenth century readers were interested in matters of philology, etymology, and poetics.

<sup>&</sup>lt;sup>199</sup> Busini 241

As I proceed to unloose the mind from the close knots of superstition (*religio*) (...) the subject is so dark and the lines I write so clear, as I touch (*contingo*) all with the Muses's grace. (...) As with children when physicians try to administer rank wormwood, they first touch (*contingo*) the rims about the cups with the sweet yellow fluid of honey, that unthinking childhood be deluded as far as the lips, and meanwhile may drink up the bitter juice, and though beguiled be not betrayed, but rather by such means be restores and regain health.<sup>200</sup>

The history of the popularization of Lucretius in the fifteenth and sixteenth centuries, argues Prosperi, almost seems to have been predicted and dictated by Lucretius himself.<sup>201</sup> His mellifluous poetry allowed him to be safe from prohibitions. By the early sixteenth century he was already canonical and en par with Virgil, Horace, and Ovid. By the mid seventeenth century his philosophy was canonical. Naturally, separating the poet from the philosopher was an easy way to justify indulging in the blasphemous verses of *De rerum natura*. Aldus Manutius, the champion of editing, printing and divulgating ancient paganism in early modern Europe, once said that Lucretius merited publication not for his thought but for the elegance of his verse.<sup>202</sup> The generalized neglect for his philosophical ideas in general, but for the crucial role of *tactus* in the poem, becomes evident in the three main sixteenth century commentaries of the poem: Giambattista Pio, Denys Lambinus, and Girolamo Frachetta.<sup>203</sup> Whether this had to do with the Christian

<sup>&</sup>lt;sup>200</sup> DRN 1.930-42

<sup>&</sup>lt;sup>201</sup> Prosperi (2004)

<sup>&</sup>lt;sup>202</sup> Piazzi 92

<sup>&</sup>lt;sup>203</sup> Pio's commentary (1511) is extremely learned but mostly philological. Goddard describes it as follows: "The style of the commentary does not stem from an interest in Lucretius or Epicureanism. It does not lend itself to reflecting the spirit of *De rerum natura* or to explaining the meaning of the work (Goddard [1991] 216)." Lambinus's commentary was published in 1563. When he gets to the invocation to *tactus* Lambinus says: *ad tactum provocat, sensuum omnium principem nam sensus omnes ad tactum revocantur*. And on *per deus numina sancta*: Lambinus says merely: *poetice, non philosophice* (*DRN* 2.434-5 [1686]). Girolamo Fracchetta's commentary also ignores the issue blatantly.

hierarchy of the senses, that almost invariably places touch as the basest most despicable sense, or whether it responds to a general disregard for the philosophical doctrines in the poem, is hard to say.

Giordano Bruno, for example, in this as in many other aspects of his revolutionary thought, went against the grain in reading Lucretius and paid particular attention to the notion of a minimum indivisible in matter, to the theory of an infinite void space and to the belief in a plurality of worlds. He was one of the first early modern authors to become involved with the cosmology of atomism, and to use it to elucidate some of the most pressing issues of contemporary science. One can see this mainly in his Frankfurt trilogy (1591): *De triplici minimo et mensura; De numero, monade et figura* and *De innumerabilibus immense et infigurabili*. Although he fails to engage with the problem of *tactus* he does place a great philosophical importance on hands, as I will show in the next chapter. The case of Galileo is also interesting. In *Il Saggiatore* (Rome, 1623), especially in chapters 41 to 48, the Tuscan thinker argues that perception is the product of the coming in contact of particles that come out of objects and the organs of the senses. He never quotes Lucretius, or Epicurus for that matter.<sup>204</sup>

In order to find readers of Lucretius who were sensible to the poet's stress on the tactile, one must look elsewhere. It is interesting that, as Valentina Prosperi points out, Lucretius seems to have been very popular among medical doctors in the Renaissance and early modern period. And since it was them who probably enjoyed the most

<sup>&</sup>lt;sup>204</sup> Piazzi 112

"freedom in the discussion of bodily matters,"<sup>205</sup> it should not surprise us to encounter in some of their writings the first signs of an appreciation for the Lucretian stress on touch, contact and tangibility. One of the clearest examples of this, from the early seventeenth century, is Giulio Casserio (1552-1616), anatomist and professor at the University of Padua. In the introduction to his treatise on the five senses, the *Pentaestheseion* (1609), he argues that all truth comes to us via the senses and quotes Lucretius as the main authority.<sup>206</sup> Touch is the most fundamental of all the senses, says Casserio, and "omnis sensus est tactus."<sup>207</sup> The dignity of touch has to be made evident, Casserio claims. He then proceeds to enumerate the features that make touch exceptional and fundamental. First, Nature has made touch responsible for the generation and preservation of species, says Casserio, clearly referring without saying it, to the invocation to Venus in book one of De rerum natura. Second, touch is the first sense to awaken in the fetus. Third, without touch there would be no medicine, and "dense tenebrae would fall on the eyes of physicians."<sup>208</sup> Fourth, touch allows for moral philosophy to exist, since it reveals vice better than any other sense. Fifth, it is the sense through which Jesus performed his miracles, thus demonstrating his divine nature to mankind.<sup>209</sup> Later in the first book, dedicated to touch, he again quotes Lucretius when he says that "tangere enim et tangi nisi corpus nulla potest res."<sup>210</sup> Only bodies are tangible, and the spirit, Casserio adds,

<sup>&</sup>lt;sup>205</sup> Prosperi 217

<sup>&</sup>lt;sup>206</sup> Casserio 1

<sup>&</sup>lt;sup>207</sup> Casserio 4

<sup>&</sup>lt;sup>208</sup> Casserio 3

<sup>&</sup>lt;sup>209</sup> Casserio 3

<sup>&</sup>lt;sup>210</sup> Casserio 43. De rerum natura 1.304

correcting Lucretius, deals with incorporeal realities. Although he believed in an incorporeal world that Lucretius would never have accepted, Casserio accepts that here in the natural world Lucretius was right in privileging touch, and considering it the basis for all the other senses. Casserio might have been one of the first intellectuals to openly revaluate touch by explicitly relying on Lucretian ideas, but in another physician before him we find perhaps the first systematic translation of Lucretius's thought into early modern science. I am referring to Girolamo Fracastoro (ca. 1478-1553).

The Veronese physician and poet was in his youth very well acquainted with members of the Aldine circle. A close friend of Fracastoro, Andrea Navagero, editor of the works of Pindar, Cicero, Quintilian, and Virgil for the Aldine press seems to have been Fracastoro's main influence during the composition of the poem that made him famous, *Syphilis sive de morbo gallico*.<sup>211</sup> In 1515, at a time when according to some Fracastoro had already a first draft of the first two books of his poem, Navagero's edition of Lucretius was published in Venice.<sup>212</sup> This means that as Navagero prepared his edition of Lucretius, Fracastoro started writing his poem. We know they spent time together at Pordenone in 1509, while they were both guests at the Accademia Friulana, and it is safe to assume they discussed Lucretius in depth.<sup>213</sup> Indeed, the poem on syphilis, finally published in two books in 1526, and subsequently in 1530 with the addition of a third book, bears the clear imprint of Lucretius's poem. In *Syphilis* Fracastoro proposes the theory of a seminal origin of diseases. Some historians of

<sup>&</sup>lt;sup>211</sup> Eatough 6

<sup>&</sup>lt;sup>212</sup> Hendrickson 519; and Ongaro, "Girolamo Fracastoro e lo Studio di Padova," in Pastore-Peruzzi, 49

<sup>&</sup>lt;sup>213</sup> Pellegrini (1954) 14

medicine consider him the forefather of modern epidemiology.<sup>214</sup> From early on readers of the poem compared it to Lucretius's work. Pietro Bembo, to whom the poem was dedicated, considered it even better than *De rerum natura* concerning certain aspects.<sup>215</sup> As the fragments discovered and published by Pellegrini in the 1950's show, at the time when Fracastoro wrote the poem he placed great importance in the relationship between philosophy and poetry, saw himself as a philosopher-poet and therefore as following the footsteps of Museus, Orpheus, Democritus, Anaxagoras and Lucretius.<sup>216</sup> As for Lucretius's footsteps, the Veronese poet followed them quite literally. *Syphilis* starts precisely where *De rerum natura* had abruptly left off: with the horrific account of a plague and the attempt to understand the cause of disease. Let us now go back to Lucretius for a moment.

Over more than seven thousand verses, Lucretius uses the theory of *semina* and *textura rerum* to explain everything from the generation and corruption of bodies, to the origins of human civilization, the movement of celestial bodies, and the causes of meteorological phenomena. The aim of the poet throughout the work is to dispel irrational fears that invariably come from ignoring the true and natural causes of the things. Among these fears—that spawn *religio* (Lucretius's bête noire) and pseudo-science—the most powerful one is the fear of death. Perhaps this is why *De rerum natura* ends with an attempt to explain the causes, or "seeds" of disease.

<sup>&</sup>lt;sup>214</sup> Fracastoro 42. The poem, fairly popular in the sixteenth century, was reprinted fifteen times in less than a century alter its publication (including in nine editions of Fracastoro's *Opera Omnia*, and in two Italian translations) (Baumgartner-Fulton).

<sup>&</sup>lt;sup>215</sup> Pellegrini (1954) 17

<sup>&</sup>lt;sup>216</sup> Pellegrini (1954) 26-27

First I taught that there are seeds of many things (*multarum semina rerum*), which are vital for us, but there must also be many others that fly about bringing disease and death.<sup>217</sup>

Contagion penetrates the body, and the mind, through such deadly seeds, dissolving and, oftentimes, killing the composite.<sup>218</sup> When these pestilent seeds accumulate "by chance"  $(casu)^{219}$  they corrupt the waters, the means of human sustenance, and even the air, "and as we breathe we draw into us that mixed air."<sup>220</sup> What follows is a horrific account of the plague in Athens that ends with a series of grisly images worthy of Bosch, or Bruegel, of temples desecrated by rotting corpses, and piles of bodies burning in improvised pyres. In one last brutal blow of honesty, Lucretius shows us that the capricious wanderings of invisible seeds can bring both humans and gods down to their knees.

Over fifteen hundred years later, Fracastoro starts his poem wondering which *semina* (the term appears in the first line of book one)<sup>221</sup> have produced the devastating plague that is ravishing Europe. *Semina* are corpuscles, very varied in nature, invisible, independent, and strikingly similar in their description to atoms.<sup>222</sup> Fracastoro never claims he is advancing new ideas, but he provides science, as Nutton says, with "a whole new set of fresh and striking metaphors to play with in their discussions of communicable

<sup>222</sup> DRN 1.294-6

<sup>&</sup>lt;sup>217</sup> DRN 6.1093-6

<sup>&</sup>lt;sup>218</sup> As he argues for the inextricable union of mind and body, Lucretius says that one must accept that "the mind is also dissolved every time that the contagion of disease penetrates it" (DRN 3, 471).

<sup>&</sup>lt;sup>219</sup> DRN 6.1096

<sup>&</sup>lt;sup>220</sup> DRN 6.1128

<sup>&</sup>lt;sup>221</sup> Qui casus rerum varii, quae semina morbum/insuetum, nec longa ulli per saeculam visum/attulerint... Singer also admits that the doctrine of disease's seeds "is foreshadowed in a Lucretian passage in the Syphilis (Singer 11)."

diseases;<sup>223</sup> and these he bases on his readings of Lucretius. Pellegrini notes that Lucretius's *semina morbi* were as familiar to all men of science, "just like protons and electrons are familiar to us.<sup>224</sup> Fracastoro's *semina* in *Syphilis* are said to be from line one of book one the bringers of the new disease. In line 84 Fracastoro uses another very Lucretian term, *primordial*, to refer to the first beginnings of things. Also, Fracastoro's view of life in this world as a constant process of change that almost like high tide and low tide bring about generation and corruption has clear Lucretian echoes.<sup>225</sup> Fracastoro, like Lucretius, believed that if we accept the constant novelty of beings that come and go, we should not be surprised when new diseases appear either.<sup>226</sup>

The fact that Fracastoro chose to write a scientific work in dactylic hexameter can also be suggestive of the influence that reading Lucretius had on him, even though, as it has been shown, the poem also follows the model of Manilius's and Pontano's Neo-Latin didactic poetry.<sup>227</sup> But perhaps the most striking element of the poem is that one of the key words throughout book one is *contagio*. The Latin word comes from the verb *contingo* (a verb used by Lucretius to describe his *ars poetica*),<sup>228</sup> and means a touching, a connection, and from there an unclean touching, an infection. In fact, Fracastoro even

<sup>&</sup>lt;sup>223</sup> Nutton [1983] 30

<sup>&</sup>lt;sup>224</sup> Pellegrini 163

<sup>&</sup>lt;sup>225</sup> Syphilis 1.132 ff

<sup>&</sup>lt;sup>226</sup> Syphilis 1.182-5

<sup>&</sup>lt;sup>227</sup> Singer 5. In his dialogue on poetics, *Naugerius, sive de poetica dialogus*, whose main character is Navagero, Fracastoro reminds us that Lucretius was not the only atomistic philosopher invested in poetry. Democritus is said to have griten twenty two volumes on the art of poetry (*Navagero* 1.20).

<sup>&</sup>lt;sup>228</sup> De rerum natura 1.947

uses the word *tactus* to refer to a type of contact that contaminates.<sup>229</sup> Eatough argues: "Fracastoro's new theory of contagion [was] based on [Lucretius's] *semina*."<sup>230</sup> Other critics, such as Pellegrini and Roccasalva, have warned readers not to confuse Fracastoro's seeds of disease with Lucretius seeds.<sup>231</sup> Valid though such conceptual and philological caveats may be, Fracastoro, like Lucretius, believed that contagion operated through physical contact between seeds of infection and a healthy host.

During his student years at Padua, between the very end of the fifteenth and the early first decade of the sixteenth century, Fracastoro surely was aware of and maybe even took part in a debate between two opposed factions of Aristotelians dominated the academic scene. Its two main protagonists were Alessandro Achillini, a Bolognese anatomist who adhered to an Averroistic reading of Aristotle's work, and Pietro Pomponazzi, more prompt to following Alexander from Aphrodisias. As Singer points out, Pomponazzi stood "for Naturalism, for the attempt to explain the World and all that it contains on the basis of known or discoverable laws."<sup>232</sup> Navagero, the would-be editor of *De rerum natura*, met Fracastoro while taking classes with Pomponazzi at Padua. They would remain friends for the rest of their lives, and Fracastoro made Navagero a character in his trilogy of dialogues on poetics (*Naugerius*), on human knowledge (*Turrius*) and on the soul (*De anima*) written in the 1540's and published posthumously.

<sup>&</sup>lt;sup>229</sup> See Syphilis 1.246

<sup>&</sup>lt;sup>230</sup> Eatough 6-7

<sup>&</sup>lt;sup>231</sup> Pellegrini 59 and Roccasalva 40. Roccasalva says that whereas Lucretius's *seminaria morbi* are dead atoms, Fracastoro's *seminaria* have all the attributes of vitality and specificity (Roccasalva 43).

<sup>&</sup>lt;sup>232</sup> Charles and Dorothea Singer 2

Surely, discussing Lucretius with Navagero, and hearing Pomponazzi's extremely heterodox readings of Aristotle, had a considerable impact on young Fracastoro.

As a matter of fact, Fracastoro's main concern as a man of science is remarkably faithful to the Lucretian legacy: When dealing with natural phenomena one must look for natural causes. Charlotte Goddard has shown that both Syphilis and Fracastoro's later work take a firm stand against superstition, as well as against astrology.<sup>233</sup> Fracastoro's immediate foes in this war against irrationality might have been Sebastian Brandt, in his poem De pestilentiali scorra sive mala de Franzos, and Josef Gruenpeck's Tractatus de pestilientiali scorra (both published in 1496), that consider syphilis to be a divine punishment. But Fracastoro was not the first physician to focus on the naturalistic theory of contagion by physical contact. Alessandro Benedetti and Johannes Widman towards the end of the fifteenth and the beginning of the sixteenth century, when Fracastoro was still a student at Padua, claim that there are four causes for infection: (1) The actual strength of the infection, (2) the disposition of the patient, (3) the nearness of two bodies, (4) the duration of exposure.<sup>234</sup> Fracastoro's revolutionary view consists of centering all causes of contagion on the notion of contact. Some of his contemporaries, like Fuchs, Paracelsus, and Cardanus among others, also held similar views on contagion, which proves that the notion gained recognition very early on. Some decades later Mercuriale, author of the first treatise on skin diseases, also subscribes to Fracastoro's theory.<sup>235</sup>

<sup>&</sup>lt;sup>233</sup> Goddard 189

<sup>&</sup>lt;sup>234</sup> Singer 21

<sup>&</sup>lt;sup>235</sup> Siraisi [2008] 303

Fracastoro spent the next decade and a half working on his theory of contagion, and in 1546 he published his two most important scientific treatises on the matter: the first one dedicated to sympathy and antipathy (De sympathia et antipathia rerum), the second one to contagion (De contagione). Concetta Pennuto, editor of the lesser-known De sympathia argues that the infectious seeds are attracted by analogia, "that affinity that becomes concrete after sympathetic action and antipathetic reaction."<sup>236</sup> Precisely for this reason, in order to understand contagion, one must first learn about the laws of attraction in nature. De sympathia serves as an introduction to De contagione, and in its pages Fracastoro explores the phenomena of attraction and repulsion within the context of universal harmony. By doing so, the physician is not only preparing the ground for his theory on contagion, which will also be to a great extent explained by these phenomena, but he is also filling what perhaps is the most considerable blank in Lucretius's natural philosophy: why and how do atoms get together and then separate. Fracastoro's theory of contagion, anteceded by his views on sympathies and antipathies in nature is, thus, a reflection on the nature of attraction and repulsion without which, he says in the opening letter to Alessandro Farnese, "the nature of contagion cannot be investigated and explained with clarity;"<sup>237</sup> and it is meant as a response to, or continuation of Lucretian ideas.

Right before he puts forward his theory of contagion, Lucretius has a significantly long digression on magnets and the cause for their quality of attraction. This digression, followed by the theory of diseases as airborne seeds, and the subsequent bone-chilling

<sup>&</sup>lt;sup>236</sup> Pastore-Peruzzi (eds.) 70

<sup>&</sup>lt;sup>237</sup> De sympathia 7

description of the plague in Athens, close *De rerum natura* in a dark and ominous vein. The fact that in order to explain something seemingly banal as a stone that "astonishes men because it often makes a chain out of little rings hanging from it,"<sup>238</sup> Lucretius reviews the foundations of the atomic theory. In doing so the poet stresses that bodies flow constantly and, since all composite bodies are porous, there is a perpetual intromission, penetration, invasion of smaller bodies into bigger ones. "But not all bodies that are cast off from things are endowed with the same effect on the senses, or suited for all things in the same way," says Lucretius.<sup>239</sup> Once again Lucretius fails to provide a thorough explanation of the laws of attraction.

*De sympathia* is crucial to understand Fracastoro's dialogue with Lucretius, as well as his theory of contagion.<sup>240</sup> In the dedicatory address to Cardinal Alessandro Farnese the physician admits that ancient writers have dealt with the topic, but says that no one before has systematically studied the essence and vicissitudes of the infectious disease.<sup>241</sup> Instead, most of his contemporaries had been content with attributing them to "*occultas proprietates*." Fracastoro's work, like Lucretius, has as one of its main goals, if not the main goal, to propose an approach to natural philosophy, a methodology and an argumentation that can justly be called naturalistic. Occult properties belong to the realm of the supernatural. Fracastoro believes that sympathy and antipathy, or the *consensus* 

<sup>&</sup>lt;sup>238</sup> DRN 6.910-11

<sup>&</sup>lt;sup>239</sup> DRN 6.959-961

<sup>&</sup>lt;sup>240</sup> Its German editor and translator Gerhard Weidmann has seen in it strong, perhaps the strongest evidence of Lucretian influence where Lucretius discusses the "images (*simulacra*)" that things produce. Weidmann concludes that Fracastoro "could not have written [his main works] had he not known Lucretius (Fracastoro [1979] 62).

<sup>&</sup>lt;sup>241</sup> De sympathia 57

and *dissensus* among things is the most marvelous and vexing law in all of nature.<sup>242</sup> The first and most primordial manifestation of universal consensus comes from the fact that every single body that exists in the universe is always touching (*tangunt*) other bodies; there is absolutely no vacuum whatsoever separating bodies.<sup>243</sup> By making touch the first law of universal *sympathia*, and contact between body parts the basis of the conservation of bodies in themselves, Fracastoro tacitly adheres to the Lucretian principle that bodies are defined by their ability to touch and be touched.

In chapter five of *De sympathia* Fracastoro advances his main theory on how *consensus* works; and it is none other but the ancient axiom according to which "like is attracted to like" (*similium ad similia*), traceable as early as Empedocles and present in Plato and Aristotle. Here Fracastoro, echoing Lucretius, appeals to the example of magnets. The physician assumes that there must surely be something that travels from body to body, in order to bring them together. It is at this point that Fracastoro brings up the atomic theory of "Democritus and Epicurus, from whom our own Lucretius followed,"<sup>244</sup> as a possible explanation for the principle of attraction, one that, as he clarifies, he "used" to accept; however now he finds it unsatisfactory because he refuses to accept that what flies between bodies is in itself bodily. Also, by denying the existence of vacuum Fracastoro distances himself from the Latin poet and comes closer to Aristotelian principles.<sup>245</sup> He thus brings up the also traditional notion of *species* 

<sup>&</sup>lt;sup>242</sup> De sympathia 58

<sup>&</sup>lt;sup>243</sup> De sympathia 2

<sup>&</sup>lt;sup>244</sup> De sympathia 60

<sup>&</sup>lt;sup>245</sup> On Fracastoro's rejection of the existente of the vacuum and its Aristotelian roots see Pennuto's comment (Fracastoro [2008], 189-190).

*spirituales* and concludes: "I understand that similitude must be taken to be a spiritual species that touches (*quae tangit*)."<sup>246</sup> Every single nature propagates its form via species spirituales to other natures that are akin to it by means of a certain touch that Fracastoro never quite explains.<sup>247</sup> Even though the critique of the atomic theory and attraction by means of bodily effluvia is strong, Fracastoro's insistence on touch and contact in a preliminary work that introduces his theory of contagion (yet another form of touch) bears a strong Lucretian undertone that no commentators have hitherto noticed.

*De contagione et contagiosis morbis et eorum curatione* is, arguably, Fracastoro's most important and influential work. According to his twentieth century editor this work constitutes the "first scientific statement of the true nature of contagion, of infection, of disease germs and of the modes of transmission of infectious diseases."<sup>248</sup> The letter to Alessandro Farnese that introduces *De sympathia et antipathia* and *De contagione* states that none of the "recent authors" have tried to establish the true nature of contagion, and have instead assumed it is caused by "occult properties."<sup>249</sup> In the very beginning of the first book Fracastoro establishes the principal axiom of the work: "contagion occurs when a certain alteration (*vitium*) has touched (*tetigit*) two individuals."<sup>250</sup> He then gives the following definition of contagion: "A certain precisely similar corruption which develops in the substance of a combination, passes from one thing to another and is originally

<sup>&</sup>lt;sup>246</sup> *De sympathia* 61

<sup>&</sup>lt;sup>247</sup> A similar kind of spiritual touch is what moves Andrea Navagero, in Fracastoro's dialogue on poetry, to start the conversation on that canicular day outside of Verona: "Naugerius enim quasi Musa tactus (...) carmina primum quaedam subcinere coepit" (*Naugerius* 2.10).

<sup>&</sup>lt;sup>248</sup> De contagione xxxi

<sup>&</sup>lt;sup>249</sup> De sympathia 9

<sup>&</sup>lt;sup>250</sup> De contagione 1.1

caused by infection of the imperceptible particles (*in particulis insensibilibus primo facta*).<sup>251</sup> The mechanism of contagion, for Fracastoro, operates not unlike that of generation and corruption in Lucretius's poem: by means of imperceptible particles that come in contact with one another, either agglutinating together or disgregating. Fracastoro clarifies his assumptions from very early on: "I call this [the living being] in its totality a composite (*compositum*), and I call minimal and insensitive (*insensibilia*) particles (*particulas minimas*) those of which the body is composed and of which it is a mixture.<sup>252</sup> Just like for Lucretius, these minimal particles are insensitive because they cannot be affected but also because we cannot perceive them. Contagion is therefore something that only happens to mixed, composite bodies, in the same way that change was only an issue for composite bodies in Lucretius.

Further ahead in book one, Fracastoro acknowledges that different diseases are passed on in different ways. Therefore he distinguishes three different types of contagion. The first type is by direct contact (*contactus*) only. The second type is by means of *fomes*, or inanimate objects like clothes, or wood that preserve the germ but are not affected by it.<sup>253</sup> Finally, the third type of contagion is the one that happens at a distance, via air or water, since both elements are vehicles for putrefaction. The one characteristic that all three kinds of contagion share in common, concludes Fracastoro, is that they all obey a

<sup>&</sup>lt;sup>251</sup> De contagione 1.6

<sup>&</sup>lt;sup>252</sup> De contagione 1.1

<sup>&</sup>lt;sup>253</sup> Nutton points out that *fomes* (woodchip, tinder) "was a technical term in theology for the minute portion of original sin left behind after baptism, which might, at any moment burst into the fire of concupiscence when presented with a suitable desired object (Nutton [1990], 203)."

certain law: "They are all contagious by direct contact (*contactus*)."<sup>254</sup> In the first two cases this is fairly obvious, in the third however it is not. When he analyses the modes of contagion at a distance, Fracastoro argues that just like onions make us cry and pepper makes us sneeze without touching us, putrefaction and infection also produce invisible particles (*seminaria*) that travel through air and affect us.<sup>255</sup> These particles in small amounts are harmless, but in big amounts they acquire power that allows them to move through air. Most of book one is dedicated to this third type of contagion because, as Fracastoro admits, "herein lies the basis of all our investigation."<sup>256</sup> Fracastoro refuses to accept "occult properties" for contagion at a distance, like his contemporary and fellow physician Fernel did.<sup>257</sup> Traces of Lucretianism are found all over this discussion. As an example of contagion at a distance Fracastoro mentions certain types of ophthalmia, and almost quoting Lucretius says that vision operates thanks to *species et simulacra rerum*, and immediately after talks about "penetration" to refer to the contagion of this type of eye illness.<sup>258</sup>

Fracastoro's debt to Lucretius has been acknowledged by many of his contemporaries, as well as by many twentieth and twenty-first century scholars. Buck and Di Leo argue that what made such an indelible impression on Fracastoro was the perplexity he shared with the Latin poet towards physical pain and its most atrocious

<sup>&</sup>lt;sup>254</sup> De contagione 1.6-7

<sup>&</sup>lt;sup>255</sup> De contagione 1.7

<sup>&</sup>lt;sup>256</sup> De contagione 1.5

<sup>&</sup>lt;sup>257</sup> For more on Fernel and occult causes of disease see Linda Deer Richardson, "The Generation of Disease: Occult Causes and Diseases of the Total Substance" in Wear-French-Lonie (eds), 175-194

<sup>&</sup>lt;sup>258</sup> De contagione 1.5

consequence: spiritual anxiety.<sup>259</sup> Fracastoro's first work in verse clearly transpires this, but it is in his later works that one gets a better feeling of how close to Lucretius Fracastoro's notion of science and knowledge really was. Just like the Latin poet, Fracastoro's epistemology turns away from the realm of the supernatural and focuses on the natural world. Nutton rightly concludes that Fracastoro's theory of contagion, "by making God and the planets remote causes, and by refuting occult causes subtly turns the attention to what can be perceived."<sup>260</sup> And Marco Beretta argues that, "Fracastoro was apparently the first scientist to absorb Lucretius scientific lesson systematically."<sup>261</sup> Most likely he is right. What neither Beretta, nor Nutton, nor Pennuto nor any of the scholars who studied Fracastoro's legacy to Lucretius point out is the crucial role that the notion of *contactus* (and consequently *contagio*) plays in both authors.

In Fracastoro, as in Lucretius the elimination of the remote and the supernatural from the arena of natural philosophy comes alongside a strong, explicit and systematic insistence on the importance of direct contact. This yearning for proximity, direct contact and first hand experience, arguably the main impulse behind the scientific revolution of the early modern period, has in Fracastoro one of its first conscious advocates. This is Lucretius's true scientific lesson for Fracastoro and, through him, for early modern Europe. It was a lesson learned at times inadvertently, at others clandestinely, but almost always voraciously. The Roman poet and the touch of his honey-sweet verse penetrated the fabric of Western thought to its very core, like an infectious disease. Lucretius was, indeed, contagious and his seeds were spread all over the West, like motes in a sunbeam,

<sup>&</sup>lt;sup>259</sup> Buck 195, and Di Leo 60

<sup>&</sup>lt;sup>260</sup> Nutton [1990] 211

<sup>&</sup>lt;sup>261</sup> Beretta 136

at the very moment that Poggio Bracciolini's hands removed centuries of dust from a forgotten codex in a German monastery.

## Chapter 2:

## Hands

I would not do this if I had not stuck my own hands [in human cadavers] and refused to be satisfied just watching others do it.

Andreas Vesalius, *De humani corporis* fabrica (Preface to Emperor Charles V)

In the winter of 1998 I stood for the first time under the David at the Galleria dell'Accademia. I had read and I had been told that I was looking at what might very well be one of the most emblematic artifacts ever made by human hands. In Vasari's words, if you have seen the David you do not need to see any other statue ancient or modern; David is the absolute peak of the sculptoric art.<sup>262</sup> I remember the smoothness of its marble (seeing it was like touching it), the uncanny life-like quality of the hero's facial expression ("calm but full of tension"),<sup>263</sup> and the veins in his arms, so geniusly chiseled that one can almost feel them pulsating. But nothing I remember more vividly than David's right hand. Critics have argued for centuries why Michelangelo exaggerated the size of the hands (especially the right hand) and head of David.<sup>264</sup> Michelangelo was

<sup>&</sup>lt;sup>262</sup> Vasari 21

<sup>&</sup>lt;sup>263</sup> De Tolnay 12

<sup>&</sup>lt;sup>264</sup> De Tolnay 13

extremely well versed in human anatomy having taken part in and even performed dissections of human bodies himself. His attention to detail is indeed remarkable and his craft, obsessive and meticulous. So why did he blatantly magnify hands and head disregarding the canon of proportion? Several answers can and have been offered to this question. First, there is the issue of perspective. Given the size of the sculpture (17 feet tall) and the fact that it was meant to stand high on a pedestal or even higher on the roofline of a building, Michelangelo emphasized head and hands for the spectator to appreciate them better from a considerable distance and from below. This actually brings us to the second answer: hands, especially the right hand, and head are the protagonists of the sculpture, they both constitute a synecdoche of the story that Michelangelo set out to sculpt. Stone in hand, David looks at Goliath and analyzes the best way of casting the projectile. Michelangelo's genius has caught David and frozen him in marble as the hero is staring at his enemy, thinking how to initiate the attack and presumably getting a perfect grip on the stone that he will presently cast. But there is a third answer to this question and the goal of this chapter is to elaborate on it. If we aspire to understand how and why the sense of touch comes back to the center of attention in the epistemological, philosophical, and artistic arenas in early modern Europe, it is of the utmost importance also for us to now focus our attention on hands.

## Hands that Cut

The yearning for proximity, for direct contact, and for first-hand experience that constitutes the epistemological basis of the scientific revolution in the sixteenth century

can be attested with particular clarity in the writings of the men who carried out the anatomical revolution. Even though anatomists had been dissecting human bodies since at least the fourteenth century, what makes early modernity exceptional is a combination of several factors: a standardization of the practice of dissection of human cadavers, the rediscovery and diffusion of the Classical medical tradition, groundbreaking technological advances in surgery, and, last but not least, a recurring insistence with *cheirourgia*, "the work of the hand:" the sixteenth century anatomist knows that skill and knowledge are a product of first-hand experience: the eye needs to operate in tandem with the hand. Such a change of paradigm would be unthinkable without new ways of understanding the eye and the visual, as it would be without a new conception of the sense of touch and its main organ, the hand. After all bodies were being cut open by hands, their cavities were being carefully explored by naked hands, their cold and clammy organs were being extracted and handled by human hands. And this is not just incidental; the hand is not merely an indispensable instrument that cuts open, penetrates and grasps: the hand and its labor, the "work of the hand" (chirurgia) are at the center of a new epistemology.

The practice of dissecting human bodies for scientific purposes seems to have started in the Hellenistic period with Herophilus of Chalcedon. According to Charles Singer, dissection of the human body "was still occasionally practiced at Alexandria towards the end of the 1st. century AD, but it had ceased by the middle of the 2nd. century."<sup>265</sup> From then until the beginning of the fourteenth century we have little to no evidence of human dissection being performed methodically and/or systematically for

<sup>&</sup>lt;sup>265</sup> Singer 38

scientific purposes anywhere in Western Europe. It is with Mondino da Luzzi, "the restorer of anatomy,"<sup>266</sup> and his *Anothomia* (Bologna, 1316) that the science of anatomy based on the direct obervation and manipulation of human bodies starts coming back as an acceptable and, in the opinion of a growing number of physicians, indispensable practice.

The reasons for which the practice of experimenting with human bodies was either explicitly forbidden, or sternly frowned upon by societies both pagan and Christian were, as Carlino has convincingly argued in his comprehensive study of the iconography of anatomy in the Renaissance, religious and political, but also, and perhaps more importantly, "anthropological."<sup>267</sup> In ancient times, as well as in medieval and early modern Europe, the human corpse was considered a liminal entity, both sacred and polluting. In the ancient world the dead body was held in high esteem since the limits between life and death were somewhat blurry, hence the common belief that an undisturbed corpse, or a corpse that had not received the appropriate funeral rites could be exercise malignant powers over the living. In medieval Europe, however, Carlino believes that the real problem was the "actual physical contact with the human body, the manual desecration of it"268 that dissection entailed. The dead body, continues Carlino, with its stench and its viscosity produced "intense disgust, horror and fear, it was considered contaminating, therefore the strong social condemnation of anatomy."<sup>269</sup> Carlino provides a compelling example from Folker Coïter's anatomical atlas, the

<sup>&</sup>lt;sup>266</sup> Singer 75

<sup>&</sup>lt;sup>267</sup> Carlino 265

<sup>&</sup>lt;sup>268</sup> Carlino 266

<sup>&</sup>lt;sup>269</sup> Ibid

*Externarum et internarum principalium humani corporis partium tabulae, atque anatomicae exercitationes, observationesque variae*, published in Nuremberg in 1572, in whose introduction the author refers to people who attack anatomy by saying it's unworthy of a free man to "touch" (*contrectare*) dead limbs contaminated with blood and scum. To this Coïter responds that the filth one should care about is that of the soul, since bodily filth can be washed away with just some water. And those who say it's cruel to flay and lacerate human flesh, he accuses of even more cruelty because it is precisely ignorance about human anatomy what causes a great number of deaths, that could be prevented upon a thorough knowledge of the inner functioning of the human body.<sup>270</sup>

The fact that the new anatomists had to deal with social reprehension is also clear from one of the most popular anatomical epitomes of the early sixteenth century, Berengario da Carpi's *Isagogae Breves* (1522). The *Isagogae Breves* are a fundamental milestone between Mondino's *Anothomia* and the work that would forever change anatomical studies, Andreas Vesalius's *De humani corporis fabrica* (1543). In this short manual on dissection, Berengario stresses the importance of first hand experience and says: "… the dissection and handling of the members are vile and repulsive to many. After I had dissected hundreds of cadavers, I understood why few physicians of our time comprehend this art."<sup>271</sup> Earlier in the sixteenth century, another father of modern anatomy, and possibly the inventor of the anatomical theater, Alessandro Benedetti, in the epistle dedicatory that opens the *Historia corporis humani sive anatomice* (1502)

<sup>&</sup>lt;sup>270</sup> Coïter, Externarum f.AA 2r, apud Carlino 265

<sup>&</sup>lt;sup>271</sup> Jacopo Berengario da Carpi 35. Berengario was unique among his predecessors and contemporaries in "producing a dissection-based anatomy in commentary form (French 43)." His contemporary Gabriele de Zerbi, on the other hand, had as main purpose in his work *Liber anathomie corporis humani* (1502) to show that the main authorities in anatomy do not disagree (see French 46).

praises dissection to Emperor Maximilian I and advises him to witness one and learn the truth about the human body, "leaving the horrid task of cutting open the body (worthy of a theatrical spectacle) to surgeons and doctors."<sup>272</sup> Finally, Jacopus Sylvius, the man that taught Vesalius at the University of Paris, as he points out the importance of first hand experience in his *Introduction to Anatomy* (1538), he notices that "many do not like at first to view the dissection of a man and cannot endure it without great disturbance of mind. Notwithstanding this, they ought, if they can, to accost the themselves from the very beginning to look diligently at the body of man while it is being dissected and then to perform the dissection *with their own hands*."<sup>273</sup>

The practice of manually cutting a dead body, sticking ones hands into the apalling miasma of its entrails and soiling them with putrescent bodily fluids was considered unworthy of an honorable man, especially of a physician. However, after the days of Mondino the practice started growing in acceptance and diffusion slowly but surely all over Europe. It is given official recognition in the university statutes at Bologna (1405) and at Padua (1429); popes Sixtus IV towards the end of the fifteenth and Clement VII at the end of the first quarter of the sixteenth century publicly declare it an acceptable practice and from then on it starts spreading outside of Italy, which continued to be the mecca for anatomical studies well into the seventeenth century. The universities at Montpellier and Paris follow suit in the later fourteenth and early fifteenth centuries. In England, in the year 1540 Henry VIII conceded a license to the guild of Barbers and Surgeons to dissect four bodies a year. At Oxford, dissections were practiced since 1549,

<sup>&</sup>lt;sup>272</sup> Benedetti 78

<sup>&</sup>lt;sup>273</sup> Jacopus Sylvius, Opera Medica 127 apud Montagu 377-8

and the university statutes soon established that students of medicine had to witness at least two during the course of their studies. In 1565 Elizabeth I gave the College of Physicians the right to dissect. The bodies used were, almost invariably, those of executed criminals.<sup>274</sup>

Not unlike John Donne in his amatory frolicking, early modern physicians, conquistadors of the human body, request permission for their "roving hands" to go wherever they may choose.<sup>275</sup> The gradual process of standardization of the practice of dissection would prove to be of extreme importance for the history of medicine in particular, but also for the history of science in general, and a crucial piece in the puzzle of the origins of the scientific revolution in the early modern period. The "anatomical revolution," albeit having symbolically started in the work of Mondino da Luzzi, has as center stage the sixteenth and the first part of the seventeenth century. Brabant has called the sixteenth century, le siècle des anatomistes,<sup>276</sup> and Jonathan Sawday refers to the period between the end of the fifteenth and late seventeenth century as the "culture of dissection." By this, Sawday means: "a network of practices, social structures and rituals surrounding the production of fragmented bodies."<sup>277</sup> Sawday, however, sees implications of the newly adopted practice of systematic dissection for scientific and educational purposes everywhere: "Anatomy, partition stretches into all forms of social and intelectual life: logic, rhetoric, architecture, philosophy; the pattern of all these

<sup>&</sup>lt;sup>274</sup> For this see Singer, Sawday, Carlino.

<sup>&</sup>lt;sup>275</sup> Donne says to his mistress as she is going to bed: "License my roving hands and let them go/before, behind, between, above, below./Oh my America, my new found land,/my kingdom safeliest when with one man manned" (Donne 125).

<sup>&</sup>lt;sup>276</sup> Brabant 214

<sup>&</sup>lt;sup>277</sup> Sawday 2

different forms of division was derived from the human body.<sup>278</sup> It is true that the word anatomy becomes almost a cliché in the period – Lyly anatomizes wit, Donne anatomizes the world, Stubbes, abuses, Burton, melancholy, Almond, protestantism  $-^{279}$  and although Sawday's thesis remains rather sweeping, the epistemological implications of dissection and the anatomical revolution that it triggered were indeed deep and worthy of far more attention.

One of the main problems with Sawday's thesis is the fact that in his study the focus is put solely on sight and the visual. Sawday is especially interested in anatomical atlases and their illustrations, in the way the new anatomy influenced some of the most influential artists of the time (people like Mantegna, Leonardo da Vinci, Michelangelo, Dürer, and others professed great interest for anatomy and many of them had even performed dissections themselves), and in anatomical "imagery" in works of literature of the period. He is right to be so; many anatomists of the period, starting with Berengario da Carpi and, most notably, Vesalius, and Estienne center their works around a series of magnificent and detailed illustrations of the most intimate crevices of the human body, and insist time and again on the value of observation and on the didactic importance of illustrations. However, this approach leaves the other half of the issue unattended: tactility. Indeed, the two main factions of epistemological infantry that successfully carry

<sup>&</sup>lt;sup>278</sup> Sawday 3

<sup>&</sup>lt;sup>279</sup> John Lyly, *Euphues, the Anatomy of Wit* (1579); John Donne, *First Anniversary, or An Anatomy of the World*; Robert Burton, *The Anatomy of Melancholy* (1621); Oliver Almond, *The Uncasing of Heresie, or the Anatomy of Protestancie* (1623). For this see R. Grant Williams' very good article "Disfiguring the Body of Knowledge: Anatomical Discourse and Robert Burton's *The Anatomy of Melancholy*" in ELH (Volume 68, Number 3, Fall 2001) 593-613. In book one of *The Advancement of Learning* Bacon says: "Thus have I described and opened, *as by a kind of dissection* those peccant humours which have not only given impediment to the proficience of learning, but have given also occasion to the traducement thereof (Bacon, *The Major Works* 148)."

out the anatomical revolution by working together are the visual and the tactile. As Goldberg puts it, alas without much further digging into the matter and its implications, "anatomy as a discipline is instituted by the hand, by the dissociative association of the dead and the living hands."<sup>280</sup>

The anatomical revolution begins with the realization of some anatomists that it was of the utmost importance for the physician to perform the dissection himself. From the times of Mondino until the end of the fifteenth century, it was customary for a *sector*, normally a barber, a surgeon or even a butcher, to do the cutting, opening and handling of the body as the doctor, carefully following his Galen, his Avicenna, his Mondino, or all of the above, gave directions on how to proceed. As seen in texts quoted above, the task of sticking one's hands into a dead body was considered unworthy of a learned man; it was dirty and indecorous. Charles Singer has convincingly shown that Vesalius's "basic reform at the University of Padua was to do away with *demonstrators* and *ostensors* in the old sense and to put his own hand to the business of dissection."<sup>281</sup> In fact, it was between the end of the XV and the beginning of the XVI century that some anatomists like Alessandro Benedetti, Berengario da Carpi, Niccolò Massa and Antonio Benivieni, started making a point of clarifying in their texts that they have dissected with their own hands.<sup>282</sup>

In the *Commentaria* on Mondino published in 1521, Berengario da Carpi says that the good anatomist *non credat aliquis per solam vivam vocem aut per scriptura posse habere* 

<sup>&</sup>lt;sup>280</sup> Goldberg 85

<sup>&</sup>lt;sup>281</sup> Singer 114

<sup>&</sup>lt;sup>282</sup> Carlino 6

hanc disciplinam: quia hic requiritur visus et tactus.<sup>283</sup> This stress on sight and touch is to be found in Mondino already. In the prologue to the Anothomia Mondino states that the reason for his work is to expose the knowledge of the parts of the human body that derives from anatomy, not in an academic style, sed magis secundum manualem operationem.<sup>284</sup> According to Mondino's modern editor, Albertina Cavazza, this idea might have been drawn from the intellectual basis for the new medical school that had been fostered since the 1260's in Bologna by Taddeo Alderotti (under the tutelage of whom Mondino spent his years as a student), which was to dynamically and critically combine theory and praxis.<sup>285</sup> As for Benedetti, in the Historia corporis humani the Paduan professor stresses the visual didactic value of the dissection. Benedetti is reputed to be the inventor of the anatomical theater in Padua in the 1490's. Towards the end of his work published in 1502 he recommends emperor Maximilian I to support the practice of having at least one public dissection a year, and ends by reminding the reader that "at the theater we see things the way they are (...) we see with our own eyes."<sup>286</sup> Clearly, not everyone can stick their hands into a body at the same time, and given that dissections were still very sporadic, Benedetti tries to stress the importance of at least being present at one. However, he was the one doing the cutting and handling of the body parts with his own hands.

It should come as no surprise that with this new stress on first-hand experience, comes a more noticeable and habitual use of the first person in medical writings. The

<sup>&</sup>lt;sup>283</sup> Berengario da Carpi, Commentaria f.VI v, apud Carlino 19

<sup>&</sup>lt;sup>284</sup> Mondino, 1r 15-16

<sup>&</sup>lt;sup>285</sup> Mondino, 98-99, note 4

<sup>&</sup>lt;sup>286</sup> Benedetti 350

scarcely studied work of Antonio Benivieni is a remarkable example of this. Benivieni was one of the first physicians in the late fifteenth century to systematically perform autopsies in search for the origin of diseases. Fortunately for us, he also happened to record his observations rigorously. Throughout his work, published posthumously, he records a great variety of clinical cases often using the almost formulaic quos ego vidi et *tetigi*, to instill in the reader the sense of accuracy and evidence that comes from personal experience. His modern Italian editor, Giorgio Weber, considers this "vidi et tetigi" the most important element of Benivieni's work, one almost completely ignored by his contemporaries, since it was "a new land, an unexplored territory that only Benivieni saw, touched and described with a few wondrous hints."287 In De abditis nonnullis ac mirandis morborum et sanationum causis (1507), his most popular work, Benivieni includes two cases that illustrate this explicit concern with first-hand experience as fundamental to the métier of the physician. In dealing with a patient who miraculously healed from an abscess in his knee the size of a "human head," Benivieni insists that he corroborated it personally "not just seeing but manibus attrectantes (touching with my hands)."288 Upon cutting open a man who had died of "meteorismo" (tympanites) Benivieni records that he saw and touched the entrails full of air, and the left ventriculum of the man's heart, a "hardened callous, the size of a walnut."<sup>289</sup> Eyes and hands are the

<sup>&</sup>lt;sup>287</sup> Benivieni 9

<sup>&</sup>lt;sup>288</sup> Benivieni 68

<sup>&</sup>lt;sup>289</sup> Benivieni 140

tools of the anatomist; they complement each other and become the protagonists of this new anatomy.<sup>290</sup>

This is how the importance of first hand experience (both visual and tactile) starts becoming a criterion, *the* criterion for scientific progress and epistemological accuracy. Nowhere can this be corroborated more clearly and explicitly as in Andreas Vesalius's preface to *De humani corporis fabrica*, arguably the most influential work of anatomy of the sixteenth century. Vesalius followed in the steps of previously mentioned anatomists and considered that the anatomist had to be personally (ie. manually) in charge of the dissection. In his first public lecture at the university of Bologna in 1540, three years before the publication of the *De humani corporis fabrica*, Vesalius, already considered by then "the most ingenious and skilled of anatomists,"<sup>291</sup> begins by telling his audience that ex visu et tactu cognoscimus substantiam.<sup>292</sup> In the preface to the first edition to the Fabrica (1543), addressed to emperor Charles V, Vesalius goes deeper into this idea as he denounces the calamitous state of arts and sciences in his days. The reason for such decadence, Vesalius believed, was the growing and seemingly unstoppable process of specialization and compartmentalization that arts and sciences were going through in early modern Europe. Nowhere does this tendency carry more tragic consequences, according to Vesalius, than in the medical sciences, and especially in anatomy, the

<sup>&</sup>lt;sup>290</sup> By the end of the century one finds this same notion in the work of French anatomist Ambroise Paré, who answers to those who attacked him for neglecting historical authority and academic theory, and says that "the operations of surgery are learned by the eye and by the hand (Ambroise Paré, *Apologie* [Paris, 1580])." Also John Banister in the proem to *The Historie of Man* (1578), a comprehensive compendium of human anatomy, makes an insistent use of the first person, emphasizing first-hand experience: "For my part, amongest those very few bodies, which, also in very few yeares, though to my cost, yet for the very zeale I haue had thereto, I haue dissected, I haue found some of Galens Sceletons in sundry pointes (Banister 8)."

<sup>&</sup>lt;sup>291</sup> Eriksson 44

science that "guards the health of human beings, the most useful and indispensable of all sciences."<sup>293</sup>

The main reason for the deterioration of anatomical studies (a deterioration which, in Vesalius' view, had started with the fall of Rome in the fifth century)<sup>294</sup> was that ever since then chirurgical intervention, *manus opera*, was left to laymen that lacked proper knowledge of both medicine and classical languages. The three cornerstones of medicine for Vesalius are, as they were for Hippocrates and Galen before him, diet, drugs and chirurgical intervention. If the physician is not proficient in one of the three, his skill is severely compromised. But if it is in manual labor that the physician is inept then the deficiency is even worse, since the *manus opera* is the most important branch of medicine "because it is based upon the observation of nature (*naturae speculatione praecipue innititur depellentes*)."<sup>295</sup> It is here that we start getting the sense that for Vesalius the work of the hand is not just a practical skill indispensable for the physician; *manus opera* (*chirurgia*) carries the weight and the depth of a technical term, and it acts as bullet point for a new epistemology, an epistemology based on the collective experience of sight and touch through its instrument *par excellence*, the hand.

Ever since the barbarian invasions, says Vesalius, physicians have "despised manual labor (*manus opera*)" and hired servants to do the dirty work while they guided them. The vital manual labor was thus left in the hands of barbers. Herein lies the calamity of medicine that Vesalius aspires to remedy with his own research. In a passionate appeal to Charles V, the most powerful man in the Western hemisphere at the

<sup>&</sup>lt;sup>293</sup> Vesalius 2

<sup>&</sup>lt;sup>294</sup> Ibid

<sup>&</sup>lt;sup>295</sup> Vesalius 7

time, Vesalius calls on physicians to follow the example of the Greeks and "get their hands to the cure (*manus quoque curatione admoveant*);"<sup>296</sup> and criticizes intellectuals for "fleeing manual labor like the plague" lest people think they are mere barbers. Anatomy, says Vesalius, "the most important and philosophical branch of medicine," has been forgotten by physicians since the moment they started delegating the work of the hand on others who are nothing but ignoramuses. Vesalius's project is aimed at leading medicine away from the darkness and "restoring its ancient glory by restoring anatomical knowledge by ancient techniques of dissection."<sup>297</sup> The Flemish anatomist takes it upon himself to make this happen: "I would not do this if I had not stuck my own hands and refused to be satisfied just watching others do it."<sup>298</sup>

Vesalius understands that graphic representations of the body contribute greatly to the understanding of the matter;<sup>299</sup> as a matter of fact, the *Fabrica* is famous for its illustrations. This notwithstanding, contemporary critics have placed excessive attention on the visual and neglected Vesalius's insistence on the training of the hand.<sup>300</sup> In Elizabeth Harvey's words: "For Vesalius and his followers the anatomist's dissecting

<sup>299</sup> Vesalius 18

<sup>&</sup>lt;sup>296</sup> Vesalius 7

<sup>&</sup>lt;sup>297</sup> Vesalius 8

<sup>&</sup>lt;sup>298</sup> Vesalius 10. In Helkiah Crooke's *Microcosmographia* published over seven decades after Vesalius's *Fabrica*, the English anatomist still shows great reticence toward physicians doing the work of "chyrurgeons." According to Crooke in his introductory address to the Company of Barber-Chyrurgeons, the physician should know enough about anatomy and *chyrurgia* to be able to guide the *chyrurgeon*, but not necessarily do the manual work himself since it is more "honorable to be able and not to do it" (Crooke 3).

<sup>&</sup>lt;sup>300</sup> See O'Malley 147-8, Kemp 24, and Rifkin-Ackerman-Folkenberg. Also Strahler Holzapfel (2008) shows a renewed fascination with the visual, anatomical theaters and the illustrations in Vesalius's *Fabrica*. Bettina Mathes is one of the few to recognize the synesthesia: "What in the *Epitome* appear to be two distinct activities –touching and looking- are really a complex negotiation between tactility and visuality" (Mathes 112).

hand became for the first time literally a speaking hand.<sup>"301</sup> Vesalius says this very clearly: "I don't want them [students of medicine] to learn through images, but through dissection and direct observation. With all my means I exhort students to cut up using their own hands (*ad consectione propriis manibus*)."<sup>302</sup> The hand discovers, guides the understanding and teaches to others. It is told that in his early years in Paris, Vesalius and a fellow student used to test their knowledge of the human skeleton by learning to recognize bones while blindfolded, only using their hands.<sup>303</sup>

Vesalius, however, was not the first anatomist to launch a diatribe exalting the importance of the hand. His own professor, Jacobus Sylvius, had said: "… for it is my judgment that you should learn the manner of cutting by eye and touch than by reading and listening. For reading alone never taught anyone how to sail a ship, lead an army, nor compound a medicine which is done rather by the use of one's sight and the training of one's hands […] For this simple manner of learning is the shortest, most certain and easiest to retain."<sup>304</sup> This should be understood within the context of a larger debate that early European men of letters and sciences were having in the early sixteenth century concerning theory and praxis. An insistence on the preponderance of practice and personal experience over book learning can be found in some of the most influential work of the first half of the century. Guicciardini's *Ricordi* (1512-1530) time and time again emphasize the prevalence of practice over theory with idiomatic catch phrases that reveal

<sup>&</sup>lt;sup>301</sup> Harvey 90

<sup>&</sup>lt;sup>302</sup> Vesalius 17

<sup>&</sup>lt;sup>303</sup> Foster 7

<sup>&</sup>lt;sup>304</sup> Jacobus Sylvius, Opera Medica, 127, apud Underwood 377-8
a brand new authority: experience. Idioms like *vedesi per esperienza*,<sup>305</sup> *vedesi che*,<sup>306</sup> *si vede per esperienza*,<sup>307</sup> *io ho visto quasi sempre*,<sup>308</sup> *e l' esperienza mostra speso*,<sup>309</sup> *io l'ho provato in me medesimo*<sup>310</sup> lead to the categorical conclusion of 186 where, talking about discretion in human relations, Guicciardini says: "if nature did not endow you with it [discretion] in very rare cases you can learn it from experience, never ever from books."<sup>311</sup> Also Macchiavelli, in the address to Lorenzo de' Medici that opens *Il Principe* (1532), as he establishes the epistemological foundation of his political speculations, bases his knowledge on: "*una lunga esperienza delle cose moderne e una continua lezione delle antique*."<sup>312</sup> Experience comes first, book learning and speculation, second. This notion is also found in the preface to the readers that introduces what many scholars have almost consistently considered to be the book that "marks the end of the middle ages and the beginning of modernity:"<sup>313</sup> Copernicus' *De revolutionibus* (1543). Copernicus says that the celestial motions discussed in his work "have been reconstituted on the basis of ancient as well as recent observations (*observationibus*), and have

- <sup>307</sup> Guicciardini 17
- <sup>308</sup> Guicciardini 182
- <sup>309</sup> Guicciardini 66
- <sup>310</sup> Guicciardini 118

<sup>312</sup> Macchiavelli 5

<sup>&</sup>lt;sup>305</sup> Guicciardini 3

<sup>&</sup>lt;sup>306</sup> Guicciardini 63

<sup>&</sup>lt;sup>311</sup> Guicciardini 186

<sup>&</sup>lt;sup>313</sup> Montagu in Underwood 374

moreover been embellished by new and marvelous hypotheses (*hypothesibus*).<sup>"314</sup> Direct observation (in this case *praxis*, the literal meaning of *theoria* having changed after centuries of metaphorization), both contemporary and ancient – recorded in books – is the kernel and speculation (*theoria*) the peel around it.<sup>315</sup>

In a recent book on the semiotics and epistemology of learned medicine in the early modern period, Ian Maclean shows the process by which, in medicine, but also in science in general, the weight of experience and practice starts gaining precedence over theory and book knowledge in early modern Europe. At universities during the middle ages the belief according to which there was an implied hierarchy that established that the knowledge of causes was superior to the application of such knowledge was, Maclean argues, almost universally held. In the early Renaissance there is, argues Maclean, a "movement to enhance the dignity of operative or mechanical knowledge [that] is not confined to medical studies, being found in such disparate authors as Bernard Palissy and Petrus Ramus."<sup>316</sup> Maclean quotes Pereira's *Novae veraeque medicinae, experimentis et evidentibus rationibus comprobatae, prima pars* (1558), as one of the clearest and best articulated examples of this change of mentality.<sup>317</sup> Pereira says: "So enormous is the force of experience in discovering the truth that we must when an apparent explanation is opposed to experience, place greater truth in the evidence of the senses, than the

<sup>&</sup>lt;sup>314</sup> Oster 27

<sup>&</sup>lt;sup>315</sup> This would also be Galileo's main argument in his letter to the Grand Duchess Christina (1615, published in 1636): "...I think that in discussions of physical problems we ought to begin not from the authority of scriptural passages, but from sense-experience and necessary demonstrations... (Oster 68)."

<sup>&</sup>lt;sup>316</sup> Maclean 69

<sup>&</sup>lt;sup>317</sup> Maclean 68

explanation, and search for a better one."<sup>318</sup> Of course, Maclean reminds us, there were many who resisted this with fury and disdain. Those who made theirs the motto: "I prefer to err with Galen (or Aristotle) than be right with the detractors,"<sup>319</sup> those who, in Bacon's words, chose to worship "the idols of the theater." Helkiah Crooke's *Microcosmographia* (1615), a compendium of Continental anatomy for the English physician constitutes a more elegant and tamed version of this preference for book learning over evidence from experience. When discussing the definition of anatomy in book one – where Crooke mostly translates and paraphrases the work of Nicholas Laurentius – we get the following distinction:

Now there is among Physitians, a double acceptation of Anatomy; either it signifieth the action which is done with the hand; or the habite of the mind (...) The first is called practicall Anatomy, the latter Theoretical or contemplative: the first is gained by experience, the second by reason and discourse: the first we attaine only by Section and Inspection, the second by the living voice of a teacher, or by their learned writings: the first wee call Historicall Anatomy, the second Scientificall, the first is altogether necessary for the practice of anatomy, the second only profitable; *but yet this profit is oftentimes more beneficiall then the use itself of Anatomy*. The first looketh into the structure of the partes, the second into the causes of the structure...<sup>320</sup>

<sup>&</sup>lt;sup>318</sup> Maclean 196

<sup>&</sup>lt;sup>319</sup> Maclean 192. On arguments from experience versus arguments from authority Maclean brings to the reader's attention a fascinating anecdote recorded by Sanctorius and repeated by Galileo. An Aristotelian was present at a dissection which showed by ocular demonstration that nerves originate in the brain and not in the heart (as Aristotle had claimed); he then confesses to the anatomist that he had made him see the matter so palpably and plainly that if Aristotle's text were not contrary to his ocular demonstration, and did not state clearly that nerves originate in the heart, he would be forced to admit that what he had seen was true (*ibid*). The Elizabethan anatomist John Banister says categorically in 1578: "Why credite we thynges written, or beleue any thyng to be true which our owne eyes haue not witnessed vnto vs? (Banister 6)."

 $<sup>^{320}</sup>$  Crooke 1.15. Crooke also says, in his "Preface to the Chyrurgeons" that the anatomisyt should master the handiwork, but not do it, since it is a rather indecorous task for such learned a man. He should "guide the chyrurgeon, assist him, and confirm him (...) but for the work of the hand I take it to be more lawfull for him than expedient, more honorable to be able and not to do it."

In Crooke's view both anatomies stand in opposition to one another. The growing concern with direct experience and the rediscovery of hitherto unknown ancient classics of anatomy happened almost simultaneously and in many ways the debate around theory and praxis is a debate triggered by the rediscovery of the Greek and Latin classics that were being systematically edited, printed, diffused, and read all over Europe. This phenomenon is a double-edged sword. On the one hand, the discovery of new texts spawns new ways of thinking about nature, ethics and religion that drive many away from old cemented scholastic reading practices. Also, as Copernicus pointed out, books can reveal ancient techniques of observation with its much valuable concomitant discoveries, that may assist and serve as foundations for new experiences. On the other hand, however, a new wave of veneration for the newly discovered texts appears and poses the problem of how closely should the classics be followed, especially when it comes to natural philosophy.<sup>321</sup> In the words of Francis Bacon, the most successful positions come from "disciples [who] do owe unto masters only a temporary belief and a suspension of their own judgment until they be fully instructed and not an absolute resignation or perpetual captivity."<sup>322</sup> Vesalius's conflicted relationship with Galen is a splendid example of this.

Among the ancient authors that were being reedited the case of Galen is of particular importance to understand both the anatomical revolution and this new and groundbreaking emphasis on the human hand as vehicle of knowledge. The first edition of Galen's complete works in Greek was published in 1525 and it serves as basis for all

<sup>&</sup>lt;sup>321</sup> Historian of medicine Nancy Siraisi argues that "from one perspective, the history of medieval and Renaissance medicine can be written as a series of receptions of the Greek heritage in various degrees of completeness, provided the vexing vicissitudes of these receptions are taken into account (Siraisi 188-9)."

<sup>&</sup>lt;sup>322</sup>The Advancement of Learning in The Major Works 144

future editions. Most of Galen's works were well known by physicians throughout the middle ages. They circulated in Latin translations and were considered canonical. Galen's major anatomical work, however, the treatise On Anatomical Procedures, was rediscovered and published for the first time in the sixteenth century. The Latin translation was done by Johannes Günther of Andernach, originally published in Paris in 1531 and later revised by Vesalius himself, and edited by Agostino Gabaldino in 1541. Singer and Ward insist on the fact that a close study of Galen's *Administrationes* (as the work was commonly known in Latin) was absolutely crucial to Vesalius's own ideas on anatomy and dissection.<sup>323</sup> Galen wrote the Administrationes as he was working on his most philosophical work, the *De usu partium*, work in which the physician is very adamant about first hand experience as the only basis for a true and lasting knowledge of the body. Considering that the dissection of human bodies was not a common practice in his times, Galen calls upon students to dissect animals that most resemble man in their anatomy, such as apes and pigs. The value of first hand observation (*thea*), says Galen, cannot be stressed enough; only practice, direct observation and constancy makes a good anatomist.<sup>324</sup> Also, just like Vesalius would do in the preface to his opera magna Galen here denounces the worrying neglect that anatomy had suffered until his times, and points out that the practice of dissection, which is absolutely vital to the intimate knowledge and understanding of the human body has been practically forgotten. Galen understood the urgency of the matter and sternly advocated for a change in habits: "The student must

<sup>&</sup>lt;sup>323</sup> Singer (1956) 10; Ward 229. According to O'Malley, Vesalius decided to take on the strenuous task of helping with a new edition of Galen's works at the same time as he was starting to work on the *Fabrica*, since this was absolutely crucial to his own work. Collating manuscripts was a good way of knowing whether the disparities between his findings and Galen's were a product of erroneous texts or actual anatomical differences, argues O'Malley (O'Malley 108).

<sup>&</sup>lt;sup>324</sup> On Anatomical Procedures, 2, 223, 9ff

carefully do everything himself, even removing the skin. My predecessors actually remained in ignorance of eight muscles because they left to others the flaying of the apes, as at first I did myself."<sup>325</sup>

Even though Vesalius often times challenges and even corrects Galen, sardonically reminding the reader that the great classic was dissecting primates, he follows him in many of the most basic theoretical and practical assumptions regarding anatomy.<sup>326</sup> Like Galen, he liked to think of himself as the savior of anatomical science. Like Galen, he denounced his contemporaries and predecessors for neglecting first hand experience at the dissecting table. Like Galen, he believed that first hand experience was the product of an inextricable epistemological negotiation between sight and touch. And like Galen, he placed special importance in the actual dissection of the hand. In the words of Katherine Rowe, "from Galen to the seventeenth century, the dissection of the hand persists as one of the central moral *topoi* of anatomy demonstrations: celebrated for its difficulty and beauty, it reveals God's intentions as no other part can."<sup>327</sup>

The first book of Galen's *Administrationes* is dedicated to the hand, arm and forearm. "I put anatomical practice on arm (...) before all others (...) In *De usu partium* since my subject was the bodily organs I put first the discourse on the hand, for that part is

<sup>&</sup>lt;sup>325</sup> Galen, *OAP* 2, 286-7

<sup>&</sup>lt;sup>326</sup> Jacopus Sylvius, Vesalius's professor in Paris, published in 1551 an infamous attack on his former student called *Vaesani cuiusdam calumniarum in Hippocratis Galenique rem anatomicam depulsio* ("A refutation of the slanders of a madman against the anatomy of Hippocrates and Galen"), that O'Malley refers to as a "hysterical defense of Galen" (O'Malley 246). As we saw above, Sylvius was a strong advocate of first hand experience, however Vesalius' corrections of Galen's inaccuracies seem to have deeply upset him. Talking about his former educator in one of his letters, Vesalius says: "Sylvius is the last one from whom I would have expected such an opinion (Vesalius *apud* O'Malley 219)." Crooke in his *Microcosmographia* makes his Laurentius opinion of Vesalius as, basically, an ungrateful and deceitful disciple of Galen (Crooke, 1.11 and 1.14).

<sup>&</sup>lt;sup>327</sup> Rowe 28. Pre-Vesalian anatomist Niccolò Massa also shares Galen's veneration for the hand, calling its anatomy the "most beautiful" (*pulcherrimum*) (see Lind 246).

characteristic of man. Now I do it not only for that reason but even more to give the young practice first in what is most necessary."<sup>328</sup> In the first edition of the *Fabrica* there is a portrait of Andreas Vesalius dissecting a right hand and forearm (which in Latin was known as, simply, manus).<sup>329</sup> As Kemp points out, the complex mechanism of the muscles and tendons of the forearm had fascinated Galen, Da Vinci, Vesalius and even Rembrandt, whose "Anatomy Lesson of Doctor Nicolas Tulp" (1632) features precisely the dissection of a forearm. And just like Rembrandt's masterpiece,<sup>330</sup> Van Calcar's portrait of Vesalius shows astonishing incongruities. Vesalius's head is disproportionally big for his body, and the cadaver being dissected is "almost impossibly large"<sup>331</sup> compared to Vesalius. The two points towards which the focus of the reader invariably gravitates are Vesalius's face, and the dissected monstrous right manus (forearm plus hand) of the cadaver. Notwithstanding the anatomical inaccuracies, the illustrious anatomist decided to keep the exact same portrait in succeeding works by him, including the second edition of the Fabrica (1555). O'Malley believes that Vesalius did so because the depicted face was possibly very faithful to his actual face, and he speculates that the

<sup>&</sup>lt;sup>328</sup> 2, 291. Galen's anatomical knowledge of the hand, as Vesalius well knew, was inaccurate, "especially his description of the muscles *extensor proprius* and *flexor digitorum profundus*, because he had dissected apes and not humans (O'Rourke Boyle 111)." Howerve, Galen's "anatomical studies of the peripheral nerves advanced his understanding of sense perception far beyond the knowledge of his predecessors (Siegel 175)."

<sup>&</sup>lt;sup>329</sup> It was designed by Jan van Calcar. See Monteiro 369. In the engraving Vesalius is exposing the cadaver's flexor muscles and flexor tendons.

<sup>&</sup>lt;sup>330</sup> In Rembrandt's famous painting the body's arm is the only part that has been open, when dissections historically, and even to this day, start by the main organs of the bodily cavity. As for the dissected arm and the polemic around Rembrandt's alleged imprecisions on the details of its inner muscles and tendons see William Schupbach, *The Paradox of Rembrandt's 'Anatomy of Dr. Tulp'* (London, 1982, pp. 52-56). Giulio Casserio in the frontispiece of *De vocis auditusque organis historia* (1601) is portrayed dissecting a right hand. See also Leonardo Da Vinci's sketches of hands in *The Mechanics of Man* (edited by Martin Clayton and Ron Philo for the J. Paul Getty Museum, Los Angeles, 2010, 98-105 and 124-127).

<sup>&</sup>lt;sup>331</sup> O'Malley 147

engraving is possibly the overlapping work of two different artists. It is, however, somewhat hard to accept that vanity prevailed over Vesalius's consistent concern with anatomical accuracy, especially considering that one of the main features of the *Fabrica* were its outstandingly vivid and carefully proportionate illustrations. Why not then think that maybe Vesalius consciously decided to introduce himself and his object of study, the human body, in the title page of his *magnum opus* emphasizing head (the seat of eyes and mind) and hand, having purposely magnified them to make them the center of the engraving, and of the work itself? After all, had not Michelangelo done something similar in his David some forty years earlier?

## Hands that Think

The notion that links the possession of hands with superior intelligence in human beings is as old as philosophy itself. According to the testimony of Aristotle, Pre-Socratic philosopher Anaxagoras of Clazomenes had reputedly pointed out that "it is his possession of hands that makes man the most intelligent of animals."<sup>332</sup> Aristotle quotes his predecessor only to refute him. He believed, in fact, that man has hands *because* he is the most intelligent of all animals, and not the other way around. Hands are an instrument (*organon*), he goes on, and nature, "like a sensible human being, always assigns an instrument to the animal that can use it [better]."<sup>333</sup> Indeed, Aristotle places the most importance on the final cause making his natural philosophy, as well as his metaphysics, the first systematic and exhaustive teleology in the history of western thought. This can

<sup>&</sup>lt;sup>332</sup> Parts of Animals 687 a 5ff

<sup>&</sup>lt;sup>333</sup> Ibid

be seen with the most clarity in his study on animal body parts: "the head exists for the sake of the brain... the neck, for the sake of the windpipe."<sup>334</sup> But it is the discussion around the matter of the exceptional and unique erect posture of human beings that leads Aristotle to his famous digression on hands: "Man's *ergon* [his task in the world] consists of thinking (*noein*) and reasoning (*phronein*) and this would be extremely difficult if the upper body was hanging."<sup>335</sup> That is why "in man the forelegs and forefeet are replaced by arms and by what we call hands (*cheira*). For of all animals man alone stands erect, in accordance with his godlike nature and substance."<sup>336</sup> Hands and arms are *the* signifier of human's divine nature. Aristotle goes deeper into this and explains the crucial role of hands:

... the most intelligent of animals is the one who would put the most organs to good use, and the hand is not to be looked on as one organ but as many, for it is, as it were, an *instrument of instruments (organon pro organõn)*. Thus it is to that animal which has the capability for acquiring the greatest number of crafts that Nature has given that instrument whose range of uses is the most extensive (...) Animals tend to have one instrument of defense, but take the human hand. It is as good as a talon, or a claw, or a horn, or again a spear or a sword or any other weapon or tool. It can be all of these because it can seize and hold them all. And Nature has admirably contrived the actual shape so as to fit in with this arrangement. It is not all one piece but it branches into several pieces.<sup>337</sup>

In conclusion, the hand is an instrument that makes other instruments, handles them, masters them and uses them in man's advantage to rule over all other species. The

<sup>335</sup> Ibid.

<sup>336</sup> *Ibid*.

<sup>&</sup>lt;sup>334</sup> Parts of Animals 686a 1-b1

<sup>&</sup>lt;sup>337</sup> *Parts of Animals* 687 a-b 5ff. Also in *De anima* Aristotle calls the hand "instrument for further instruments" when he compares the soul to a hand, in the sense that "the soul is a form that employs other forms" (*De anima* 432 a).

reason for this, in Aristotle's teleological worldview, is that the invariable plan of nature – nature being rational – in distributing the organs is to give each to such animal as can make use of it. Centuries later Galen would take on this idea and make it the central philosophical assumption of his anatomical investigations.

Galen's *De usu partium* can be read as an attempt to demonstrate, through a meticulous study of human anatomy, that Aristotelian teleology, condensed in the motto *natura nihil agit frustra*, is the most accurate explanation for the mechanism of the human body, and by extension, of the natural world. Galen's Aristotelianism is one certainly influenced by post-Aristotelian schools, in particular Stoicism, and this can be seen in his stress on the relationship between whole and parts. As Margaret Tallmadge May points out, "this work is on the suitability of each body part to perform a function organic to the whole: its thesis is that the human body as a whole and each and every individual part of it have been so perfectly constructed in view of the actions to be performed that even the least change in any detail would be for the worse."<sup>338</sup> The perfection that goes into this remarkable relation between parts and whole is, in Galen's opinion (and here the physician's tone sounds closer to that of Plato in the *Timaeus*) a magnificent epiphany. Nowhere better than in the inside organs and muscles of a body can one appreciate the perfection and rationality of God's masterpiece: the natural world.<sup>339</sup> As a matter of fact, Galen calls his study on the usefulness of the parts of the

<sup>&</sup>lt;sup>338</sup> De usu partium 9-10

<sup>&</sup>lt;sup>339</sup> The idea that God's wonderful master plan can be appreciated better in small organisms finds an eloquent rendition in Helkiah Crooke's anatomical epitome, the *Microcosmographia*: "This little World therefore, which we call Man, is a great Miracle andhis frame and composition is more to be admired and wondered at, then the workmanship of the whole Universe. For it is a farre easier thing to depaint out many things in a large and spacious table, such as is the World, then to comprehend all things in one so little and narrow, as is the compasse of man's body (Crooke 1.2)."

body "a true hymn of praise to the Creator."<sup>340</sup> As we have seen and shall see again soon in the work of early modern Galenists, in Galen the anatomist, the philosopher, and the theologian converge. And Galen's exhaustive journey through the human body starts in the hand, which is the subject of the first book of *De usu partium*.

Galen believed that the body is the instrument (*organon*) of the soul therefore it is adapted to the faculties of the soul. Making his the Aristotelian argument, Galen says that given than man is the most intelligent animal, and the only one that is actually godlike, nature gave him hands. For Galen, as for Aristotle, hands are instruments that serve to make and handle other instruments. Hands are first and foremost our main survival tools. Thanks to our hands we protect ourselves by creating weapons, we provide ourselves with food by hunting, fishing, and harvesting the land, we weave and make clothes that protect us from the winter, we build houses, cities, fortresses that help us withstand inclement weather and the attacks of wild animals or other men. And when all these conditions are given and we need not worry about survival any longer, we use our hands to write laws, to compose and register poetry and philosophy, to raise altars to the gods and to fashion and play musical instruments.<sup>341</sup> It is at this point that Galen goes back to Aristotle's refutation of Anaxagoras: "It is not because he has hands that he is the most intelligent of animals, as Anaxagoras said, but it is because he is the most intelligent that he has hands: hands are an instrument of intelligence."<sup>342</sup>

<sup>&</sup>lt;sup>340</sup> DUP 3. 10

<sup>&</sup>lt;sup>341</sup> *DUP* 1. 2-4 <sup>342</sup> *DUP* 1. 6

Given the subtleties of the human soul, says Galen always following Aristotle closely, the hand is so subtly divided into fingers, membranes and "it is excellently constituted for a firm grasp of things both larger and smaller than itself."343 The conclusion at the end of book one of *De usu partium* is that a close study of the hand shows that all parts of it "are of such nature and size that they cooperate in the one work performed by the whole instrument."<sup>344</sup> By "the one work" Galen means to be instrument of human intelligence, to be instrument of instruments and Nature's most unique attribute, proof in itself of the godlike nature of human beings. Galen wrote De usu *partium* as a more speculative and theoretical counterpart to his more practical On Anatomical Procedures, work that also begins with a book dedicated to the hand: "I put anatomical practice on arm and leg before all others."<sup>345</sup> Late medieval and early modern anatomists would adopt this Aristotelian-Galenic teleological conception of the usefulness of the body parts, as well as this devotion for the hand. In O'Rourke Boyle's words: "Galen's teleology dominated medicine almost to the end of the seventeenth century, with a persistence that distinguished it as an outstanding phenomenon in intellectual history."<sup>346</sup> Temkin calls this phenomenon, simply, "Galenism," and defines it as: "a medical philosophy, a set of more or less cogently connected principles,

<sup>&</sup>lt;sup>343</sup> DUP 1.7

<sup>&</sup>lt;sup>344</sup> DUP 1. 13

<sup>&</sup>lt;sup>345</sup> And he goes on: "In *De usu partium* since my subject was the bodily organs I put first the discourse on the hand, for that part is characteristic of man. Now I do it not only for that reason but even more to give the young practice first in what is most necessary (Galen, *On anatomical procedures* 291).

<sup>&</sup>lt;sup>346</sup> O'Rouke Boyle 72. Temkin believes that it was between the times of Oribasius, physician and friend of emperor Julian the Apostate (361-3 AD) and the Arab conquest of Alexandria in 642 that "a scholastic form of Galenism was created which pervaded medieval medicine in the East and subsequently in the West (Temkin 64)." See also Karl Gross, "Galens teleologische Betrachtung der menschlichen Hand in *de usu partium.*"Sudhoffs Archiv 58 (1974). 13-24.

doctrines and concepts ascribed to Galen, used in thinking about man's body in health and disease and shaping the physician's attitude to his profession and to human life."<sup>347</sup>

Mondino de Luzzi certainly presupposed Aristotelian-Galenic teleology. He understood man's erect posture as a means to achieve the human *telos* which is to use the intellect. Also, says Mondino, "unlike other animals [man] does not have an art that is his by nature; because humans have the *organum organorum*, the hand, with which he can make all sorts of weapons and instruments."<sup>348</sup> And, of course, this idea also makes its way to Vesalius, who as Daremberg, Temkin and others have rightly pointed out, and notwithstanding his anatomical corrections, was a full-fledged Galenist until the day he died. In his first public lecture at Bologna (delivered in the morning of January 13<sup>th</sup> 1540), Vesalius stressed the fact that physicians are practicing philosophers (*medici habent habitum philosophorum*).<sup>349</sup> His main philosophical assumption was taken directly from Galen:

According to the construction of the whole body, all parts of the body are given to maintain, to perform and to fulfill the functions necessary for preserving the whole. Any action is the concern of the whole body; every single particle is created to fulfill an action of its own.<sup>350</sup>

Vesalius gives the example of the hand and its complex and sophisticated grasp, and once again explains the erect posture of human beings on the grounds of the possession of hands and forearm. "So that man may pursue all arts, nature has given him such an

<sup>&</sup>lt;sup>347</sup> Temkin 93

<sup>&</sup>lt;sup>348</sup> Mondino De' Luzzi 66

<sup>&</sup>lt;sup>349</sup> Eriksson 46 <sup>350</sup> Eriksson 49

upright posture. Therefore, contrary to all animals, man has the power to learn workmanship, to handle an instrument with the hands, the instrument of all instruments, to enquire with his reason into everything and to govern it.<sup>351</sup>

The hand, tool of the intellect, God's most precious attribute to mankind, comes into close and closer scrutiny after the standardization of the practice of dissection. We find praises to the hand in this very distinguishable Aristotelian-Galenic vein in authors such as Lygaeus, Julius Scaliger, and in anatomists like Realdo Colombo – who ends his *De re anatomica* (1559) with a celebration of the hand as *organum organorum* – John Banister, Arcangelo Piccolomini, Andreas Laurentius, Helkiah Crooke, Caspar Bauhim in his *Theatrum Anatomicum*, Petrus Paaw, Caspar Hofmann, and Johannes Riolanus.<sup>352</sup> Anatomists were not the only intellectuals to focus their attention on hands. The early modern period sees a proliferation of treatises of chirology, chiromancy, and mnemonics that portray the hand as both the fundamental instrument of the intellect and a palpable proof of man's divine nature.<sup>353</sup> Perhaps one of the most important examples of this is John Bulwer's *Chirologia and Chironomia* (London, 1644), two treatises on the "natural"

<sup>&</sup>lt;sup>351</sup> Eriksson 54. This Galenism can be seen well into the seventeenth century. In John Bulwer's *Chironomia* (1644) the author refers to the chicken-egg debate between Anaxagoras and Galen. He claims that Anaxagoras, in an "ecstasy of admiration" says that man is the wisest of creatures because he has hands, but that Galen "with great elegancy and humanity" corrects him and argues it is, actually, the other way around (Bulwer 155).

<sup>&</sup>lt;sup>352</sup> See Schupbach's excellent anthology in Schupbach 57-65.

<sup>&</sup>lt;sup>353</sup> In his pedagogy treatise *The First Part of the Elementarie* (1582) Richard Mulcaster says that "what nature offers in its mere being incluyes in the hand an ability to catch and hold, and in our mind an ability to foresee (Goldberg, 33)." Michel de Montaigne dedicated one of his essays to the power of thumbs (*Essais* II, 26: *Des pouces*). For more on this see Richter Sherman who, in the introduction to a volume dedicated to images of hands in the early modern period, says: "… images of the hand serve(d) as iconic metaphors, bodily mnemonics, and congnitive maps encompassing processes of association, memory and recollection (Richter Sherman 13)."

language of hands and gestures.<sup>354</sup> As Katherine Rowe points out in a book about the intellectual history of the figure of the severed hand, "as both instrument and object of dissection (...) the hand becomes the prominent vehicle for integrating sacred mystery with corporeal mechanism.<sup>355</sup>

However, the teleological position according to which man has hands because he is the most intelligent animal was vigorously contested by a position that one could call naturalistic. This notion was perhaps first proclaimed by Anaxagoras when – according to Aristotle – the pre-Socratic philosopher argued that man was the most intelligent animal because he has hands, and not the other way around. Five hundred years later, in Galen's days, this idea had grown in adepts and received careful attention and elaboration. In fact, this naturalistic position had become a serious intellectual threat, so much so that Galen felt the obligation to dedicate several pages of the last book of *De usu partium* to vigorously attack it. And more importantly, at the end of this work – which is, arguably, the most speculative one in his corpus – Galen confesses that he wrote it, partly, to show those who do not believe in nature's master plan that they are wrong. These detractors, these children of Anaxagoras who deny the master plan responsible for the natural world, these "enemies of nature"<sup>356</sup> were none other than the atomists.

<sup>&</sup>lt;sup>354</sup> Bulwer consciously follows Bacon's idea that just like "tongue speaketh to the ear, so gesture speaketh to the eye" (Bulwer 5, and Bacon, quoting James I's *Basilikon Doron*, in *Major Works* 206) and his work is a thorough dictionary-like compendium of gestures and the meaning they convey. Bulwer believes that "all these motions and habits of the hand are purely natural, not positive; nor in their senses remote from the true nature of the things that are implied (Bulwer 16)." Hands not only think, but they speak and their language is closer to nature, unpolluted by the vicissitudes of culture and immune to the punishment of Babel. In the "Chirepilogus," a short poem that closes the two treatises, Bulwer praises his "soul inspired hand" and his "hand's genius" (Bulwer 250), sacred gifts from God that prove human's privileged place in creation.

As shown in the previous chapter, in *De rerum natura* Lucretius gives *tactus* an absolutely crucial importance. When dealing with sense in general and with the senses in particular, the poet reminds the reader that *tactus* is the bodily sense, that to feel in the world is basically equivalent with touching things and being touched by things at many different levels of sensitivity. Notwithstanding the fact that all senses are forms of touch, Lucretius also aknowledges that there is a sense of touch whose organ is the hand.<sup>357</sup> As he explores Lucretius's analogical thinking, Schrijvers notices that thinking and understanding are often reduced to touch by means of analogies, or idioms. In doing so he follows Merbach, who had suggested that the epicurean term *epibole* (that could be translated as "notion" or "intuition") derives from the idiom epiballein tas cheiras, "to extend one's hands" [in order to grasp something]. In the Letter to Herodotus Epicurus characterizes both mental and sensory perception with one technical term: epibole.358 Lucretius has translated this as *animi iniectus*,<sup>359</sup> argues Schrijvers, which is almost like *iacere indu manus.* <sup>360</sup>This illustrates clearly that the same physical reality, *tactus*, is at the base of the three functions: hands, eyes, spirit. One could say, Schrijvers concludes, that in *De rerum natura* Lucretius juxtaposes the functioning of hands, eyes, and spirit.<sup>361</sup> Hands give us what is necessary for life because they are the most active, controllable and, perhaps for Lucretius, the most sensitive tools for touch. Hands are the tip of *tactus*,

<sup>&</sup>lt;sup>357</sup> For the hand identified as the organ of touch see *De rerum natura* 1.495; 2.434-441, 912; 3.96, 551-552, 631-633.

<sup>&</sup>lt;sup>358</sup> Epicurus 38

<sup>359</sup> DRN 2.740

<sup>&</sup>lt;sup>360</sup> *DRN* 5.102 <sup>361</sup> Schrijvers (1970) 91

and their astonishing versatility both justifies the analogy with thinking and the mind, and guarantees that the more man exercises them, perfects them and toys with them the more sophisticated the satisfaction of their necessities will be.

Lucretius not only affirms that sight is a form of touch.<sup>362</sup> but also that both vision and the sense of touch, made active and operated by the hand, are very similar mechanisms.<sup>363</sup> His *haptocentrism*, however, has no sign of teleological implications whatsoever. We do not have hands so that we can touch. We do not have a grasping intellect so that we can apprehend notions and ideas. It is precisely the other way around. Given that in the continuous shower of clashing atoms through void human beings consistently come to be, furnished with two hands and intellect, we use our hands as instruments and our minds to grasp concepts. Lucretius is quite concerned with making his position against teleology clear: "There is a fault in this regard which you should earnestly crave to escape," goes the warning.<sup>364</sup> Eyes were not made to see, thighs and calves were *not* joined so that we can walk and "ministering hands [were not] given to us so that we can do what is necessary for life."365 Those who think otherwise are "perverting" knowledge, claims Lucretius, because they confuse effect and cause, "since nothing is born in us simply in order that we may use it, but *that which is born creates the* use (nil ideo quoniam natum est in corpore ut uti/ possemus, sed quod natum est id

- <sup>363</sup> DRN 4.233
- <sup>364</sup>DRN 4.823-5

<sup>&</sup>lt;sup>362</sup> DRN 4.26ff

<sup>&</sup>lt;sup>365</sup> DRN 4.830-1

procreat usum)."<sup>366</sup> Lucretius also compares the discovery and invention of fire, utensils, mattresses, and clothing, all products of experience in the world that come invariably after man has felt enough cold, distress, discomfort, hunger and thirst, with the use of the senses. Human beings have learned how to use their senses and what to use them for, just like they learned how to keep warm in the winter and just like they learned that drinking from a cup is more efficient, more satisfactory (and safer, as the killing of Siegfried's shows) than kneeling down by a stream and scooping water with one's hands.

It should not surprise us to find this anti-teleological position in one of the first and most vocal admirers of atomism of the sixteenth century,<sup>367</sup> and it should not surprise us that he does so appealing once again to the status of hands. I am referring to Giordano Bruno and his notable apology of hands in the Cabala del cavallo pegaseo (1585). Bruno's disconcerting place in the Hermetic-Cabalistic tradition has been the object of many studies during the twentieth century. A complex Catholicism steeped in the works of the Pseudo-Dionysius and Nicholas of Cusa, his vexing "Egyptianism," the recurring trace of Cornelius Agrippa's De occulta philosophia (1533), and an often-misleading Neoplatonism make for Bruno's "extremely strange religion, which he expounds under extremely strange allegories."368 In The Cabala of Pegasus, one of three philosophical dialogues that Bruno wrote and published during his sojourn in England, Onorio, the main interlocutor, claims to remember his previous lives in a bizarre diatribe on reincarnation. Among other things, Onorio has been an ass, Aristotle (yes, the Stagirite), and Pegasus the winged horse. Based on first hand experience he tells his interlocutors

<sup>&</sup>lt;sup>366</sup> DRN 4.834-5

 <sup>&</sup>lt;sup>367</sup> For Bruno's Lucretianism see Papi 91-125
<sup>368</sup> Yates 259-60

that there are no hierarchies in nature: all living beings share the same prime matter and the same soul. In the words of Fulvio Papi, "man's ontological primary status is not some specific essence, but a natural equality with all other beings."<sup>369</sup> There is, however, a principle of individuation, a *complessione* ("complexion")<sup>370</sup> that defines the manner in which this universal soul vivifies each particular species with its physiological particularities. Each living being, therefore, has as main task to master its own anatomy and physiology. Intelligence equals proficiency in so doing. Man, unlike all other animals, has hands. Imagine for a second, Onorio proposes, a being with twice the intellectual capacity than man but feet instead of hands:

How could the families and leagues of such people, any more than of horses, deer, pigs be established and continued without being devoured by innumerable species of beasts, being thus subject to greater and more ruin? And consequently where would be the institutions of knowledge, the inventions of disciplines, the congregations of citizens, the structures of the buildings and other things in great quantity that signify human grandeur and excellence and made man truly the victor (*trionfator*) over the other species? All this, if you look cautiously, refers primarily not so much to the style of mind, as to that of the hand, organ of the organs (*organo degli organi*).<sup>371</sup>

In reading this passage, Rius Gatell points out that Bruno is inverting the Aristotelian-Galenic teleological explanation of man's exceptional place in the world and, thus, proposing a new ethics of action also based on the idea of man's superior dignity.<sup>372</sup> Following Anaxagoras and Lucretius, Bruno argues that man becomes man after

<sup>&</sup>lt;sup>369</sup> Papi 237

<sup>&</sup>lt;sup>370</sup> Bruno 125

<sup>&</sup>lt;sup>371</sup> Bruno 127

<sup>&</sup>lt;sup>372</sup> Papi says: "For Bruno the hand is not a teleological attribute of the human essence, but the human corporeal instantiation becomes what we in culture refer to as 'man' because it has been endowed with this attribute (Papi 242)."

generations and generations of mastering the hand, which is nothing but a token of the idiosyncrasy of the species. We rule over nature, we are intelligent because we have hands and have learned how to use them, and not the other way around. This idea, argues Rius Gatell, goes along with Bruno's interest on effort, and is the basis of a strict ethics of practice that understands man's dignity as equivalent with hard work.<sup>373</sup> Bruno here takes on Pico della Mirandola's notion of man as the one animal capable of ontological mobility, demolishes the Neoplatonic vertical ontological hierarchy by adopting Lucretian naturalism – according to which all creatures share the same matter and the same spirit – and focuses on the hand, not just the soul, as a vehicle towards the moral and spiritual improvement of man.

Bruno was not the only intellectual taking the Anaxagorean-Lucretian position in this debate. In *Paradoxe*, a poem dedicated to Charles IX and published in 1571, Ronsard praises the hands as idiosyncratic to mankind, exceptional and responsible for crowning us rulers of nature. Ronsard sings: "Les mains font l'homme, et le font de la beste/ ester veincueur, non les pieds ny la teste..."<sup>374</sup> Hands make the man. Ronsard's *veincueur* and Bruno's *trionfator* summarize the Lucretian idea of human civilization as a martial process in which man and nature, albeit made by the same prime matter, are in constant conflict. They also anticipate the Baconian idea of man that in many ways becomes the triumphant anthropological basis of modern science: man's mission in the world is to subdue nature and put it at his service. Notwithstanding the crucial difference between naturalism and teleology, for Ronsard and Bruno, as for Vesalius and his fellow

<sup>&</sup>lt;sup>373</sup> Rius Gatell 195-6

<sup>&</sup>lt;sup>374</sup> Papi reminds us that Frances Yates had argued in favor of a clear influence of Ronsard over Bruno when it came to religious matters (Papi 245). See Ronsard, *Oeuvres Complètes* II, 841-2

anatomists, humans do this with their hands. Towards the end of the sixteenth century the teleological approach in science was doomed to obsolescence, but it still had roughly one more century of life. Once again, this can be seen clearly in anatomy.

Anatomical studies in England at the time when Bruno visited the island were quite unremarkable and almost completely subservient to both the classical and Vesalian traditions. English anatomist John Banister published his anatomical compendium The Historie of Man, sucked from the sappe of the most approued anathomistes in 1578. There he takes the Aristotelian-Galenic stand on the teleological essence of hands: "As man, of all other creatures, is the most sapient, and wise, so also he hath hands, the most convenient instruments to a sapient creature: yet not in that he hath hands, therefore he is the wisest, but because he is wisest therefore he hath hands."<sup>375</sup> Almost four decades later, in another anatomical compendium, Helkiah Crooke, physician to James I, translates Laurentius's Historia anatomica humani corporis (1599) also taking Galen's side in the polemic against Anaxagoras and the atomists.<sup>376</sup>

If we briefly go back to Galen's anti-atomism and take a closer look at it we shall find that what upsets the physician the most is the atomistic obsession with the exceptional in nature. "For as they clearly see as they look at every animal's outer aspect that it has no part without a use, they try to find just some one thing, apparent either at first glance or from dissection, that will serve for contradiction. Consequently they have imposed on me the necessity of explaining all parts."377 Atomists, in Galen's view,

<sup>&</sup>lt;sup>375</sup> Banister 31 <sup>376</sup> Crooke 729

<sup>&</sup>lt;sup>377</sup> De usu partium 17. 441

annoyingly strive to look for exceptions in nature and use them to deny the perfectly rational skill of nature and, consequently, God's master plan. They dare talk about chance, Galen continues, when mistakes, like deformity, are exceptions in tens of thousands of individuals that are perfectly formed.<sup>378</sup> For Galen the exception does nothing but confirm the rule. For atomists like Lucretius, nature is an ever-flowing continuum from normal to abnormal, from generation to corruption, from monstrosity to beauty. Little did Galen know that this profound concern with the exceptional would be one of the main features of the scientific revolution in early modernity. Indeed, in the second book of The Advancement of Learning (1605), a true manifesto of the new science, Francis Bacon divides natural philosophy, or "history of nature" in three main branches: the study of nature in course, the study of nature erring or varying and the study of nature artificially wrought or altered.<sup>379</sup> Bacon later moves on to brutally dismiss Plato's, Aristotle's and Galen's natural philosophy based on the concept of final cause and in doing so says: "...the natural philosophy of Democritus and some others, who did not suppose a mind or reason in the frame of things, but attributed the form thereof able to maintain itself to infinite essays or proofs of nature (...) seems to me (...) in particularities of physical causes more real and better enquired than that of Aristotle and Plato."380 History that does not lack in a deep sense of irony, would turn Galen and Aristotle's teleology into an obsolete *Weltanschauung* by the very means for which they both advocated so strongly: a close and systematic first-hand approach to nature.

<sup>&</sup>lt;sup>378</sup> De usu partium 17. 444

<sup>&</sup>lt;sup>379</sup> *The Major Works*, 176. Bacon emphasizes the fact that natural philosophy until his days had failed to properly study, examine and describe "the heteroclites or irregulars in nature."

<sup>&</sup>lt;sup>380</sup> The Major Works, 198-9

In Crooke's *Microcosmographia*, as conservative and Galenic as this work is, we find a fascinating rhetorical twist to explain man's exceptionality. Following Laurentius, his guide throughout the whole of the first book, and taking on the trope of man's natural vulnerability, Crooke says that, fortunately, God

hath not left [man] destitute (...) having armed him with three several muniments, which he hath denied to other living creatures: Reason to invent, Speech to call for assistance and Hands to bring his will to act and perfection. Reason is the hand of the understanding, Speech the hand of Reason and the Hand itself, is the Hand of Speech.<sup>381</sup>

However philosophically weak and inconsistent this reflection might sound, (where does "understanding" come from? Is it a *fourth* attribute?) it does carry two points of interest. First, the metaphor of the hand as the quintessential "instrument," "the great Organ before all Organs, the instrument of all instruments," as Crooke will say immediately after, had become so much of a common place for early modern intellectuals that it could easily be taken to different and new referential levels. Two, the chain of metaphorization that Crooke here welds, much like Homer's golden chain, seems to form a harmonic nexus from God to man; a chain of hands that stretches from God's *dextra creatrix* to man's conquering hand. But hands do not only engage in intelligent creation and rational conquest. God's hand also saves, human hands also heal.

## Hands that Heal

In the frontispiece of the first single edition of Galen's *On Anatomical Procedures* in Greek (published by Simon de Colines in Paris some time between February and

<sup>&</sup>lt;sup>381</sup> Crooke, 1.3

March of 1531) there is an engraving that shows Jesus curing a leper in between Saint Cosme, who is carrying a book, and Saint Damian, who is holding an ampoule. Below them, in the second level of the illustration, the artist placed the medical authorities: Hippocrates, Galen, Oribasius, and Paul of Aegina.<sup>382</sup> Finally, in the bottom of the illustration there is an anatomy lesson. There is no podium, the physician delivering the lesson is also performing the dissection, and students are gathered around the dissecting table, attentively observing the procedure. The engraving constitutes a fascinating synthesis of the early modern debate between theory, grounded on book learning and tradition, and practice, based on individual first-hand experience, which invariably comes in conflict with tradition. In the lowest level we have practice at its best: a physician performing the manual labor of the dissection in the midst of his students. Above them hovers the pantheon of authorities, overlooking, supervising the dissection. And further above, in the topos ouranos of the illustration, Jesus, standing in between the book and the ampoule (that in Carlino's reading also symbolize "theory and praxis")<sup>383</sup> is healing the sick man. As the Word incarnate, Jesus represents the most perfect and most sacred symbiosis of contemplation and action, of theory and praxis. And the vessel that channels the divine power into the cure of the ill is Jesus's hand.

According to Matthew's gospel, upon finishing his sermon on the mountain Jesus came down and encountered a pious leper that asked him to "clean" him. "And Jesus put forth his hand and touched him saying (...) be thou clean. And immediately his leprosy

<sup>&</sup>lt;sup>382</sup> Also known as Paulus Aeginetus. He was a Greek physician and encyclopedist who lived in the VII Century AD and wrote the monumental *Epitome medicae* in seven books, a work that deeply influenced both Arab and later Medieval medicine.

<sup>&</sup>lt;sup>383</sup> Carlino 58

was cleansed."<sup>384</sup> The story repeats itself almost verbatim in Mark's gospel, only this time Jesus had just finished preaching at a synagogue. In response to the leper's request, Mark says: "And Jesus, moved with compassion, put forth his hand and touched him and said unto him (...) be thou clean."<sup>385</sup> Later in Mark's gospel Jesus restores a blind man's eyesight by placing his hands on the man's eyes twice, because after the first time the healing was not complete and the man could see but not clearly.<sup>386</sup> This could point into a differentiation between Jesus as miracle worker and Jesus as healer. Miracles like turning stones into bread, water into wine or like resurrecting Lazarus are supernatural phenomena, whereas the healings seem to belong more to the realm of skill and craft, in that it involves a certain degree of error and the necessity of improvement of the technique. A passage from Mark's gospel supports this idea. Back in Bethlehem Jesus, says Mark, "could do no mighty work, save that he laid his hands upon a few sick folk and cured them."<sup>387</sup> Indeed, a crucial part of Jesus's ministry revolved around healing the physically sick with word and hand. As Sara Wuthnow points out, in early Christianity the idiom "laying on of hands" becomes almost a synonym for healing, <sup>388</sup> and the idea of Jesus as physician is as old as the gospels themselves.<sup>389</sup>

<sup>&</sup>lt;sup>384</sup> Matt. 8:1-3

<sup>&</sup>lt;sup>385</sup> Mark 1:40-1. In Luke (17:11-9) Jesus cures ten lepers without touching them.

 <sup>&</sup>lt;sup>386</sup> Mark 8:22-6. Also in Matthew (9:27-30) Jesus cures blindness by touch. More examples of Jesus healing by touch are Luke 13:13; Mark 5:22-43
<sup>387</sup> Mark 6:1-5

<sup>&</sup>lt;sup>388</sup> Wuthnow 222

<sup>&</sup>lt;sup>389</sup> Walter Charleton calls Jesus the "great physician" who cured by touch, that "virtual and medical sense" (*Physiologia Epicuro-Gassendo-Charltoniana*, 3.9).

One of the most fascinating historical examples of healing by the "laying on of hands" is the case of the rois thaumaturges in England and France. In what still constitutes the most meticulous and insightful study on the long lasting belief in the royal touch that cured scrofula, Marc Bloch establishes a timeline that goes from as early as the eleventh century in Capetian France (and about a century later in Norman England), until the beginning of the eighteenth century in England, and well into the nineteenth century in France. According to this belief, that differed little in both countries, among the divine attributes of the anointed monarch there was the ability to cure by the touch of his or her hands. Not unlike Jesus, the King or Queen as instantiations of the divine on earth could channel health from God and transmit it to the body of the sick person. Bloch speculates that scrofula – a very visible inflammation of the lymph nodes due to the bacillus of tuberculosis – was a "disease lending itself particularly to the miraculous because (...) it can easily give the illusion of having been cured."390 In the rite, performed amidst prayers, the monarch would touch the sick person's protuberances and the person would allegedly start a slow but sustained and successful process of healing.

During the wars of religion in the sixteenth century the royal miracle noticeably grew in extent and fame on both sides of the Channel, and in 1597 the first book dedicated to the phenomenon (*Charisma sive donum sanationis*) was published in London by theologian William Tooker, who intended to historically legitimize the royal gift that also Elizabeth had been exercising as part of her monarchic attributes.<sup>391</sup> The importance of this tradition is confirmed when James I, who initially had shown reticence

<sup>390</sup> Bloch 46

<sup>&</sup>lt;sup>391</sup> Bloch 177

to perform the ritual healings, follows suit only months after his coronation. His Stuart successors would all continue with the periodical ceremonies to heal from the "king's evil" with their hands, the last instance of such ceremony being in April of 1714 when Queen Anne became the last English monarch to touch for scrofula. Bloch argues that it might have been James's strict Calvinistic upbringing the cause of his initial reticence.<sup>392</sup> Indeed, other Calvinists, like the famed French anatomist Ambroise Paré, in his treatise on surgery, when discussing treatments against scrofula significantly refrains from saying a single word about the healing hands of kings. An unfavorable attitude to this ritual and miraculous "laying on of hands" is consistent with Calvinist rejection of pomp, flamboyance, and superstition in religious rites. The issue of hand healing and touch, however, is one that particularly worried Calvin.

To someone who believes that "our flesh is nothing but rottenness and corruption,"<sup>393</sup> it makes perfect sense that the divine "cannot be touched by human hands."<sup>394</sup> As a natural consequence of his vitriolic condemnation of the sacraments, Calvin, Wear shrewdly points out, "denied that any physical material or even touch had miraculous powers." In fact, Wear continues, whenever Calvin discusses Christ's miracles he always makes a point of noting that Christ "could have healed without the physical laying on of hands," which the Genevan theologian reads as purely symbolic.<sup>395</sup> However, in his heated commentary of *Genesis*, Calvin makes an significant distinction, that sheds light over the notion of Calvinistic salvation. Talking about Adam's fall, the

<sup>&</sup>lt;sup>392</sup> Bloch 191

<sup>&</sup>lt;sup>393</sup> Calvin 145

<sup>&</sup>lt;sup>394</sup> Calvin, Inst. 2.14.2

<sup>&</sup>lt;sup>395</sup> Wear 155

theologian concludes: "...it is important that we touch nothing of God's goods without his permission, for we cannot enjoy anything with a good conscience, except we receive it as from the hand of God."<sup>396</sup> God's goods are his effects, our only vehicle to an acceptable knowledge of the divine, as the first book of the *Institutes* strives to prove. We can only enjoy them piously if given to us by God's hand. O'Rourke Boyle observes that: "Calvin knew well the convention of God's hand. In Scripture it was synonymous with force, creation, liberation."<sup>397</sup> Man's salvation, like everything else, depends upon God's inscrutable Will, and the hand of God may reach out to us, but we should never, we could never instigate the sacred contact ourselves. Also, in the address to Francis I that opens the 1541 French edition of the *Institutes* Calvin summarizes the purpose of his works as follows: "...to teach some rudiments by which those who are touched with some good affection for God might be instructed in true piety."<sup>398</sup> In Calvin's tactile imagery there is no room for reciprocity, and this represents a dilemma both for epistemology and for soteriology that reflects the Calvinistic conundrum of justification by faith versus the merit of works. God can touch us with his hand, but we cannot touch Him with ours.

The case of James I is interesting because his initial reticence to continue with the tradition of laying his hands to heal the scrofulous might have very well been, as Bloch argues, an attempt by a fresh King to impose his religious ideology on his policies. The fact that he ended up adopting the ritual on the very year of his coronation shows two things. On the one hand, it points to how important the ritual was for the English people and how crucial a kingly attribute it constituted. On the other hand, it offers a clear view

<sup>&</sup>lt;sup>396</sup> In libros Mosis ad Gen 1.28

<sup>&</sup>lt;sup>397</sup> O'Rourke Boyle 250 <sup>398</sup> Calvin, *Inst.* 5

on James's Realpolitik and his efforts to reconcile religious beliefs rather than anatagonize and alienate factions. The crowds believed that the King had the God given gift of the healing hand and this belief stayed strong throughout the early modern period. A royal proclamation from 1616, and another one from the beginning of Charles I's rule establishing the best time of the year for the King to perform the ceremony of the sacred touch (ie. the period between Easter and Michaelmas –from the end of March until the end of September) are eloquent documents of the importance of this practice in the first half of the seventeenth century.<sup>399</sup> But this belief was not just held by the ignorant masses. Men steeped in the new scientific paradigm are known to have witnessed and confirmed the efficacy of the royal healing hand. I already mentioned Tooke, towards the end of Elizabeth's reign, but now I would like to focus my attention on one of the most brilliant minds of the seventeenth century, a man who, among many other vexing and seemingly contradictory positions, manifested his belief in the strange healing ritual.

Sir Thomas Browne was a physician, an enthusiastic follower of the Baconian project, yet a firm believer in Aristotelian-Galenic teleology, a proud royalist, a pious Anglican and one of the best prose writer in the English language. His work constitutes a great example of the encounter between the new science, based on observation and evidence, and the old Aristotelian-Galenic paradigm, reliant on teleology. Browne's ways of negotiating old and new learning, religion and science, theory and praxis, are clear signs of his deep concern with civility in times of dramatic political and religious crisis. Since his early years as a medical student first at Oxford and then at Montpellier, Padua,

<sup>&</sup>lt;sup>399</sup> By the King: A Proclamation concerning the Kings Evill (London, 1616); and By the King: A Proclamation for the better ordering of those who repayre to the Court for their cure of the disease called the Kings Evill (London, 1626).

and Leiden - the three most important medical centers of the early modern period -Browne learned to combine a dedicated study of the classics with his eagerness to observe first-hand and describe. Padua was the birthplace of the anatomical theater. Leiden was a Mecca for students eager to combine humanism and new science.<sup>400</sup> Medical students at Leiden had two types of instruction: the lectura, which were theoretical lectures based on classical texts, and the ostensio, practical demonstrations either at the anatomy theater with dead bodies, or at the ambulacrum with living patients.<sup>401</sup> Already in *Religio Medici*, written in 1635 but first published in 1642, one finds the young doctor making fun of a zealous follower of Galen who "could not perfectly believe the immortality of the soul because Galen seemed to make a doubt thereof."402 Ten years later, in a letter to Henry Power, Browne says that direct experience makes a physician, not books; however, one must master the classics because they are an invaluable source of knowledge from past experiences.<sup>403</sup> His acceptance of the possibility of miracles, carefully argued for and established in Religio Medici<sup>404</sup> alongside his rigorous scientific spirit is yet another particularity of Browne's mind by which the Norwich physician reconciled antagonistic views, or dabbled beautifully in

<sup>&</sup>lt;sup>400</sup> See Barbour's and Beuker's essays in '*A man very well studyed: New Contexts for Thomas Browne* (Murphy-Todd [eds.]).

<sup>&</sup>lt;sup>401</sup> Murphy-Todd 55

<sup>&</sup>lt;sup>402</sup> Religio Medici 1.21

<sup>&</sup>lt;sup>403</sup> Letters 277

<sup>&</sup>lt;sup>404</sup> Religio Medici 1.27

contradiction.<sup>405</sup> His belief in the efficacy of the royal touch must be understood in this context.

John Browne, anatomist and author of one of the most important scientific works on the King's Evil and the royal touch, the Adenochoiradelogia (1684), recalls how Sir Thomas Browne once sent a child to Breda to be touched by the King.<sup>406</sup> It is more than safe to assume that both Brownes, physicians, royalists and pious men, believed in the healing power of the kingly touch. In A Letter to a Friend, written in the mid 1650's, Thomas Browne casually refers to the practice talking about the spread of diseases in general: "The king's Purse knows that the King's evil grows more common," referring to the fact that each patient touched for scrofula received a gold medal as a memento of the healing ceremony.<sup>407</sup> In two letters to his son Edward, who was also a physician, Browne also refers to the ritual. The first one, dated September 22nd. 1680, has Browne wondering what "chirurgeons" and "physitians" were in Newmarkett attending his Majesty as he touched the sick. The ceremony, albeit based on faith and belief, counted with the assistance of physicians. It is perfectly reasonable that such a hybrid ceremony would appeal to Browne. The second letter, dated June 6th. 1681, contains a mere reference to the wife of a certain "Cosen Astley" who took her son to Windson "to bee touched again." The lack of any comment or digression upon this might very well be yet another sign that Browne believed in the efficacy of the royal practice. But in order to understand better the importance that touch, hands in general and healing hands in

<sup>&</sup>lt;sup>405</sup> In *A Letter to a Friend* Browne admits that miracles in medicine are rare, but by no means does he rule them out completely (*Major Works*, 393).

<sup>&</sup>lt;sup>406</sup> Bloch 211

<sup>&</sup>lt;sup>407</sup> Major Works 399. See note 45.

particular had for Browne one must start by looking at his first, and arguably the work that best illustrates the mind of the Norwich physician: *Religio Medici*.

If one takes Browne's word, faith, the center of the first part of the work, is a "mere notion, and of no existence" without charity. In his introduction to the 1955 Cambridge edition J.J. Denonain expresses this view with great clarity: "[*Religio Medici*] is a memorial intended to record for the author's further use (...) a sum of personal views resulting from temper and experience written at the sober age of thirty by a man who settles down to a grave calling in his native country after years of browsing among books and roaming in foreign lands."<sup>408</sup> *Religio Medici* is not an anthology of ideas past, or the anxious and dramatic monologue of a man, whose very being is divided between faith and reason, or even the virtuous linguistic display of an acrobat of style; *Religio Medici* is a roadmap to the future. It is not simply the religion of a physician; it is an unorthodox and eclectic manual that stipulates how a certain religion, Anglicanism, is and ought to be practiced by a certain physician, Thomas Browne. The Latin genitive is more like a dative, or an ablative: Religion for a physician, religion to a physician; in brief, what does it mean for a physician to be religious? This is the question that acts as Ariadne's thread throughout *Religio Medici*. The answer lies in the second part of the text. The religious doctor, the good physician, is the one whose whole life is guided by the virtue of charity.409

<sup>&</sup>lt;sup>408</sup> Denonain xi

<sup>&</sup>lt;sup>409</sup> Huntley, in his excellent intellectual biography, summarizes the relation between parts one and two of *Religio Medici* as follows: "As a physician he knew that medicine's theory and practice, diagnosis and cure parallel in religion faith and conduct or belief and action. The Hippocratic Oath enjoins love of one's patients as requisite to the wisdom of the art (Huntley 107)."

Indeed, Browne is convinced that his rational faith, albeit fundamental to lead a good life and to aspire to experience the divine, is a "meere notion, and of no existence"<sup>410</sup> without charity. Only "insolent zeales" (*RM* 1.60) rely purely on faith, a faith with no committed grounding in this world, with no transformational capacity in every day life is as useless as a geometer's compass with no spike. Part two of *Religio Medici* is dedicated to the notion of charity. Charity has very many forms, acknowledges Browne.<sup>411</sup> Civility is one of them. Browne's irenicism, his religious and cultural tolerance, and in his life-long concern with avoiding chauvinism, sectarianism, and divisive zeal confirm this.<sup>412</sup> In a country torn apart by civil war, in a continent lacerated by enduring religious strife, Browne's *Religio Medici* can be read also as a manifesto of civility.<sup>413</sup> Civility is the social consequence of charity.

For Browne charity is the only way to attain happiness. "Where Charity is broke the Law itself is shattered, which cannot be whole without Love that is the fulfilling of it," says Browne in *A Letter to a Friend*.<sup>414</sup> This is what in 1635 the young Thomas Browne, about to become a fully licensed doctor, had already wished from God. This is what Thomas Browne the Norwich physician wishes again from God in 1643 when correcting the first authorized edition of *Religio Medici*, and again in the 1650's when writing a letter to a friend, offering consolation over an unexpected death. The pursuit of happiness involved training his reason in the highest mysteries, observing nature in its

<sup>410</sup> RM 2.1

<sup>&</sup>lt;sup>411</sup> RM 2.3

<sup>&</sup>lt;sup>412</sup> See *RM* 1.3, and 2.1

<sup>&</sup>lt;sup>413</sup> This is the main thesis of Claire Preston's *Thomas Browne and the Writing of Early Modern Science*. <sup>414</sup> *Major Works* 411

most minuscule details, and exercising charity towards his neighbors, but most importantly dedicating his life to healing the sick. His profession would be his true grounding, his answer to God's calling. His religion, as Andrew Cunningham affirms, "was thoroughgoing (...) an attempt to practice the divine ethics of our Saviour."<sup>415</sup> Browne had said it himself: "He honors God who imitates Him."<sup>416</sup>

Lund has shown that Browne had an idea rather traditional among many of his contemporaries, according to which physicians were in charge of perpetuating Jesus's healing ministry.<sup>417</sup> In *A Letter to a Friend* Browne quotes the passage from Matthew's gospel that physicians used to base their claims upon: "…he went about Galilee healing all manner of sickness, and all manner of diseases."<sup>418</sup> This attitude towards religion and medical practice, argues Lund, reveals an unspoken anti-Calvinism in Browne. His belief in the royal touch also reinforces this idea. Calvin's repulsion for all types of emotional ceremonial led him to affirm that "the age of miracles was past" and to stress the symbolic meaning of Jesus's healings.<sup>419</sup> In Lund's view for Browne "the biblical miracles are hence used not to make a theological point about ceremony and sacrament (as in Calvin) but to legitimize the medical profession as, firstly, following Christ's example and secondly, being a conduit of God's purposes and power."<sup>420</sup> Even in

<sup>&</sup>lt;sup>415</sup> Cunningham 39

<sup>&</sup>lt;sup>416</sup> In Christian Morals 3, 2 (Major Works 449).

<sup>&</sup>lt;sup>417</sup> Foor this Lund quotes Burton's *Anatomy of Melancholy* and Obadiah Walker's *Periamma Epidemion*. See Murphy-Todd (eds) 243

<sup>&</sup>lt;sup>418</sup> Matt. 4:23. *Major Works*, 394 <sup>419</sup> Murphy-Todd 243

<sup>420</sup> Ibid

Browne's own time physicians had looked up to him and the pious commitment he had to his profession. George Thomson says:

In my Minority I had been a little amazed to hear the Religion of Physicians indifferently, yea flightingly, ironically spoken of. So that I have not without some indignation, vindicated it; persuading myself that there were many who like Dr. Brown were able to assert it practically.<sup>421</sup>

Such physicians who "by their love are grown cosmographers," as Donne says,<sup>422</sup> devotedly perusing the map of the human body, were rare then as they are today. Browne's pious conception of medicine is nowhere clearer than in his attack to those "sordid and unchristian desires" of those doctors who wished for maladies and plagues in order to gain profit:

Let mee be sicke my self, if sometimes the malady of my patient be not a disease unto me, I desire rather to cure his infirmities than my owne necessities.<sup>423</sup>

Browne's empathy with the patient, as that with his close friends, emulates God's creative, healing and saving love for mankind. Medical consultation is indeed for Browne a religious ceremony: "I cannot goe to cure the body of my patient, but I forget my profession and call unto God for his soule."<sup>424</sup> Just like God's, the physician's instrument of healing is the hand.

<sup>&</sup>lt;sup>421</sup> Thomson 187

 <sup>&</sup>lt;sup>422</sup> John Donne, *Hymn to God my God, in my Sickness* 6-7
<sup>423</sup> *RM* 2.9

<sup>&</sup>lt;sup>424</sup> RM 2.6

Will Marshall's engraving for the first unauthorized edition of *Religio Medici* (1642) portrays a hand breaking through a cloudy sky and holding a man who is falling to the sea from a rocky cliff. The hand coming down from the sky is a right hand, the *dextra divina*, and it is holding a person's left hand, which is the weak one for the great majority of us. The sky, as tumultuous as the sea, reveals nothing more from what lies beyond, just a hand. An inscription reads: *a caelo salus*. It means both "salvation comes from heaven" and "health comes from heaven." It is safe to assume that Browne approved of the engraving enough to pose no objections to the inclusion of it in the first authorized edition (1643), and in subsequent editions. The hand was not just a symbol for Browne. The hand was the instrument of creation, destruction and salvation, the nexus between God and man.<sup>425</sup>

References to God's hand and finger are peppered throughout the pages of *Religio Medici*. The work, in its first authorized edition, includes three poems. In the first poem, Browne addresses God and prays so that his enquiring reason with "weary wings may on thy hands still light."<sup>426</sup> When discussing creation he praises "the wisdome of his hand,"<sup>427</sup> and wondering at the civility of certain insects he asks "what wise hand teacheth them to doe what reason cannot teach us?"<sup>428</sup> In dealing with the issue of

<sup>426</sup> RM 1.13

<sup>427</sup> RM 1.15

<sup>428</sup> Ibid

<sup>&</sup>lt;sup>425</sup> "A glance at the Grant of Arms of the Royal College of Physicians reminds us of this, a hand coming from the sky... it could be God's, but it's wearing an aristocratic ruff, so it's a doctor's, grabbing another hand taking its pulse (Rowe 47)." See also the frontispiece (by an anonymous engraver) of Robert Fludd's work on pulse, *Pulsus* published in 1631. It shows the hand of God issuing from the clouds and taking the pulse of a person, whose extended arm God holds. Following the prescribed directions for placing four fingers on the wrist of the patient's right hand, God acts as physician (Richter Sherman 97).
Fortune he identifies it with "the meere hand of God,"<sup>429</sup> and paraphrasing Daniel<sup>430</sup> he points out that we also "behold the hand, but see not the spring that moves it.<sup>431</sup>" Later he concludes that the swing of the wheel of fortune is directly and without mediation moved "by the hand of God."<sup>432</sup> Our very lives are designed by "that mercifull hand,"<sup>433</sup> by that "paire of second causes, or visible hands of God,"<sup>434</sup> ie. providence and fortune. Also when discussing miracles he defines them as "the extraordinary effect of the hand of God,"<sup>435</sup> "that invisible hand that conveyed Habakkuk to the lion's den."<sup>436</sup> Later in the text Browne refers to nature as a "hand that twines the thread of life," but immediately admits that there is another hand that does it more obscurely, more mystically: "I am sure we doe not erre if we say it is the hand of God."<sup>437</sup>

The hand of God for Browne is not just an image of Grace and a soteriological metaphor, it is also a metaphor for creation, instruction, and omnipotent will. Browne imagines creation, generation and providence as the perfect sketch of a harmony of hands: nature, fortune and providence work simultaneously and harmoniously to produce this perfect product from beyond the threshold of eternity. The Norwich doctor even

- <sup>430</sup> Daniel 5.5
- <sup>431</sup> Ibid

<sup>432</sup> Ibid

- <sup>433</sup> RM 1.18
- <sup>434</sup> RM 1.19
- <sup>435</sup> RM 1.27
- <sup>436</sup> RM 1.33

<sup>437</sup> RM 1.43

<sup>&</sup>lt;sup>429</sup> RM 1.17

admits to believe in some sort of chiromancy when, in *A Letter to a Friend* he says: "Cardan hath a peculiar and not hard observation from a Man's Hand to know whether he was born in the day or night, which I confess holdeth in my own."<sup>438</sup> The hand is to Browne perhaps the most evident mark of the creator in his most accomplished creature, man. Thus Browne's God, not unlike Kali, the Hindu goddess of time and change, may be pictured in the form of a portentous array of hands that create and order, heal and save, tell the past and the future, and contain the secret of who we are. In short:

And to be true and speake my soule, when I survey the occurrences of my life and call into account the finger of God I can perceive nothing but an abysse and masse of mercies, either in general to mankind, or in particular to myself.<sup>439</sup>

However, the divine hand is not just God understood as maker and ruler, God as that "skillful Geometrician"<sup>440</sup> of the world. More importantly, it is the manifestation of God's love. Divine charity is the touch of God, and our hands are the instruments of charity. By shaking hands with Catholics and doing the sign of the cross – a habit that Browne refers to as "the civility of my hand" –<sup>441</sup> Browne exercises civility. But just like hands can heal and inspire civility they can also harm and even kill: "Tis in the power of every hand to destroy us, and we are beholding unto every one we meete hee doeth not kill us,"<sup>442</sup> warns Browne anticipating Hobbes's main argument for the necessity of social covenants in *De Cive*, also published in 1642. Luckily, he retorts, there is "but one

- 440 RM 1.16
- <sup>441</sup> *RM* 1.3
- <sup>442</sup> RM 1.44

<sup>&</sup>lt;sup>438</sup> Major Works 394-5

<sup>&</sup>lt;sup>439</sup> *RM* 1.53

comfort left, that though it be in the power of the weakest arme to take away life, it is not in the strongest to deprive us of death.<sup>443</sup> Physicians can mitigate the maladies of the soul with what Browne calls "the mercifull hand of our abilities,"<sup>444</sup> by performing acts of charity on their fellowmen, but only the physician can cure the maladies of the body. Physician's hands emulate divine hands recomposing what has been upset, restoring to its original health what has fallen ill, combating death and, thus, recreating life. In a very tangible sense the physician's is a mission of redemption, a mission to restore the sick body to its prelapsarian state of health. The instrument to diagnose and to cure is the hand that touches the body, feels its temperature, and penetrates its cavities. Browne entertains, in two occasions, the idea of losing an arm as the worst thing that could happen to him.<sup>445</sup>

Browne's charity consists therefore in a devoted commitment to the profession of healing the sick. The touch of God that he feels, that he has felt as his own fortune – "now for my life, it is a miracle of thirty years" – <sup>446</sup> is what he strives to imitate with his friends in that mystical union of empathetic love, with his fellowmen in his consistent and natural civility and with his patients. In Browne's melancholy yet optimistic outlook the world was "an Hospitall,"<sup>447</sup> and his Sisyphean mission, to deprive men of death. Although he never words it explicitly Sir Thomas Browne in *Religio Medici* seems to entertain the idea that the closest way to get to God is not through a blinding vision, or

<sup>446</sup> RM 2.11

<sup>&</sup>lt;sup>443</sup> Ibid

<sup>&</sup>lt;sup>444</sup> *RM* 2.3 <sup>445</sup> *RM* 1.3, and 2.5

<sup>10,1 2.1</sup> 

<sup>&</sup>lt;sup>447</sup> Ibid

even an ecstatic realization, but through touch. Being touched by his merciful hand, and touching with healing charity the most recondite crevices of His creation.<sup>448</sup> In Browne's view, as in that of many of the physicians who revolutionized anatomy, diagnosis, and treatment, tactility is the most real and direct link between man and God.

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Only a few months ago a team of paleoanthropologists from the University of Bristol (England), using a "newly refined uranium-thorium dating technique"<sup>449</sup> proved beyond a shadow of doubt that the handprints at the caves of El Castillo in Cantabria are at least 37,300 years old. In other words: the oldest work of art known to man. Similar Stone Age depictions of hands can also be found in other caves around Europe, and prove that humans have been obsessed with their hands for as long as they have been sophisticated enough to produced art. Many millennia after the Cantabrian artists (who may have been Neanderthal men) left their handprints on those walls Michelangelo Buonarroti was invited to Rome by Pope Julius II. The Tuscan artist had just finished the David, and after a period of three years working on the Pope's tomb, he started painting

<sup>&</sup>lt;sup>448</sup> For Browne there is something unusually tactile about how God made man. Whereas he created the rest of the world with "a blast of his mouth (...) at his bare word (...) in the frame of man (...) he played the sensible operator, and seemed not so much to create as make him" (RM 1, 36). Browne is here striving to grasp a subtle distinction concerning God as generator by means of a complex metaphor. Creation seems to be something performed from afar, whereas making is more "sensible," something that involves a sort of contact. Browne believed that the making of man, a creature so similar to Himself, required God to stick his hands in the dough of primeval matter and spirit and personally model a creature in his image. As a physician, Browne knew about using one's hand to heal, to repair God's creation.

<sup>&</sup>lt;sup>449</sup> Wilford, "With Science, New Portrait of the Cave Artist"

(some say reluctantly) the frescoes of the Sistine Chapel. It was 1508. The most famous scene in the fresco, the creation of Adam, centers the attention on two hands, one divine, one human, and two index fingers that point to one another without touching each other, forever separated by "the flick of a fingernail."<sup>450</sup> Michelangelo offers us the instant, the nanosecond that follows the creation of man. The scene may presuppose a previous state of full contact – maybe even one of indistinguishable unity – between human and divine after which comes the ineluctable separation: a fall before the Fall. But then again, the scene could be suggesting that there was no primal contact. Maybe with a sleight of hand, God, who creates by the Word, is instilling in the newborn creature that exceptional quality that places it above all other creatures: the capacity to manipulate and manufacture. In the end Michelangelo appears to be expressing that regardless of whether human and divine can touch, regardless of whether we are exceptional because we have hands or we have hands because we are exceptional, the goal of the new man in that brave new world that was emerging in the sixteenth century was to get closer to God by means of a skillful use of that proverbial attribute with which we too create, rule, destroy, love and heal: our hands.

<sup>&</sup>lt;sup>450</sup> O'Rourke Boyle 2

# Chapter 3:

# Kiss

Il connut les secrets de la main dans la main, La ferveur de la bouche et la voix des prunelles. Pierre Louÿs, Subscriptum tumuli Ioannis Secundi<sup>451</sup>

It is hard to think of a more tangible account of tactility in early modern Europe than the poetic genre autocthonous to the period, known as *basium*, or "kiss poem." While early modern physicians revolutionized anatomy by sticking their naked hands into the cold insides of human cadavers, Renaissance poets transformed classical and medieval *tópoi* to create a new genre of erotic poetry by sticking their tongues in the warm mouths of their beloved. Humid textures are still the great protagonist, only this time it is not the eery touch of clammy human viscera, but the warm moisture of tongue and lips that sparks the tactile epiphany. The anatomist's hand touched death, the poet's kiss is a touch of life. In the poetry of Neo-Latin luminaries like Giovanni Pontano, Michelle Marullo, and, especially, Johannes Secundus, the kiss claims protagonism as a metaphor for sexual intercourse, as a synecdoche of the romantic relationship, as a

<sup>&</sup>lt;sup>451</sup> "He knew the secrets of hands holding hands,/the ardor of mouths and the voice of the prunelle" (Pierre Louÿs on Johannes Secundus).

sophisticated and ingenious new *locus amoenus* that, paradoxically, catapults the lovers out of space and out of time, and as true *kairós*, or moment of ineffable ecstasy, in which two become one. It is fair to say that Neo-Latin poetics are a response to the hitherto reigning tradition of Petrarchismo.<sup>452</sup> Petrarch bases the love poetry of his *Rime* on the experience of non-consummation. His sonnets are mostly lamentations and songs of yearning for a beloved who is untouchable because she is either married, or dead and elevated to the rank of a deity. His faithful heirs follow suit. On the other hand, Neo-Latin poetry and its many later translations and imitations in the vernacular is built upon the originary experience of continued physical contact, thus making touch the cornerstone of aesthetic experience in the world, and kiss its most privileged and intimate variant.

The obsession with the kiss was not just limited to the realm of poetry in early modernity. In *The Seducer's Diary* Søren Kierkegaard's narrative alter-ego confesses he has "thought of gathering material for a book titled: *A Contribution to a Theory of the Kiss*," and adds: "incidentally, it is curious that there is no book on this topic."<sup>453</sup> Although he might have been right in that no such treatise exists, Kierkegaard ignored that a Platonic philosopher in late sixteenth century Italy wrote a philosophical dialogue on the kiss. There is no way that the Danish philosopher could have known Francesco Patrizi's *Delfino overo del bacio*, given that it survived in one manuscript only, edited and published for the very first time in 1975.<sup>454</sup> Even though both Classical and Medieval

<sup>&</sup>lt;sup>452</sup> On Petrarchismo see Quondam (2004).

<sup>453</sup> Kierkegaard 416

<sup>&</sup>lt;sup>454</sup> There is only one existing version of this dialogue, it is a manuscript copy by a secretarial hand (cod. Ambros. Q 119 Sup. *Il Delfino ovvero dialogo del bacio* f ° 106 r°-117 v°) but with many corrections and emmendations made by Patrizi himself. The manuscript was owned by Paul Oskar Kristeller who kindly trusted it to the hands of it only editor, Aguzzi Barbagli.

authors had used and abused the symbol and the metaphor of the kiss to illustrate peace between men, communion between souls, death, betrayal, and union between the human and the divine, the novelty of Patrizi's early modern approach is that he carries out a thorough analysis of the physiology of the kiss from a strictly philosophical, and in many ways naturalistic, standpoint – something never done before, and that has not been done since. And despite Patrizi's Platonic affiliation his discussion on the kiss needs to be read in the context of his "love philosophy," especially as presented in *L'amorosa filosofia*, a text that violently defies the traditional Renaissaince love philosophy of Pietro Bembo, Marsilio Ficino and Baldasare Castiglione, among others, all of whom saw themselves as rightful heirs of Plato.

As I will try to show throughout this chapter, in the aesthetic and philosophical worldviews of some early modern authors the actual kiss, the real kiss between lovers is a particularly significant event since it reveals the existence of a liminal space in a tangible epiphany. The kiss, described as a profane ceremony, is the tactile threshold where body and soul, life and death, time and eternity, and masculine and feminine meet. Not just the obvious fact that it is a product of physical contact makes the lover's kiss a privileged instance of the tactile; its most intrinsic characteristic: softness (or sweetness), and its most overwhelming effect: pleasure, also render it a special significance as perhaps the most compelling variation of the sense touch.<sup>455</sup> This notwithstanding, and as I showed in

<sup>&</sup>lt;sup>455</sup> *L'Alcibiade* by Antonio Rocco (1651), one of the most scandalous and persecuted works of the seventeenth century, includes a compelling praise of tactility that focuses on the pleasure it produces. The master says to Alcibiades: "The senses were produced in us by nature so that we can feel pleasure and communicate it unto our souls. Sight indulges in beautiful pictures, hearing in beautiful sounds, smell in pleasant smells and taste in delicious foods; now touch, the most powerful of all senses (*potentissimo*), and on which life and being of all creatures consist, achieves the epitome of its pleasure when touching the most gentle, temperate and soft parts. Lips, breasts, cheeks. But the first virtue of touch resides, like the

the case of the accounts of physicians, early modern poets and thinkers who engage with love, stress the role of tactility as much as they do that of other senses, in particular sight. Just like the eye and the hand were inseparable companions, and their work in tandem a *conditio sine qua non* for the task of early modern anatomist, eyes and lips (and hands, and nose, and ears, and tongue, *et al.*) colaborate in the inebriating ceremony of love as sung by early modern poets, and discussed by philosophers. The early modern obsession with kissing, transmitted mostly through Johannes Secundus's *Basia* and his many many imitators, who range from the founding fathers of poetry in the vernacular, to Goethe has shaped our own ideas of romance and eroticism, as well as the manners in which we represent them in art.

## Basia

Jan Everaerts (better known as Johannes Secundus) shares with Heliodorus and Edgar Allan Poe an extremely rare privilege: he single-handedly invented a literary genre. Many of his immediate and later contemporaries, all of whom were sufficiently versed in the classical and medieval tradition to assert this with enough confidence, recognized his *basia*, or "kisses" ("kiss poems") as a wonderful novelty. One of them, who also happened to be his fellow countryman, Dutch jurist and philosopher Hugo Grotius, once said about him: "Neither Rome nor Greece ever knew a more pure and

most knowledgeable philosophers agree, in the nervous parts (*parti nervose*) and in the nerves themselves. These are the parts that can feel the most pain and the most pleasure. The peak of pleasure is in the genital area which is composed of a myriad very gentle nerves" (Rocco 90-1).

tortured talent (...) And there is nothing more pleasant and beautiful than his *Basia*, a poetic genre he invented and created with all the charm of an Anacreon.<sup>456</sup>

Given that in literature, just like in the Lucretian cosmos, nothing is created ex nihilo, the roots of Johannes Secundus's basia can certainly be traced back to a very old tradition of amatory poetry. Hellenistic poets like Callimachus and Theocritus, and many other lesser known Greek poets whose epigrams where collected in Maximus Planudes's immensely influential Greek Anthology,457 along with Horace, Catullus, Tibullus and Propertius had long before sang snippets of the games lovers play in times of bliss. Johannes Secundus not only knew this tradition thoroughly, but he also had a remarkable command of Latin; so much so that he managed to give it a new poetic vitality at a time when the ineluctable transition to the vernacular was already an ongoing process. Lorenzo Valla's *Elegantiae Linguae Latinae*, a textbook of Latin grammar with a thorough selection of examples taken from classical authors, was published in the midfifteenth century and was greatly influential for Neo-Latin poets.<sup>458</sup> Although poets like Angelo Poliziano, Giovanni Pontano, Jacopo Sannazaro, Michele Marullo, Andrea Navagero, Ercole Strozzi in Italy, and Conrad Celtis in Northern Europe made remarkable contributions to the short-lived tradition, Johannes Secundus was, arguably, the most influential one.

<sup>&</sup>lt;sup>456</sup> Hugo Grotius, *Parallèle des Républiques* apud Guillot 66

<sup>&</sup>lt;sup>457</sup> First published in 1494 by Janus Lascaris, Maximus Planudes's anthology of Greek verse was very popular in the 16th-century. Between 1532-1533 Johannes Secundus studied with Andrea Alciati, who many years earlier had been one of the translator of the *Anthologia Greca*.

<sup>&</sup>lt;sup>458</sup> Endres 16

In the *Carmina* Catullus famously obsesses with the number of kisses he and Lesbia should, would or could exchange. "Give me a thousand kisses (*basia*) and then a hundred, then another thousand, then a second set of a hundred..."<sup>459</sup> Later on, Lesbia also asks the poet how many kisses she could give him before he felt satisfied and even nauseous. Catullus responds: infinite.<sup>460</sup> So too, Propertius insists on the kiss (in this case *osculum*) as an inexhaustible currency of sorts that lovers demand constantly.<sup>461</sup> And he also fixates on what is left on lips after many kisses (*oscula*), as a mark of possession that the lover leaves behind.<sup>462</sup> Ovid watches heartbroken as his beloved exchanges "guilty kisses" (*inproba*... *oscula*)<sup>463</sup> with her new lover, and Tibullus praises the erotic *osculum* as he evokes violent "tongue struggles, moist kisses and biting marks on the neck," enticing stages of the amatory game.<sup>464</sup> Nowhere, however, do we find whole poems dedicated to the kiss, let alone a collection of them. Until early modernity.

Johannes Secundus's most relevant predecessors in the art of writing new love poetry in Latin that both paid homage to the Classics and achieved a new tone more appropriate to the current times, were Giovanni Pontano and Michelle Marullo. Pontano (1426-1503) lived most of his life in Naples where he had a long and succesful career in politics. He started writing poetry in his old age and, as his latest editor says, "his is a

<sup>&</sup>lt;sup>459</sup> Catullus, 5.7-8

<sup>&</sup>lt;sup>460</sup> Catullus, 7

<sup>&</sup>lt;sup>461</sup> Propertius, 2.15.50

<sup>&</sup>lt;sup>462</sup> Propertius, 2.15.10

<sup>&</sup>lt;sup>463</sup> Ovid, 2.5.23

<sup>&</sup>lt;sup>464</sup> Tibullus, 1.8.37-8

world of earthly happiness; his advice applies to life in this world, not the next."<sup>465</sup> Most of his love poetry is set in Baia, an ancient Roman spa and seaside resort on the bay of Pozzuoli, where rich and powerful Neapolitans, accompanied by very sophisticated prostitutes, spent weeks on end engaging in a particularly refined type of debauchery, that for lack of a better term we might just call "humanistic."<sup>466</sup> Unlike the either purely bucolic, or strictly urban settings that Classical love poets chose for their love songs, Pontanus has his exploits among Roman ruins by the sea, a haven of decadence, melancholy, and promiscuity. A more appropriate locus amoenus for an early modern love poet I simply cannot imagine. In one of his poems, Pontanus invites another poet, Iacopo Sannazaro, to Baia where "secret kisses and biting tongues and lips are allowed."467 Baia is the place where one can kiss and be kissed, touch and be touched. Tactile alusions, in particular kisses and bites, are recurrent in Pontano's poetry. In To Hermione, so that she covers her tits the poets asks the courtisan: "Why do you show me your tits? Are you perchance saying 'kiss my tits,/ lick my white chest!'?/ Or maybe 'touch, touch, squeeze'?"<sup>468</sup> Love passion is an almost exclusively tactile experience for Pontano. When passions are ignited, he sings, they produce a burning sensation that runs

<sup>465</sup> Pontano, xvii

<sup>&</sup>lt;sup>466</sup> Apparently Baia had a very long-standing tradition of being a retreat fo libertines. Propertius refers to it, and portrays it as a corrupted mecca of licentious love (Propertius, 1.11).

<sup>&</sup>lt;sup>467</sup> Pontano, 16. Poliziano also refers to the biting kiss in his *Domini Angeli Puella*: "What [should I say of] your lips shining with the red of coral, pressed so often and so long by my biting kiss?" (Nichols 279).

<sup>&</sup>lt;sup>468</sup> Pontano, Ad Hermionem ut papillas contegat (9-10): An vis dicere: 'basia papillas/et pertus nitidum suaviare'?/visnum dicere: 'tange, tange, tracta'?

simultaneously through throat, cheeks, hands, neck, forehead, chest and teeth.<sup>469</sup> It is in the eyes, however, where it all begins.

Eves and sight have indeed great importance for the Neo-Latin poet. In a series of poems to a courtisan named Focilla he warns her about the overwhelming power of her eyes. Amor lives in those eyes, he claims, and from there shoots his harmful arrows.<sup>470</sup> In a later poem the poet accuses Focilla of seriously hurting men with her eyes. Whether her look is shy, sad or lascivious "those eves mean death for the lover."<sup>471</sup> The danger of vision seems to consist in its essential detachment; distance invariably generates ambiguity, looks can be very disconcerting. The lover is consumed by yearning, and devoured by the feeling of uncertainty regarding the real intentions of the beloved. Eves can easily deceive. Touch, on the other hand, cannot. Moreover, the harm produced by wanton eyes can only be healed by soothing kisses. In fact, Amor also lives in lips. In a poem dedicated to the lips of a certain Fannia, the poets says: "If you're looking for Venus and Cupid,/ask for sweet little Fannia's lips;/there Cupid established his seat, there Venus stirs her happy choirs."472 The complex relationship between sight and touch in amatory poetry is a trope that later Neo-Latin, and vernacular poets, explore with particular curiosity. One of my favorite examples is Michael Drayton's sonnet 29, To the Senses (1594), in which the senses are summoned to determine which one holds the key to the lover's heart. The poet goes over four of the senses and stresses how they can fool one's heart to conclude:

<sup>&</sup>lt;sup>469</sup> Pontano, Ad Ariadnam uxorem 71-4

<sup>&</sup>lt;sup>470</sup> Pontano, *De Focillae puellae ocellis*, 1

<sup>&</sup>lt;sup>471</sup> Pontano, Ad Focillam de cohibendis oculis 13-15

<sup>&</sup>lt;sup>472</sup> Pontano, *De Fanniae labellis* 1-2

But then my Touching came to play his part (the King of senses, greater than the rest) he yields Love up the keys unto my heart and tells the other how they should be blest.

Let us now return to the end of the fifteenth century and to another regular guest at Baia who wrote some of the most powerful love poems of the Neo-Latin tradition. Michele Marullo Tarchaniota (1453-1500) was conceived in Constantinople during the Turkish siege, and came to the world in Dalmatia as his parents were fleeing to Italy. Predictably enough, he would have an agitated life marked by drama, war, and many migrations. In 1494 he married Alessandra Scala, the daughter of famous humanist Bartolomeo Scala, over whom he and Angelo Poliziano<sup>473</sup> became bitter rivals. However, the love of his life and addressee of his most remarkable verses is believed to have been a certain Nerea, "daughter and sister of kings,"<sup>474</sup> who died before Marullo married Alessandra.<sup>475</sup> Unlike Pontano's fiery poetry, Marullo's poetic tone has been described as a perfect example of "*hydropyrica*;" in his songs, tears both ignite and quench the fire of lust.

Marullo's attention to the kiss (his preferred word for it is *suaviolum*, a "soft, little kiss") prefigurates Johannes Secundus's in at least two aspects: the kiss is presented as a threshold between life and death, and it is also understood as an epiphanic moment that contains, as if in a nutshell, the whole person of the beloved. When ennumerating terms

<sup>&</sup>lt;sup>473</sup> See Marullo, *Epigrammata* 3.50

<sup>&</sup>lt;sup>474</sup> Marullo, *Epigrammata* 2.48

<sup>&</sup>lt;sup>475</sup> Sers is convinced that Nerea was, actually, Camilla Marzano de Aragón, grand-daughter of Alfonso V of Aragón (Sers 114).

of endearment for Nerea, he calls her "folly of mine (...) my white turtledove, my softness, my heart, my honey, my soft little kiss (*meum suaviolum*)....<sup>3476</sup> The beloved is the kiss, but the synecdoche is more than a poetic flourish; it reveals a deeper meaning: to the lover the moment of the kiss is the ceremony of instantiation of an array of romantic feelings in the lips of the beloved. Moreover, the kiss is also the gateway through which the soul exits and enters bodies. Thus, it is a moment of both life and death. One of Marullo's most famous epigrams reflects this in the story of a stolen kiss:

A soft little kiss I snatched against your will, chaste Nerea,

And imprudently left my soul on your lips,

And was long without life.

When it would not return of its own accord and a delay,

However trifling, would be lethal, I sent my heart to seek my soul.

But my heart too, fascinated by your sweet eyes,

Never after returned to me.

But if I had not with my soft little kiss, chaste Nerea,

Drunk in the flame to sustain me, though lifeless,

That day, believe me, would have been the last for your wretched lover,

That day when I snatched that soft little kiss from you.<sup>477</sup>

The lover leaves his soul behind when he kisses, the soul stays on the beloved's lips. But as he continues kissing, he drinks (this concept will be fundamental in Patrizi's love philosophy) the flame of life that prevents his soulless body from dying. This idea of the

<sup>&</sup>lt;sup>476</sup> Marullo, *Epigrammata* 1.2 (Marullo's poetry is taken from Kidwell).

<sup>&</sup>lt;sup>477</sup> Epigrammata 2.4.

kiss conceived as a liminar space where life and death, sickness and health, meet will prove fundamental in Johannes Secundus and Francesco Patrizi. But also the trope of the eyes as dangerous, deceitful weapons appears often in Marullo's poetry, as it had in Pontano's. Nerea's "sweet eyes" make the poet burn in desire,<sup>478</sup> her look petrifies him<sup>479</sup> and melts him,<sup>480</sup> cruelly murders him,<sup>481</sup> and at the same time keeps him alive.<sup>482</sup> Once again, eyes and looks are associated with the lover's despair, and with the beloved's absolute, almost tyrannical power over him. As it was the case in Pontano, the game of looks is a teasing game, whereas the kiss is an instance of consummation.

Not unlike Pontano, Marullo was also an accomplished scholar who had a profound knowledge of the Classical sources he emulated and re-elaborated in his own poetry. Towards the end of his life he revised and proposed a substantial number of emendations to a new edition of Lucretius's *De rerum natura*. The edition that bears the mark of Marullo's work was published early in the sixteenth century in Florence by Filippo Giunta. By then, Marullo was dead. In April of 1500, as he made his way to Piombino, in the southern coast of Tuscany, to fight the troops of Cesare Borgia, he was riding across the overflooded river Cecina when his horse slipped and fell over him. He drowned. An edition of *De rerum natura* by Lucretius, his "inseparable companion,"<sup>483</sup> was found in his pocket. It has been argued that his most "Lucretian" work were the

<sup>478</sup> Epigrammata 1.13

<sup>&</sup>lt;sup>479</sup> Epigrammata 1.60

<sup>&</sup>lt;sup>480</sup> Epigrammata 2.2

<sup>&</sup>lt;sup>481</sup> Epigrammata 2.12

<sup>&</sup>lt;sup>482</sup> Epigrammata 1.18

<sup>&</sup>lt;sup>483</sup> Croce, vol. 2, 296

*Hymns to Nature*, but in book four of *De rerum natura* Marullo certainly could have found inspiration for his love epigrams.<sup>484</sup>

The description of sexual intercourse in book four of Lucretius's poem is among the most vivid and candid ones literature has ever produced. At the most intimate moment, says Lucretius, lovers, overtaken by erotic frenzy, hesitate on whether to enjoy the beloved's body with the eye first, or with the hand.<sup>485</sup> And then they

press closely the desired object hurting the body, often they set their teeth in their lips and inflict (adfligunt) kisses (oscula) on one another, because the pleasure is not unmixed. And there are secret stings which urge them to hurt that very thing, whatever it might be, from which those germs of frenzy grow. But Venus gives a light break to the suffering amidst their love, and the soothing pleasure intermingled curbs back the bites. For here lies the hope, that the fire may be extinguished from the same body that was the origin of the burning, which is something completely repugnant to nature. And this is the only thing for which the more we have the more fierce burns the heart with fell craving. (...)In love Venus mocks lovers with images, nor can bodies even in real presence satisfy lovers with looking, nor can they rub off something from tender limbs with hands wandering aimless all over the body. Lastly, when clasped body to body they (...) cling greedily close together and join their watering mouths and draw deep breaths pressing teeth on lips; but all is vanity for they can rub nothing off thence, nor can they penetrate and be absorbed body in body, for this they seem sometimes to wish and to strive for, so eagerly do they cling in the couplings of Venus while their limbs slacken and melt under the power of delight.<sup>486</sup>

True to his style, Lucretius depicts in wonderful detail the frenzied yearning of lovers without really explaining the reasons that drive them to try, unsuccessfully, to

<sup>&</sup>lt;sup>484</sup> Goddard (Goddard [1991] 105-8) and then Greenblatt (Greenblatt 226) argue that Marullo's *Hymns* (published in 1497) were clearly inspired by Lucretius.

<sup>&</sup>lt;sup>485</sup> DRN 4.1076-1079

<sup>&</sup>lt;sup>486</sup> DRN 4.1079-1114

penetrate, and possess the beloved. Stimuli subsunt, he says, "there are secret stings" that set lovers in motion. What these stings be, Lucretius does not say. Perhaps he thought that the laws of attraction are, in fact, a mystery, like the swerving of the atoms. Lucretius probably believed that sexual frenzy, just like generation in the natural world, is simply the product of continued collisions and combinations of atoms that are, in fact, random.<sup>487</sup> What is undeniable, what Lucretius cunningly observes and honestly points out is that when they kiss in the heat of passion lovers are driven by a mysterious impulse to penetrate, devour, and hurt each other; and they always stay unsatisfied. The Neo-Latin poets, great admirers of Lucretius, explore these *stimuli* that *subsunt*, as well as the paradoxes of love. Why do we kiss? Why do kisses simultaneously feel like death and resurrection? Pontano tells his beloved that her kisses rejuvenate him. Marullo claims that Nerea's kisses make him experience death and resuscitation. But it is in the poetry of Johannes Secundus where the topic of the kiss and its vicisitudes becomes the center of attention, to the point that the young Dutch poet feels the need to invent a new type of poem, the "kiss," or basium.

Johannes Secundus (1511-1536) did not see any of the two main editions of the *Basia*, since they were both published after his premature death at 24 years-old. The first (pirated) edition of the nineteen poems appeared in 1539, the second one (authorized) was published in Utrecht in 1541. The first critical edition would be Scriverius's, published in Leiden in 1619. According to Roland Guillot, the book was composed in the spring of 1534 during Johannes's stay in Spain where he served as secretary of Cardinal

<sup>&</sup>lt;sup>487</sup> As I argued in chaper one, this is precisely the gap that Fracastoro tries to fill in his treatise on sympathy and antipathy. Before dealing with the essentially tactile and corpuscularian nature of contagion, the Veronese physician needed to establish a proper order that explained what drives things to come in contact with one another.

Archbishop of Toledo, Juan Pardo de Tavera.<sup>488</sup> "It is fair to say that Johannes Secundus is the first poet ever to produce a collection of Kisses, placing it at the same level of odes, or elegies, thus consecrating the *Basium* as a poetic genre."<sup>489</sup> Since a new poetic genre required a new meter, Johannes, almost bragging about his uncanny talent, exhausts all the metric possibilities of the amorous genre using, abusing and combing four different meters. Nine *Basia* (1, 3, 6, 10, 11, 13, 15, 17 and 19) are composed in Propertius's preferred meter, the elegiac distich. In four of them (4, 5, 12, 14) the poet experiments with Catullus's phalecian hendecasyllable. *Basium* 2 is a mixture of dactylic hexameter and iambic dimeter, and tetrameter. The alchaic stanza of *Basium* 9, the asclepiad stanza B of 16, the iambic trimeter of 18, the glyconic/pherecratean stanza of 7, and *Basium* 8's anacreontic verse complete the catalogue of amorous metric possibilities.<sup>490</sup>

Johannes Secundus was very aware that he was creating a new genre. In the little poem dedicated to his *Basia*, he defends his creation against accusations of not being virile enough for singing "kisses" instead of "pricks" (*mentula*).<sup>491</sup> Thus, *Basium* acquires a double meaning: an actual kiss, and a poem about kissing. It is not, however, the only word that Johannes Secundus uses to refer to kisses. In fact, the poet produces an asystematic, but rather sophisticated and comprehensive taxonomy of the kiss throughout the *Basia. Basium* is the most common word, and, it is safe to assume, the basis of all other types of kisses. When the goddess Venus creates the kiss, the word the poet uses is

<sup>&</sup>lt;sup>488</sup> Guillot 13

<sup>489</sup> Guillot 63

<sup>&</sup>lt;sup>490</sup> Guillot 13-14. Secundus's overwhelming metric variety, unheard of in his time, imitates Catullus's poikilia. Like the Roman poet, for each motif Secundus uses a different meter. For more on this see Balsamo and Hallyn's collection of essays on Secundus published in 2000.

<sup>&</sup>lt;sup>491</sup> De libello basiorum (in F.X. Matthews).

*basia. Basia* can be warm, wet, and lingering, they can be cold and brief, they can suck lips or tongue, and they can involve tongue licking or tongues battling. But one also finds the more common *osculum (Basium 2)*, the sweet little kiss, or *suaviolum (Basium 3)*, the more violent, passionate *morsus*, or biting kiss (*Basium 5*), or the tender yet bawdy *basiolum (Basium 9)*.<sup>492</sup> Regardless what the original meaning of these terms was in Classical Latin, in Johannes Secundus they all refer to kisses of love.

But the series of nineteen *Basia* is carefully crafted not only in regards to its metric sophistication, its tacit intertextual references and its detailed taxonomies. Its thematic progression is also meaningful and deliberate taking the reader from the genesis of the kiss to more and more climactic instances of the act of kissing, to end with the same image that had opened the series – the kiss as flower. *Basium* 1 tells the story of how kisses first came to be; it is a mythological poem, and, as such, hard not to compare it with the beginning of Lucretius's *De rerum natura*: the famous praise of Venus who insufflates the will to reproduce in every single living thing, "who alone governs the nature of things."<sup>493</sup> In Johannes Secundus's "kissogony" Venus takes little Ascanius to Cytherea and lies him down to sleep on a bed of violets. As she sees the boy sleeping peacefully she is reminded of Adonis, and overtaken by an inner fire. Afraid of waking up the boy in her excitement, the goddess starts kissing the flowers around him instead and each flower opens up in crimson. "On every rose she touches a fresh kiss blooms

<sup>&</sup>lt;sup>492</sup> In a very comprehensive philological analysis of the three main terms for "kiss" in Classical latin (*osculum, suavium, basium*), Moreau concludes that, even though over time the distinctions between the terms gets blurry, one can safely say that the *osculum* is a ceremonial kiss, or "kiss of protocol," devoid of deep emotion, whereas the other two are kisses of love (Moreau 97).

<sup>&</sup>lt;sup>493</sup> DRN 1.21. In a letter to Didacus Mendoza, a Spanish poet, Secundus refers to the Latin poet as "Floridus Lucretius" (*Epistles*, Book 2, VI.5). One of Johannes Secundus's epigrams (II: "In Petrum quendam") also confirms that he admired Lucretius, as he repeats the image of the atoms hovering lightly in a sunbeam (*per leveis atomi feruntur auras*).

(*quotque rosas tetigit, tot basia nata repente*).<sup>494</sup> Venus's primal kiss is a touch that engenders subsequent kisses. Upon seeing her creation, Venus flies over the dry lands scattering kisses all over the world. Kisses, says the poet, that are "the singular solace of my blackest nights.<sup>495</sup> Kisses are many things for Johannes Secundus; they are inflammatory, they are playful, they are soothing, they are tender, but more importantly, they are remedies for the physical and spiritual malaise of living. Venus's decorous abstention from leading yet another mortal into a premature death is the cause of salvation for many mortals, the poet included. The original kiss, meant for Ascanius but too powerful, perhaps potentially deadly for him, becomes the touch that opens the flowers from where appropriate kisses for humans generate, healing kisses. The poet celebrates this fortunate act of restraint by the goddess proclaiming himself the official bard of kisses, protector of the Latin language of Ascanius and his progeny:

Godspeed to you for all eternity, rulers of my pitiable flame,

moist kisses born of gelid roses!

Lo, I am your bard, I will sing your praises  $(...)^{496}$ 

In *Basium* 19, at the end of the lyrical journey through this new genre, Johannes Secundus goes back to the image of the kiss and the flower; only this time it is not a mythology, but a metaphor. The poet invites bees to taste his mistress's lips instead of flying from flower to flower. "Her breathing is the sum of thyme and roses, and nectar

<sup>&</sup>lt;sup>494</sup> Basium 1.13. Translations of Johannes Secundus are my own, unless accordingly specified. I have use Guillot's Edition. In a song dedicated to violets (*In violas, a Venere mea dono acceptas*) Angelo Poliziano (1454-1494), whom Secundus had most certainly read, says: "Oh lucky violets (...) from you I shall pluck welcome kisses (*grata oscula*), I shall touch you three and four times with an eager hand" (see Nichols 275).

<sup>&</sup>lt;sup>495</sup> Basium 1.20

<sup>&</sup>lt;sup>496</sup> Basium 1.21-23

dripping violets in the spring.<sup>497</sup> If in the mythological beginning flowers became kisses, now the kiss – the one quintessential kiss, the beloved's kiss – has become all the flowers.<sup>498</sup> Roses and violets, the birthplace of the kiss, are now in the lips of the beloved. And the kiss, born from the touch of the lips of a goddess, has now, after becoming a multiplicity and completed the brief and intense poetic journey of the *Basia*, returned to being one; one touch of the beloved's lips, of Johannes Secundus's Venus: Nerea.

One of the most interesting twists that Secundus's *Basia* give to traditional love poetry is that they make the kiss itself the *locus amoenus*. If Pontanus's Baia was the decadent *locus amoenus* where kissing and touching was always permitted, in the *Basia* the kiss itself is the place where lovers go in the paroxysm of their bliss. The mythology of *Basia* 1 illustrates this beautifully. Ascanius lies dormant in a bed of roses and violets that the goddess touches with her lips, making them bloom and exhude kisses, so that the boy ends up sleeping in a bed of kisses. In *Basium* 2 this notion finds its first tangible instantiation when the poet describes the incommensurable bliss of holding and kissing Nerea. Holding each other as tightly as the gravepine holds the elm tree, the poet asks his beloved to be joined to him in a timeless kiss (*iungens perenne basium*), to be dissolved in the kiss (*mutuis in osculis defectos*). This catapults them to "the twilight kingdom of Dis" where they:

...stroll through eternal spring in fragrant fields of asphodel

where mythic women lead their demigods

through the old dance of love,

<sup>497</sup> Basium 19.5-6

<sup>&</sup>lt;sup>498</sup> In *Basium* 4 the poet says that Nerea doesn't give *basia* but "nectar, spices (...) thyme, cinnamon and cloves, plunder of the Honey bees."

or make with them in a valley of green myrtle rhapsodic song where the dappled shade of the laurel grove trembles on violets, roses and flame-haired daffodils and the balmy west winds whisper their deathless murmurings, where the pregnant earth uncut by the ploughshare

yields spontaneous fruit.499

The kiss is the new *locus amoenus*, in this sense it is a place. A place of bliss, a refuge from the dangers of the world. But it is also a time, the moment when two dissolve into one. It is the ecstatic *hic et nunc* of the romantic experience, the crossroads where space and time meet. *Basium* 5 is perhaps the most vivid account of what happens when lovers kiss. First, they hold each other tightly, their faces moist with perspiration, and their lips come together until they are arranged perfectly one on the other (*componens*) in a feast of humid symmetry, interrupted only by occasional playful, and not so playful bites. And then the tongues come in:

### *Et linguam tremulan hinc et inde vibras*

*Et linguam querulam hinc et inde sugis.*<sup>500</sup>

First it is her trembling tongue that vibrates here and there, then it is his plaintive tongue that she sucks on here and there. With the shared moisture comes the exchange of souls.

<sup>&</sup>lt;sup>499</sup> Basium 2.15-20. Translation by F.X, Mathews.

<sup>&</sup>lt;sup>500</sup> Basium 5.7-8. Poliziano's poem to "Master Angelo's Girl" also incluyes a vivid and ardorous reference to the tongue kiss: "[What should I say about] your tongue that entangles me whenever with traded breath coupling a lover to a lover, Venus hurries to the climax, while the kissing with half-opened mouths sucks the sweetly scented breath..." (Nichols 279). One of the most beautiful "tongue-kiss poems" of the period was written by Jacopo Sannazaro: "Nina, I want to hold your tongue inserted within my little wet lips, and suck it, and give it gentle little nips, and the way the little doves do, start in on tender games, and also rouse wet murmuring" (*Ad Ninam*, 10-16). So too, Ercole Strozzi explores the image of the tongue-kiss: "And we've kissed over and over with our tongues so entangled that no space is left for envy to harm us" (*Amica tandem potitos, exultat* 23-24, in Nichols 337).

She blows her "soft wind" into his soul, as she "drinks" (*hauriens*) his "dying, burning soul, cooked in the intemperate vapor, cooked in the heat of an impotent chest." Such experience makes the poet declare *Amor* the greatest of all gods, but not as powerful as Nerea, who is presented as greater than *Amor*: as *Amor* incarnate. And as a goddess, Nerea gives life and takes it away. Every kiss is a ceremony where two souls meet and become one, but also a ceremony of life and death. Here it becomes clear what we suspected since the first *Basium*: the kiss is also a metonymy of sexual intercourse. Nowhere is the relationship between both illustrated more clearly than in *Basium* 13.

The poet rests after a vigorous session of love-making. His mouth is dry and there is "no fresh wind to save [his] heart from dying."<sup>501</sup> The body after sex is dry and stale, much like a corpse – life and moisture go together – the poet can already see the realm of the dead. But suddenly – just like in Marullo's poem, which was also, incidentally, dedicated to a certain Nerea – she draws him back "from the depths of the vale of the dead," and she does so "drenching [his] lips with a (soft) kiss like wind and rain." Moisture brings back life to the poet, but his shadow (*umbra*) inevitably crossed over to the land of the dead, and his body stays alive only thanks to the soul insufflated in him by the kiss. The poem ends with a supplication:

Let our lips couple then, one spirit breathe in both,

Till ripe for death, still yearning for the dreams

Of its impassioned youth, a single life from this twinned body streams.<sup>502</sup>

<sup>&</sup>lt;sup>501</sup> Basium 13.4

<sup>&</sup>lt;sup>502</sup> Basium 13.19-22. In two of his *Elegies* Johannes Secundus repeats the trope of the kiss that takes one's breath away and then gives life. "May it then be permitted for me to hold her with trembling hands and while kissing her breathe out my fleeing soul (*Elegy* 1.3.32-32)." And also: "you're forced forthwith to give

Not just life and death meet in a kiss, but also lives: two lives become one life, and health and sickness. It is believed that Johannes Secundus first fell ill with the fever that would finally kill him during his stay in Toledo, between 1533 and 1534.<sup>503</sup> It was there and then that he met a beautiful *toledana*, Nerea, the "gray-eyed, blonde-haired goddess"<sup>504</sup> that inspired the *Basia*. The poet's illness is relevant not only because it would drive him to a premature death, but also because the *Basia* are distinctively tainted by the poet's fear of death and by the powerful conviction that the precarious and ephemeral nature of love might be a reflection of the precarious and ephemeral nature of life itself. The kiss is the event that more powerfully reveals the intensity and precariousness of life. Therefore, for the poet the kiss is a bringer of death as much as it is a bringer of life. Nerea's kiss sucks the life out of him and simultaneously breathes life into him. This paradox is one of the most recurrent tropes in the *Basia*. In *Basium* 1 the poet calls kisses "the one remedy invented for my afflictions," Basium 4 finds him singing ecstatic: "let me devour your mouth a thousand times and I will become immortal;" and in Basium 10, as he describes the tongue-kiss, the poet says: "to suck your trembling tongue with my plaintive lips, and mix two souls in one mouth, and then when our love languishes to the point of resembling death, to diffuse our pilgrim bodies one into one another."505

The *basium*, however, is not just a instance where sickness and health, life and death, man and woman come together, intermingling their flesh and their vapors, their

me a few kisses, the kind of kiss that can bring a fleeing soul to a halt when no hope of a medical cure remains, that can save from the boat that sails to Styx a poor pale spirit and call it back on to a forbidden route (*Elegy* 1.4.8-12)." *Elegy* 1.5 (87-90) also repeats this same idea.

<sup>&</sup>lt;sup>503</sup> See Epigram XIX

<sup>&</sup>lt;sup>504</sup> Matthews 2

<sup>&</sup>lt;sup>505</sup> Basium 1.20; Basium 4.8-9; Basium 10.10-14

winds and their moisture, until they become almost indistinct. The kiss is also the experience that best evidences the conflict between the visual and the tactile. Lucretius's lovers did not know whether to indulge first in the looking or in the touching,<sup>506</sup> Pontano and Marullo repined the cruel, deceitful nature of sight and privileged touch as the only true means to cosummate love; in *Basia* 7 the poet evokes a full blown war (praelia) between lips and eyes in a tone that is closer to Lucretius's, only less cynical.<sup>507</sup> The problem is not that love cannot give true satisfaction, but that it can satisfy too much and by enjoying the fruits of one sense the lover misses out on the other sense. Nerea's "swollen lips and eloquent eyes" invite the poet both to kiss and to contemplate. But when he kisses he cannot indulge in her contemplation, and vice-versa. Neo-Latin poets are fond of stressing this ineluctable conundrum. For the lover, sight and touch will always be rivals, although they inevitably colaborate in the appreciation and enjoyment of the person of the beloved.<sup>508</sup> The kiss, however, is a purely tactile occurrence. The *Basia* are not concerned with dry, intangible kisses between souls, or with mythological kisses between humans and divinities; they are songs about bodily kisses. Be they moist, smacking, dry, sucking or biting, Johannes Secundus's *Basia* are all real, tangible kisses. The *Basia* are, in this sense, the first systematic poetic exploration of tactility. The Dutch poet knew he was doing something that had never been done at that scale, and that might be why he felt the need to produce a new type of poem.

<sup>506</sup> DRN 4.1076-1079

<sup>&</sup>lt;sup>507</sup> Basium 7.30

<sup>&</sup>lt;sup>508</sup> *Elegy* 2.7 has a wonderful example of the erotic collaboration between touch and sight. The poet is about to have sex with a certain Justina, when an older woman walks in and spoils their moment. He says: "While we exganged wet kisses with intertwined tongues, while our shameless hands flew here and there and our wanton eyes were whirling out of control as we both prepared to proceed to the sweet rites of sex, suddenly and fatefully that bitch Larvia appeared" (*Elegy* 2.7.89-94).

The influence of the *Basia* in European literature runs deep, although it does so mostly through underground channels. The men who "invented" French and English poetry translated, copied, imitated and honored the *Basia*. Some of the most resounding names are Ronsard and Du Bellay in France,<sup>509</sup> and Wyatt and Sidney in England.<sup>510</sup> Two of the most influential lyrical poets of late sixteenth and early seenteenth century Italy, Guarino and Marino,<sup>511</sup> were enormously indebted to Secundus. Even Goethe revered and imitated the Dutch poet in his youth. Kiss poetry also influenced the musical tradition of the madrigal. Dutch composer Cornelis Thymanszoon Padbrué (1592-1670) set the *Basia* to music in the 1631 collection of madrigals *Kusje* (*Kisses*), and Claudio

<sup>&</sup>lt;sup>509</sup> Both Guillot in his edition of Johannes Secundus's *Basia*, and Gooley study in great depth the reception of the *Basia* in 16th century French poetry.

<sup>&</sup>lt;sup>510</sup> In sonnets 74, 77, and 79 to 82 of the series Astrophil and Stella (first published in 1591), Sir Philip Sidney focuses on the kiss, albeit in a less erotic and mundane sense. He calls it "the pretty death, where each in other live" (79) and "O sweet kiss which souls, even souls together ties" (81). The first reference to Secundus in English literature comes in Puttenham's The Art of English Poesie (1589). The Elizabethan critic considers that in love poetry Secundus "surpasses any of the ancient or modern poets (Crane 42)." Thomas Nashe mentions him in "The Praise of the Red Herring," and in Florio's 1603 translation of Montaigne the English reader learns about Montaigne's predilection for the Dutch poet (Montaigne, Vol II, 95). The first English translation of Johannes Secundus's Basia is Thomas Stanley's from 1647. Stanley only translates fourteen out of the nineteen poems, probably considering the missing five too explicit. Other examples of kiss poetry in early modern English literature are Wyatt's Epigram 38, Barnabe Barnes's Madrigals 16 and 17, Thomas Campion's Latin epigram To Mellea, Ben Jonson's Catullian Song to Celia, Christopher Marlowe's Hero and Leander (see 2, 1-3), and of course the arch-famous passage from The Tragedy of Doctor Faustus: "Was this the face that launched a thousand ships and burned the topless towers of Ilium?/Sweet Helen, make me immortal with a kiss. (Stage directions: they kiss)/ Her lips suck forth my soul; see, where it flies!/Come, Helen, come, give me my soul again, (Stage directions: they kiss)/Here will I dwell for heaven is in these lips ... " (Act 5, Scene 1). William Shakespeare's Venus and Adonis (1593) abounds in references to kissing, and it also repeats some of the most famous motifs of Latin and neo-Latin amatory, or osculatory, poetry. The kiss, although it hardly happens, is one of the main protagonists of Shakespeare's epyllion. I plan to explore the connections between Venus and Adonis and the tradition of the *basium* in a future article.

<sup>&</sup>lt;sup>511</sup> Giambattista Marino's *Canzone dei baci* is perhaps one of the most wonderful kiss poems written after the death of Johannes Secundus. It was probably composed some time before 1590 in Naples when the poet was still very young. The poem enjoyed an enormous success and was set to music by Tomaso Pecci (see Mirollo 18). Canto eight of Marino's masterpiece, *L'Adone* (Paris, 1623), tells the story of Venus and Adonis's frolickings in the garden of touch. Kisses are not kisses, Venus says to the young ephebus, they are loquatious means of recyprocated amorous desire (Marino, 8.126.1-2) Love communicates thus. Souls converse thus with voices that only they understand. That red in their lips is blood, and if souls are immersed in blood like wise men say, "dunque qualhor baciando entriamo in giostra, bacia l'anima tua l'anima mia, e mentre tu ribaci, et io ribacio, l'alma mia con la tua copula il bacio" (Marino, 8.128.5-8).

Monteverdi has four pieces entirely dedicated to the kiss in the *Seventh Book of Madrigals* (1619) that bear the clear imprint of Johannes Secundus.<sup>512</sup> The fact that the *Basia* is not as widely read as other poetic masterpieces of early modernity, and of Western literature in general, is a sign –using Greenblatt's words regarding the recovery of Lucretius – "of [its] absortion into the mainstream of modern thought."<sup>513</sup> When sculptors or film directors choose to focus on lovers kissing, we must remember that the first one to do this systematically, deliberately, and with a clear aesthetic vision was Johannes Secundus. And he did not do it without creating some controversy.

Two of Secundus's epigrams that refer to the *Basia* exemplify a bizarre kind of *recusatio*. In *In libellum suum Basiorum* the poet claims his *basia* are chaste (*casta*), simple, pure songs of love for unexperienced lovers. He does so against claims not that his songs are lewd, but quite the contrary, that they are not virile enough. "Spare me, you filthy whores. *Mentula* are not my thing at all."<sup>514</sup> *Mentula* – in this context: "songs about pricks" – are opposed to *basia*. The poet's claim is not prudish, but tasteful. "I sing of harmless kissing (*inermes cano basiationes*)," he says in *Basium* 12, and his ideal reader is his very addressee and muse, Nerea, who is so much more chaste than both horrified prudes and appalled scholars: "she certainly prefers a book without pricks, than a poet without a prick!"<sup>515</sup> In another epigram the poet says he sings of "lascivious

<sup>&</sup>lt;sup>512</sup> They are "Eccomi pronta ai baci," "Vorrei baciarti, o Filli," "Tornate, o cari baci," and "Con che soavità, labbra adorate." In an excelent article Ossi (2004) argues that Marino was Monteverdi's main influence in the "kiss madrigals." Be this as it may, Marino was in turn greatly influenced by Johannes Secundus, as his *Canzone dei baci* and *L'Adone* attest.

<sup>&</sup>lt;sup>513</sup> Greenblatt 262

<sup>&</sup>lt;sup>514</sup> Epigram XXIV, 6

<sup>&</sup>lt;sup>515</sup> Basium 12.8 and 14-15

kisses" not of kingly deeds, and he confesses that his verses are inspired by "wet kisses (...) and a throbbing prick;" this poem is directed at "scholars" (*grammaticos*), the poet wants them to stay away from his *Basia*. As he introduces this new genre, Johannes Secundus is telling the reader: if you are looking for base pornography you will not find it here, if you are looking for elevated topics you have come to the wrong place. His songs deal with a phenomenon as ordinary and mundane, yet as mobilizing, inspiring, overwhelming and beautiful as the kiss. In order to appreciate the importance of Johannes Secundus's vindication of physical love and of that most privileged form of touch, the kiss, it is necessary first to take a look at the most popular and influential writings on love in the context of which the Dutch poet composed the *Basia*.

### **Diotima versus the Androgyne**

When in the early 1640's William Cartwright wrote his famous poem "No Platonic Love" he was expressing a very baroque annoyance with a notion according to which true love only happens between disembodied souls.<sup>516</sup> This annoyance, however, was not a novelty. As a matter of fact, since very early on in the history of the return of Plato's dialogues to the West, their translation into Latin, and their vast diffusion, there had been writers who opposed this idea, not as a way of arguing against Plato, but as a way of contesting the most accepted interpretation of Plato's love philosophy. In the writings of many "love philosophers" of the early and mid-16th century there is a clear revaluation of the role of the lower sensorium in love matters, and in many cases this can

<sup>&</sup>lt;sup>516</sup> "Tell me no more of minds embracing minds / and hearts exchanged for hearts;/ that spirits spirits meet, as winds do winds/ and mix their subtlest parts/ that two unbodied essence may kiss/ and then, like angels, twist and feel one bliss.... The body is the way" (Maclean 286).

and should be seen partly as a reaction against a cannonical exegesis of Plato's love philosophy. The main responsibles for this "orthodox" interpretation of Plato, in particular of the *Symposium* and the *Phaedrus*, were Marsilio Ficino, Pietro Bembo, and Baldassare Castiglione. In the same way that the poetry of Pontano, Marullo, Aretino, and Johannes Secundus, with its emphasis on physical contact constitutes a veiled response to the dominant views of these interpreters of Plato, the writings on love by Flaminio Nobili and Francesco Patrizi are among the most exemplary stands the sixteenth-century ever produced against the established reading of Plato. I will argue that the main difference between Ficino and the tradition he initiated – deeply steeped in Neoplatonic roots – and Patrizi's Platonic love philosophy is that whereas the former makes Diotima's speech the key to understanding *éros*, the latter centers the problem around Aristophanes's speech, the famous mythical account of the origins of human love.<sup>517</sup>

As Hankins points out in his monumental study of Plato's reception in Renaissance Italy, "the period from Petrarch to Ficino was in fact an epoch when the philosophy of Plato was valued and studied more<sup>518</sup> than at any time since Justinian closed the Athenian Academy in A.D. 529."<sup>519</sup> Marsilio Ficino was largely responsible

<sup>&</sup>lt;sup>517</sup> According to Aristophanes's character in Plato's *Symposium* humans used to be spherical portly creatures with four legs and four arms, and there used to be three, not two, genders: masculine, feminine, and androgynous. As they defied the Gods, Zeus decided to diminish their power by cutting them in half. Ever since they all look for their other half. This explains heterosexuality, and both male and female homosexuality. It also explains, argues Aristophanes, that the biggest dream lovers have is to be molten together, made one with their better halves (see *Symposium* 189c-193e). Many centuries later Freud would joke around and say: "*Liebe ist Heimweh*."

<sup>&</sup>lt;sup>518</sup> Here Hankins surely omitted "in the West," since Byzantine scholars and intellectuals never ceased to study Plato, and even produced two major names in Platonic Studies: Michael Psellos in the 11th century, and Gemistius Pletho in the 15th century.

for this "Platonic fever" when in 1484, with the support of the Medici family, he published the first Latin translation of Plato's complete dialogues. Twelve years later, he would complete his work with a collection of commentaries on several dialogues. The commentary on the Symposium, known as De amore, was written earlier, however, in 1469, and translated into Italian by Ficino himself in 1474. It is a commentary unlike all his other commentaries of Plato, since it only deals with six passages of the dialogue. Ficino's De amore is a dialogue on the nature of love modeled in the Symposium. The purpose for its composition, in Ficino's own words, was "to summon the lost lovers of earthly beauty to return to the love of immortal beauty."520 Indeed, as much as the distinction bewteen an earthly kind of love, that sustains reproduction among individuals, and a heavenly kind of love, the one human beings *should* ultimately aspire to, is present in Plato himself, and more explicitly in Plotinus and Proclus – authors that Ficino not only knew extremely well, but also translated - it would not be unfair to make Ficino almost single-handedly responsible for the diffusion of this dichotomy which percolated into the culture of the sixteenth-century, and beyond, with astonishing velocity and vigor. The divulgation and impact that Ficino's treatise had in Italy, France, Spain, England and other European countries between its publication and the mid-seventeenth century is attested by its numerous editions, translations, and by the astonishing number of *trattati d'amore* that imitate it, adhere to its principles, paraphrase it and evoke it.<sup>521</sup>

Ficino's *De amore* tries to be faithful to Plato's philosophy and the Platonic tradition in many ways, one of which is its ocularcentrism. Early on in the dialogue

<sup>&</sup>lt;sup>520</sup> Jayne 1. Jayne argues that "Ficino was responsable for shifting the emphasis in treatises on love from an Aristotelian emphasis on the physiology and psychology of love to a Platonic emphasis on love as Desire for ideal beauty" (Jayne 3).

<sup>&</sup>lt;sup>521</sup> See Jayne, 19-23.

Cavalcanti, the first speaker, says that love is love of beauty, and beauty is three-fold: "of souls, of bodies and of sounds. That of souls is known through the intellect, that of bodies through the eyes, that of sounds through the ears, or che gli fa bisogno di odorare, di gustare o di toccare (so what is the point of smelling, tasting and touching?)?"522 The lower sensoria have no role whatsoever in the appreciation of beauty and, thus, in the mechanism of love. The lower senses are not vehicles for love, but for "appetite" (appetito), "libido" and "frenzy."<sup>523</sup> For this reason the appetite for sexual intercourse and love not only are not of the same kind, "they are contraries."<sup>524</sup> Even more vehemently than Plato in the Symposium, Ficino appreciates physical attraction only as a manifestation of the desire hidden in every soul to ascend to God. And even as such, sight is its only acceptable vehicle: "The desire to touch is not a part of love, but rather a kind of lust or perturbation of the servile man."<sup>525</sup> Therefore, it need not surprise us, as Perella points out, that Ficino does not deal with the kiss in this work: "in [Ficino]s love philosophy there is simply no room for carnal contact of any kind, and least of all for the sense of touch."526

Faithful though it may be to the Platonic stress on the analogy eye-soul, Ficino's *De amore* is the testimony of a tremendously homogenous conversation, or succession of monologues. The genius of Plato's *Symposium*, and perhaps one of the main reasons for

<sup>&</sup>lt;sup>522</sup> Ficino 25

<sup>&</sup>lt;sup>523</sup> "Thus the pleasures of taste and touch (...) love not only does not desire, but hates and shuns as things which because of their intemperante are contrary to beauty," concluyes Cavalcanti (Ficino 25).

<sup>&</sup>lt;sup>524</sup> Ficino 25

<sup>&</sup>lt;sup>525</sup> Ficino 44-45

<sup>&</sup>lt;sup>526</sup> Perella 164

the relevance it still has today, resides both in the diversity of views and positions on love that it brings together, and in the plethora of exegetic approaches it invites. All of the interlocutors in *De amore* agree with the basic distinction between earthly, depraved appetite and spiritual, anabatic love. The tone is monochord, and in a way all the speakers are Diotima. The clearest example comes with Cristoforo Landino's exegesis of Aristophanes's speech. According to Landino, when Aristophanes refers to "man" being cut in half on account of his hybris he is referring alegorically to "souls."<sup>527</sup> As a careful student and translator of Plotinus, Porphyry, and Proclus, Ficino knew the artifices of Neoplatonic allegorical hermeneutics like the back of his hand, and he uses them to homegeneate Plato's *Symposium* making love a purely spiritual matter, and tactility a vicious obstacle to it.

Only a few years after the death of Ficino, in 1505, the Aldine press published Pietro Bembo's *Gli Asolani*, probably the first dialogue on love in the vernacular, which bears the mark of Ficino's rendition of Plato's love philosophy. The work comprises three dialogues, and proceeds in a dialectical progression starting with Perottino's hiperbolic love complaints in book one. The disappointed lover is convinced that love and bitterness are one and the same thing, as he abuses the resemblance of both words in Italian (*amore-amaro*).<sup>528</sup> In book two, Gismondo argues fanatically in favor of love, and strives to prove "*la bontà d'Amore*"<sup>529</sup> which is "infinitely flawless."<sup>530</sup> The two paroxysmal positions are toned down, reconciled and surpassed by Lavinello's theory of

<sup>527</sup> Ficino 60

<sup>&</sup>lt;sup>528</sup> Amare senza amaritudine non si può, né altro è amaritudine che amore. (Bembo, 1.viii.35-36).

<sup>&</sup>lt;sup>529</sup> Bembo 2.iii.16

<sup>&</sup>lt;sup>530</sup> Bembo 2.xix.5

"Platonic love" in book three, which is where the influence of Ficino appears with most clarity. Here, Bembo, through Lavinello, negotiates between Perottino's pessimism and Gismondo's optimism by establishing that love inspired by the eyes, the ears and the intellect is good, whereas love inspired by "the other senses" is "evil," and the invariable source of bitterness, suffering and all the ailments that Perottino enumerated in his diatribe.<sup>531</sup> The *Asolani* thus adhere to the drastic Ficinian distinction between love (true, spiritual, enhancing and good) and appetite (false, earthly, destructive and evil), based on a staunch anti-tactility. But Bembo's love philosophy enjoyed popularity in its afterlife not precisely through this work, but thanks to another *trattato d'amore* where he appears as a character of the Lavinello-type, and lectures his interlocutors on Platonic love philosophy with eloquence and vigor. I am referring to Baldassare Castiglione's *Libro del Cortegiano*, first published in 1528, once again by the Aldine press.

The book, inspired by nostalgia and yearning for the good old years when courtiers conversed about love, listened to music, and just relaxed and "hung out" (*nugor*) in courts all over Europe, knowledgeable of true decorum and behaving with methodic *sprezzatura*,<sup>532</sup> appeared barely a year after the troops of Charles V sacked Rome in one of the bloodiest most monumentally infamous episodes in early modern history. Its success was instantaneous not only in Italy but all over Europe, and it became one of the first bestsellers in history, if not the first. The action is set towards the beginning of the sixteenth century at Urbino when Guidobaldo da Montefeltro was Duke and head of one of the most refined courts of all Europe. It is in book four where

<sup>&</sup>lt;sup>531</sup> Bembo 3.vi.47-52

<sup>&</sup>lt;sup>532</sup> Castiglione 1.26

Castiglione develops his love philosophy through the mouth of Pietro Bembo. The true courtier, says Bembo - hinting at Perottino's speech in *Gli Asolani* - seeks those loves that are sweet without being bitter (quegli amori che sono dolci senza amaritudine).<sup>533</sup> In doing so, he is moved by the desire to contemplate true beauty; and true beauty comes from above, from God.<sup>534</sup> Pleasure that comes from the enjoyment produced by bodily senses is "false and mendacious," since the body is not an end it itself, but just a mere springboard to the spirit.<sup>535</sup> Castiglione, well aligned with Ficino and Bembo, opposes love and appetite making the one source of happiness and the other one, bringer of profound dissatisfaction, frustration and misery. And the cause of appetite is, of course, *il* senso, which is especially strong and overpowering during youth.<sup>536</sup> Our souls must prevail, exhorts Bembo: "Beauty is the true trophy of the soul's victory, when it defeats matter with its divine virtue and with its light overcomes the shadows of the body."537 He thus advocates for a "rational love," compatible with the tender holding of hands, and even with a chaste kiss. Kissing is a particularly delicate matter since it can easily be corrupted for "as it is the union of body and soul" the lascivious lover will most likely focus on the distracting sensitive pleasure, and end up misled about what is the end and what are the means; rational lovers, on the other hand, enjoy kissing not because of the

<sup>535</sup> Ibid

<sup>536</sup> Castiglione 4.53

<sup>&</sup>lt;sup>533</sup> Castiglione 4.50

<sup>&</sup>lt;sup>534</sup> Castiglione 4.52

<sup>&</sup>lt;sup>537</sup> Castiglione 4.59. Interestingly, when Bembo concludes his inspired speech, remaining in a state of trance ("frozen, with his eyes to the sky") not unlike that of Socrates at the beginning of the *Symposium*, Mrs. Emilia grabs him by his robe and shakes him saying: "Beware, Mr. Pietro, lest with such thoughts your soul doesn't flee your body" (Castiglione 4.71). Thus Castiglione, almost tongue in cheek, seems to be admitting that touch is what keeps us grounded to the world, whereas sight and thought tend to indulge in ephemeral chimeras.

bodily pleasure it produces but because they know that their souls are meeting through their mouths and becoming one.<sup>538</sup>

In the early sixteenth century, however, things started to change, and just like the neo-Latin poets took it upon themselves to vindicate physical contact, making it along with the other senses, especially sight, the privileged means of love, certain writers on love matters defied Ficinian anti-tactile love. The genre preferred by love-philosophers to deal with the complex issue of spiritual versus physical love was, of course, the dialogue. Russell convincingly argues that "the dialogue was a genre most apt to negotiate this conflict, for it proposed as worthy of investigation many possible solutions, thus minimizing the contrast between irrenconciliable positions."<sup>539</sup> Perhaps the first example of this kind of work, which was quite popular in the period, is Mario Equicola's encyclopedic Book on the Nature of Love -- published in 1525, but begun in 1495 -- where it is argued that true lovers love both body and soul.<sup>540</sup> Other prominent examples are Agostino Nifo's De pulchro et amore (1531), in which it is said that sexual desire, as the ultimate form of bodily pleasure, is a conditio sine qua non for human love, which is based on the pursuit of different kinds of pleasure.<sup>541</sup> More influential, perhaps, were Leone Ebreo's *Dialoghi d'amore* – published in 1535 but written almost four decades before - which constitute a bridge between Ficino and new ideas that revalued the lower sensoria. Towards the end of the first dialogue Philo, the lover, explains to Sophia, the

<sup>538</sup> Castiglione 4.64

<sup>&</sup>lt;sup>539</sup> D'Aragona 28

<sup>&</sup>lt;sup>540</sup> Equicola 298. Equicola believes, as Patrizi will argue later, that all forms of affection stem from self-love and the particular needs of each individual for their own well being (Robb 188).

<sup>&</sup>lt;sup>541</sup> Nifo 18 and 38. Nifo's "peripatetic" treatise on love is perhaps the first clear attack on Ficino and his followers in love matters.
beloved, that the two "vital" senses, touch and taste (needed for reproduction and nourish), are "naturally limited", in the sense that they can be easily satiated, whereas the higher senses are insatiable and aways ready for delight.<sup>542</sup> But this only means that compulsive sexual intercourse is ultimately sickening; honest love actually dignifies sex, transforming it into a key feature of any loving bond on this earth. When the bodies of the lovers strive to become one they are imitating the union of their souls: sensitive and spiritual love must go together. Whereas Castiglione exceptionally admitted the kiss only as a symbolic ceremony of spirituality, Ebreo, although still observing the classical hierarchy of the senses, stresses the crucial role of touch as the means of reproduction, and as a necessary counterpart of the spiritual connection between lovers. So too, Sperone Speroni's *Dialogo d'amore* (1542) includes a vivid description of erotic passion in terms -reminiscent of Lucretius - of a never-ending struggle between the senses to enjoy the beloved,<sup>543</sup> and the also Lucretian notion that passion inebriates lovers and fills them with the desire to touch, a desire as fleeting as impossible to fully satisfy. Love between humans, Speroni concludes, is imperfect and subject to excesses due to the powerful protagonism of the senses; however, it is also the only one we can truly experience, and we must do so exercising measure rather than zealous asceticism.<sup>544</sup> Finally, the *Dialogo dell'infinità d'amore* (1547) by Tullia d'Aragona follows Leone Ebreo rather closely, and defines honest love as that reasonable type of love that consists in the transformation of oneself into the beloved, which can only happen on a spiritual

<sup>&</sup>lt;sup>542</sup> Ebreo 1.3

<sup>&</sup>lt;sup>543</sup> "Where does it come from among lovers the need to bite one another, the heart beating as if it wanted to pop out of the chest, words interrupted by kisses (...) the sudden need to stop touching and contemplate the beloved, only to feel the yearning to embrace and squeeze them once again?" (Speroni 106)

<sup>544</sup> Speroni 153-160

plane. This leads D'Aragona to conclude that the senses that play a relevant role in it are the "spiritual senses," ie. sight and hearing.<sup>545</sup> It is natural for lovers to strive for a carnal union as well, but such a union, as Lucretius exemplary illustrated, is impossible. Just like Ebreo and Speroni before her, d'Aragona struggles to redeem sexual intercourse, mostly by admitting its necessary role in procreation and its presence in all living beings, but makes a strong appeal for the taming of passions.<sup>546</sup>

From Ficino onwards, the love-treatise tradition in Italy was constrained by a stronger and stronger pressure to deal with the issue of human love, the kind of love that inevitably engages the five senses; and the lower senses, ie. touch and taste, were those that most challenged the notion of honest love. With Ficino, Bembo, Castiglione on one side, and Equicola, Nifo, Ebreo on the other, the biggest point of disagreement becomes the possibility, or impossibility, of redeeming the lower senses. Still, in many ways, the discussions around the role of the senses can be read as exegetic variations based on Diotima's speech in the *Symposium*. The first important twist to the matter comes in 1556 from a very close friend of Torquato Tasso, twenty-three year-old Tuscan intellectual Flaminio Nobili in the *Trattato dell'amore humano*. The treatise – more famous today because Tasso's annotated copy has survived – was eventually published in Lucca in 1567. From its very definition of "human love" one can appreciate the abyss that separates it from Ficino. Love, says Nobili, is "a vigorous bending of our appetite and our will inspired by a known beauty, that suddenly becomes a desire to generate something

<sup>&</sup>lt;sup>545</sup> D'Aragona 90

<sup>546</sup> D'Aragona 94

beautiful, or to gain the favor of the beloved."<sup>547</sup> Will, sensitive appetite and the desire to generate are all instances of the phenomenon known as love. And there is nothing reprehensible about physical contact, continues Nobili

as one can see in the natural instinct to touch and embrace our children, our siblings, our friends. This is why, according to Plato, Aristophanes is certain that lovers are keen on finding a certain Vulcan who might melt them together with their beloved so that from two they can become one. And also Lucretius when talking about love says that the lover would like to penetrate the body of the beloved with his whole body. I see that these superstitious men who wrote about love approve of the kiss, which, in the end, is also a merger of bodies (...); such a merger is compatible with human love as long as it is reasonable and honest, it does not go against any laws, and it is ruled by temperance.<sup>548</sup>

The kiss, as well as the yearning to weld human bodies together is not a means to ascend on the road of spirituality, it is not a symbol of the merger of souls; it is a "natural instinct," and it is innocent, since even children kiss and desire to touch. Nobili's caveat, his call for a "reasonable, honest, temperate and law-abidding" love, has nothing to do with Castiglione's shy and shameful admission of the kiss. Although in both cases the authors consider honest a love that has been purified by wedlock, in Castiglione's case the kiss and the touch are still means to a spiritual end, whereas in Nobili they are an end in itself, the satisfaction of a natural instinct. On the other hand, Nobili's novelty in respect with love philosophers who admitted the lower senses as instinctive and, therefore, natural, is that he directly relates this to Aristophanes's speech, without reading it allegorically as Ficino had done. The union of the lovers is *essentially* psychosomatic.

<sup>&</sup>lt;sup>547</sup> Nobili 31

<sup>&</sup>lt;sup>548</sup> Nobili 23-24

Thus, Flaminio Nobili prepares the ground for one of the most original and least read love treatises of the sixteenth-century: Francesco Patrizi's *L'amorosa filosofia*.

Francesco Patrizi (1529-1597), born on the island of Cherso off the coast of Dalmatia, was, in the words of Vasoli, a new "*uomo di cultura*."<sup>549</sup> Although formed at the University of Padua – where he studied medicine and philosophy – Patrizi soon defected from Academia to become an independent, migrating scholar. A Utopian, a historian, a sailor, a philologist, a mercenary, a manuscript dealer, a literary critic and a natural philosopher, Patrizi is better known today for having been one of the most vocal and vitriolic critics of Aristotelism in the sixteenth century, as well as the first person ever to be appointed Professor of Platonic Philosophy –first at the University of Ferrara (1577), later at La Sapienza, in Rome (1592).<sup>550</sup> *L'amorosa filosofia* was written some time between 1577 and 1578. It has been preserved in one codex, handwritten and incomplete – we only have four of the dialogues. The structure is that of Plato's *Symposium* and Ficino's *De amore:* there is a banquet, there is a posse of luminaries, and they all take turns to praise *éros*. Only in this case *éros* is actually present, sitting there

<sup>&</sup>lt;sup>549</sup> Vasoli 9

<sup>&</sup>lt;sup>550</sup> In his study on the Italian Universities in the Renaissance Paul Grendler comments on Patrizi's appointments. When he return from a sojourn in Spain in 1576-7 Patrizi stopped at Modena where he met Alfonso II Este, Duke of Ferrara. It was there that he re-encountered Antonio Montecatini, who taught natural philosophy at the university of Ferrara. Grendler continues saying that, "in 1577 Patrizi was appointed ordinary professor of Platonic philosophy at Ferrara (*Ad lecturam philosophiae Platonicae*), the first such position in a European university. In 1592 he was invited by Cardinal Ippolito Aldobrandini, as he became Pope Clement VIII, to teach Platonic philosophy at the University of Rome. He received a four-year contract and the highest salary that the university paid (600 *scudi per annum*)" (Grendler303-304). One of his better known works are the *Discussiones Peripateticae* in which Patrizi meticulously dissects Aristotelianism, and attacks the monolithic structure of Academic thought, modeled upon Aristotelian principles, as he defends a *prisca filosofia*, passed on from the Persians, to the Chaldeans and the Egyptians, and onto the Greeks (Vasoli 150).

among the guests, and for the whole duration of the first, and longest, dialogue does not say a word. In Patrizi's rendition of the *Symposium*, *éros* is Lady Tarquinia Molza.

Tarquinia Molza was a poet, a singer and a philosopher who lived in Modena at the time when Patrizi wrote his work. Even though she plays a role in Torquato Tasso's dialogue on love, which is named after her (La Molza overo del amore, 1583), as well as in Annibale Romei's Discorsi (1585), where also Patrizi is one of the characters, most of what we know of her life comes from L'amorosa filosofia. In the pages of the first, and longest of the four remaining dialogues we learn that Tarquinia had complete mastery of Latin – she understood Tibullus and Catullus better than anyone  $-^{551}$  and Greek –which she learned in only three months, reading the *Phaedrus* under the tutelage of none other than Patrizi.<sup>552</sup> She was the best soprano of her time, she wrote sonnets and madrigals, played the viola and the basso, she was witty, ingenious, and just plain brilliant at thirtythree.<sup>553</sup> Tarquinia Molza's eyes were neither blue nor black, mixed perfectly in color; they were big, happy, radiant, luminous eyes filled with vivacious spirits, and they were humid, almost lacrimous: the most beautiful eyes one has ever seen.<sup>554</sup> Her neck was white and smooth like snow, no veins or muscles to be seen,<sup>555</sup> and her lips were pure honey and ambrosia.<sup>556</sup> Contemplating Tarquinia, says one of the guests, is coming a step

<sup>&</sup>lt;sup>551</sup> L'amorosa filosofia, 13-14

<sup>&</sup>lt;sup>552</sup> *L'amorosa filosofia*, 25. Four letters from Patrizi to Molza, dated in 1577 and 1578 and dealing mostly with astronomy, have been preserved and published by Aguzzi Barbagli in 1975.

<sup>&</sup>lt;sup>553</sup> *L'amorosa filosofia*, 22-23. From Molza's production we have about thirty poems in Italian, mostly madrigals, six compositions in Latin and a Greek distich (Cavallari 130).

<sup>&</sup>lt;sup>554</sup> L'amorosa filosofia, 30

<sup>&</sup>lt;sup>555</sup> L'amorosa filosofia, 28

<sup>&</sup>lt;sup>556</sup> L'amorosa filosofia, 69

closer to God.<sup>557</sup> Every gesture, every movement, every action, every laugh, every word, every wink of her eyes is an explosion formed by all the Minervas, all the Venuses, all the Graces, all the Muses, and all the Loves in infinite space.<sup>558</sup> But the most unique characteristic of Tarquinia Molza was something else. Something that Monsignor Quarengo, a friend of Patrizi who introduces the speeches, notices in the very beginning of the long polyphonic eulogy. Tarquinia's beauty is somewhat "contradictory" (*di effetti contrari*). Mysteriously, no painters – more than ten tried in vain – were ever capable of properly representing her features on the canvas. Finding Tarquinia something of a "marvel," an overwhelming oddity, none of them knew where to start the portrait – a portrait has to start somewhere – because of that "strange mixture" of Lady Molza. "What mixture?" asks someone, to which Quarengo replies:

They say that Lady Tarquinia's beauty consists of *a very subtle mixture of female and male*; two elements that are perfectly mixed together in her, so much so that it is impossible to distinguish one from the other. And they can both appear anywhere in ineffable and incomprehensible ways. Patrizi agrees with this assessment, and he is certain that this ineffable and incomprehensible aspect comes from somewhere else (...) from a deity that hides in that face.<sup>559</sup>

With her androgynous beauty and her superior intellect and sensibility, Lady Molza is there to teach these intellectuals about love matters. After all, Patrizi himself says that, as they read the *Phaedrus* together, he learned all he knows about love "like Socrates

<sup>&</sup>lt;sup>557</sup> L'amorosa filosofia, 32

<sup>&</sup>lt;sup>558</sup> *L'amorosa filosofia*, 70. Nelson has rightly pointed out that the descriptions of Mrs. Molza bear the imprint of Platonic and Petrarchan language, as well as the influence of the *stilnovisti* poets, and of Angelo Poliziano's verses (Nelson 94).

<sup>&</sup>lt;sup>559</sup> L'amorosa filosofia, 6

learned it from Diotima.<sup>560</sup> The comparison should nos mislead us.<sup>561</sup> Tarquinia's only resemblance to Diotima has to do with the fact that she introduced a philosopher – Patrizi – to the mysteries of love. But Tarquinia's ideas about love have nothing to do with Diotima's. Tarquinia Molza's love philosophy can be read as a philosophical exegesis of Aristophanes's speech in the *Symposium*, and it is first laid out in the second dialogue of *L'amorosa filosofia*.

When Tarquinia finally takes the stand she begins by conducting a careful dissection of the phenomenon known as "love" (*amore*). There are many different kinds of love, she says; there is benevolence, charity, friendship, predilection, affection, inclination, there is also hunger, avidity, will, concupiscence, there is desire and yearning, there is appetite, there is lust, and there is wish. Deep down, however, they all are instances of one phenomenon: love; and love can either be love of oneself, or love of something or someone else.<sup>562</sup> Tarquinia's conclusion is that, actually, all of these different kinds of love and, therefore, love itself begins in oneself, and for oneself.<sup>563</sup> All love is *philautía*. Both Nelson and Vasoli stress the surprisingly un-Platonic flavor that this argument has. Vasoli sees Patrizi's *philautía* as a dismantlement of traditional Platonic Renaissance love-philosophy.<sup>564</sup> Nelson stresses the complete elimination of all hierarchy-based arguments in Tarquinia's views on love, and points out that the focus on

<sup>&</sup>lt;sup>560</sup> L'amorosa filosofia, 25

<sup>&</sup>lt;sup>561</sup> Later, in the fourth dialogue Patrizi refers to Tarquinia as "Diotima mia" (*L'amorosa filosofia*, 134). In one of the very few articles on the text, Nelson takes for granted the analogy "Tarquinia-Diotima; Patrizi-Socrates" without pointing out the gigantic differences between Tarquinia's and Diotima's views on love (Nelson 99).

<sup>&</sup>lt;sup>562</sup> L'amorosa filosofia, 88

<sup>&</sup>lt;sup>563</sup> L'amorosa filosofia, 92

<sup>564</sup> Vasoli 419

*philautía* is not only a subversion of Ficinian Platonism, but also of Christian values.<sup>565</sup> But before assessing these judgments, let us listen to the Lady herself.

Dialogue three of *L'amorosa filosofia* is dedicated to Tarquinia Molza's discourse on *philautía*.<sup>566</sup> Love for oneself, she argues, is the beginning of every single feeling of affection in every living being. In other words: the affective *intentio* is always the product of a feeling of affection for oneself that ricochets within ourselves and goes out into the world. Before she can even be accused of heterodoxy, Tarquinia adds that God's love, which lies at the basis of creation, is originally a form of *philautía* simply because before the creation of the world there was nothing outside of God at which He could direct His love.<sup>567</sup> So too, charity, the purely altruistic love for our neighbor, as it is a way to serve God and come closer to Him, it is done for our own sake, says Tarquinia.<sup>568</sup> If for no better reason, this is clear because of the Platonic principle that establishes that "it is not granted to what is impure to touch what is pure" (toccare il puro non lece con lo *impuro*).<sup>569</sup> If our goal is to become one with God, Tarquinia clarifies – and in order for two things to become one they have to touch - we must become pure before we even aspire to touch God. Not being charitable makes us impure. If the highest form of love is the love of God, which makes us want to become one with God, and every kind of love

<sup>565</sup> Nelson 101

<sup>&</sup>lt;sup>566</sup> The notion of *philautía* was first elaborated by Aristotle in the *Nichomachean Ethics* (9.8.1) as a crucial feature of the *spoudaios*. Against popular notions of self-love as selfish and callous, an honest must must necessary love himself first in order to love others. In the *Praise of Folly* (22) Erasmus also tackles the concept, making Folly praise Philautía as a fundamental mean for happiness. More relevant to Patrizi's work, in Mario Equicola's *Libro di natura d'amore* there is a long digression on the virtues of self-love (Equicola 77).

<sup>&</sup>lt;sup>567</sup> L'amorosa filosofia, 110

<sup>&</sup>lt;sup>568</sup> L'amorosa filosofia, 115

<sup>&</sup>lt;sup>569</sup> Ibid

stems from the love we have for ourselves, both at the very beginning and at the end love is a unity, a unity that is the product of the most intimate touch. As we become pure we can aspire to touch God and become one with Him, in order to perpetuate the species – yet another clear instance of self-love – lovers strive to physically become one with one another, but what about *philautía*? What sort of touch, if any, is involved in self-love?

At this point Aristophanes's bizarre myth comes back as the missing piece of the puzzle. After being sliced by Zeus the severed human beings go through life looking for their long-lost other half to physically attach themselves to it. The intensity of éros, in Aristophanes's speech, comes from a nostalgic yearning to go back to what we once were; éros is, thus, the expression of philautía, and has one and only one possible goal and eventual outcome: the most intimate physical contact. Tarquinia Molza's views on love are a tacit commentary on the myth of the severed halves. Therefore, L'amorosa filosofia is not a surprisingly un-Platonic work by a self-proclaimed Platonist; it is, instead, a heterodox approach to the *Symposium* that goes against the trend set by Ficino, Bembo, Castiglione, and Ebreo.<sup>570</sup> All kinds of love come not from a yearning to ascend and be united with God and true beauty, but from a primal feeling of self-love, and from an overpowering need for physical contact. Even divine love is described in tactile terms when Molza claims that our ultimate goal is to touch God! And who better to illustrate all this than Tarquinia Molza, "whose beauty consists of a very subtle mixture of female and male"? As the instantiation of the Aristophanic androgyne, the degree zero of all heterosexual love, there is no one better equipped and better qualified to teach lovematters than Lady Tarquinia Molza.

<sup>&</sup>lt;sup>570</sup> In *Gli Asolani* Pietro Bembo does refer to the myth of the hermaphrodite in the *Symposium*, but follows Ficino's allegorical-spiritual reading of it (Bembo, 2.iii.1).

In *The Metaphor of the Kiss in Renaissance Poetry*, Ruth Gooley notes that "in exchanging a kiss lovers mix their breath and their souls (...) in addition, like the androgyne, the mouth is a bisexual image that contains in itself the transcendence of dualism, (...) formed in the perfection of the round figure, the mouth is circular and female when open; closed, it makes a line in whose center the phallic tongue is visible."<sup>571</sup> The image of the lovers of flesh and blood glued together in a kiss, forming a perfect androgyne, constitutes a desacralization of the traditional Christian and Platonic notion of love as two disembodied souls becoming one, or as a lonely soul becoming one with God. This is how tactility becomes a key player in a discourse from which it had previously been ostracized.

As I showed in the first section of this chapter, the poets explored the meaning of the kiss quite thoroughly in the late fifteenth and throughout the sixteenth century. Incidentally, one of such poets also happened to be a guest at the banquet in honor of Tarquinia Molza that Patrizi fictionalized in *L'amorosa filosofia*. Maffio Venier, Venetian champion of the anti-Petrarchisti, was author of a collection of some of the most explicitly erotic sonnets since Aretino's *Sonetti Lussuriosi*, a few of which evoke the kiss with unprecedented force and ardor.<sup>572</sup> In *L'amorosa filosofia* Venier is the last

<sup>&</sup>lt;sup>571</sup> Gooley 2-3. For an early modern text on the androgyne, or hermaphrodite see Jean Riolan's fantastic *Discours sur les hermaphrodites* (Paris, 1614).

<sup>&</sup>lt;sup>572</sup> Perhaps the most remarkable example is this sonnet, written in Venetian dialect, that imitates the pacing and rythm of sexual intercourse: "Kiss me, my darling, and make me die/with a strike of that little tongue of yours,/kiss me, darling, kiss me, murderess,/this kissing is so lovely, kiss me again./Now kiss me once more, kiss me all the time,/keep me kissed always, kiss me until this kissing achieves perfection,/kiss me, bitch, one thousand times per hour./Kiss me, my soul, kiss me until I feel pure anguish,/kiss, and after you've kissed me, kiss me some more (Venier 258)."

speaker of dialogue one, and he invokes Urania, a muse traditionally associated in the iconography of the senses to the sense of touch, to guide him in his speech, during which the poet goes out of his way to praise Tarquinia's lips. Hundreds of graces inhabit her arms, legs, feet, cheeks, ears, eyelashes, says the poet, and "on her lips there lives a swarm of little graces that suck on a honey sweeter (*più dolce*) than ambrosia and softer (*più soave*) than nectar."<sup>573</sup> "Sweet" and "soft," the two main characteristics of Tarquinia's lips, are the key to solve the mystery of the kiss, a mystery neglected by love-philosophers, a mystery hitherto only explored by poets, a mystery that Patrizi's dialogue *Delfino overo del bacio* ("Delfino, or on the Kiss") attempts to unravel.

## A Natural History of the Kiss

When the narator of Kierkegaard's *The Seducer's Diary* proposes the idea of writing *A Contribution to the Theory of the Kiss*, he argues that if "there is no book on this topic" it is probably because "philosophers [either] do not think about such things or (...) do not understand them."<sup>574</sup> Patrizi's dialogue on the kiss begins precisely with the same complaint against a long tradition of love philosophy that has blatantly and systematically ignored the issue of the kiss.<sup>575</sup> The two characters of the dialogue are Delfino – most likely a member of the powerful Venetian family of the Dolfini – and

<sup>&</sup>lt;sup>573</sup> L'amorosa filosofia, 69

<sup>&</sup>lt;sup>574</sup> Kierkegaard 416

<sup>&</sup>lt;sup>575</sup> Apart from Ficino and the Ficinians, it is likely that Patrizi was referring, especially, to, and also continuing the work of Agostino Nifo, who carefully dissected the nature of sexual pleasure in *De pulchro et amore* (chapters 41 and 42) paying special attention to the role of the sense of touch, but does not talk about the kiss. Nifo, as opposed to Patrizi's Molza, did not believe that *philautía* was the source of all love (Nifo 108). Equicola also ignores the issue of the kiss almost completely.

Patrizi himself. Young Delfino goes to see Patrizi because he wants to know the reason for the "sweetness" (*dolcezza*) of the kiss, which, he adds, "when it comes to love matters it is the *second* sweetest thing."<sup>576</sup> Delfino expresses deep frustration, as he claims that he has gone to most of those writers who write about love, and found in their writings many wondrous things, but absolutely nothing on the kiss, "as if the kiss were not something to take into account when philosophizing about love."<sup>577</sup> If *L'amorosa filosofia* tackled a common issue – love – from a heterodox perspective, in this case Patrizi goes even farther and engages with a completely heterodox issue: the kiss. Not as a symbol, not as the communion of two disembodies souls, or between the soul and God: the actual, tangible kiss between mortal lovers.

To date the dialogue is, according to editor Aguzzi Barbagli, "extremely difficult," but given the topic it is fair to speculate that it was written around the time when Patrizi was living in Modena and working on *L'amorosa filosofia* – ie. in the late 1570's.<sup>578</sup> Aguzzi Barbagli is right to associate both works by stressing their openly polemic spirit against the tradition of the *trattato d'amore* from the late quattrocento and cinquecento: "Patrizi is very aware of his own originality (...) In *Delfino* love, discussed through one of its main expressions – ie. the kiss – is implicitly presented as a psychophysical event, and not as a phenomenon of the ethico-spiritual order," concludes the editor.<sup>579</sup> Indeed, *Delfino*, much like *L'amorosa filosofia*, illustrates what Kristeller meant

<sup>&</sup>lt;sup>576</sup> *Delfino* 136, 10-11. In Battista Guarini's *Pastor Fido* (1590) two shepherds, Ergasto and Mirtillo, discuss the sweetness of kiss in equal awe: "I wish I could tell you, Ergasto of mine, the ineffable sweetness I experienced upon kissing her!" (Act 2, Scene 1, 178-180).

<sup>&</sup>lt;sup>577</sup> Delfino 136, 1-8

 <sup>&</sup>lt;sup>578</sup> Aguzzi Barbagli xxiii
<sup>579</sup> Ibid

when he said that "Patrizi is a vigorous mind, remarkably free of occultism, both learned and acute and quite unusual in his combination of scientific and humanistic interests."580 Furthermore, it would be fair to say that Patrizi is trying to be truer to the Neoplatonic spirit than Ficino and his followers, in that his main concern are the diffuse and ambiguous spaces where the mediation between body and soul, matter and spirit, mortal and immortal is negotiated. The mystery of the sweetness of the kiss is the mystery of this mediation, and it is only accesible to whoever has kissed. Patrizi seems to be tacitly replacing Plotinus's famous quote, the foundational motto of Western rational mysticism: "Only those who have seen know what I'm talking about,"<sup>581</sup> with his own "Whoever has kissed knows what I'm talking about;" and in doing so, establishing that unique version of naturalism deeply steeped in Platonic spirituality, and strongly concerned with the mechanism by which the intangible becomes tangible.<sup>582</sup> Deeply grounded in theoretical principles, and presented as a conversation between a young lover and an inspired teacher, the dialogue is invariably rooted on past experiences of actual kisses, and by means of taxonomies and descriptions based on first-hand (or first-mouth!) observation, it sets out to explain a natural phenomenon: the pleasure and sweetness experienced when one kisses. It is in this sense that I consider *Delfino* to be a natural history of the kiss. <sup>583</sup>

<sup>&</sup>lt;sup>580</sup> Kristeller 125

<sup>&</sup>lt;sup>581</sup> Plotinus, *Enneads* 1.6.7. Dutch novelist Cees Nooteboom wrote that tactile memory is "the most elusive of all. Once touch becomes an idea it becomes its own contradiction: absent, gone, unthinkable." Cees Nooteboom, *The Following Story* (1991) 53.

<sup>&</sup>lt;sup>582</sup> Mario Equicola's encyclopedic *Di Natura d'Amore* praises love, among many other reasons, for being the mediation between body and soul: "You are the continuation of the celestial body, you make perpetual the motion of our mundane machine" (Equicola 120).

<sup>&</sup>lt;sup>583</sup> It is likely that Patrizi was also continuing the work of Agostino Nifo, who carefully dissected the nature of sexual pleasure in *De pulchro et amore* (chapters 41 and 42) paying special attention to the role of the sense of touch. It is interesting to read Patrizi's attempt to explore liminality from the vantage point of

Before the enquiry begins, Patrizi helps Delfino determine what kind of kisses are sweet. The words "sweet" (*dolce*) and "soft" (*soave*) to define the unique feeling that the kiss produces, are from here onward used interchangeably. Only kisses on the mouth are sweet, agree both interlocutors, in particulars those given *in su fatti d'amore* ("in romantic situations") to a beautiful woman.<sup>584</sup> Surely not any beautiful woman, notes Patrizi, and Delfino replies with the magic word: "Only when the kiss is shared between loved ones it is sweet."<sup>585</sup> At this point, and after the word love has been pronounced, Patrizi notices that the discourse has suddenly turned from profane to sacred. From here on, *Amore* will speak through Patrizi and will help Delfino unravel the mystery of the sweetness of the kiss. Upon reading this, any learned reader of the late sixteenth century would have thought of Castiglione's admission of the kiss between loved ones as the only kind of redeemable touch. Patrizi, however, is going elsewhere.<sup>586</sup> The kiss between loved ones is not merely a spiritual matter; quite the contrary. What follows is what

Eugenio Garin's thoughts on the complex relationship between Platonism and Humanism. Garin says that the preference for Platonism among humanists reveals "an aspiration to an open, discontinued and contradictory world, a world of changing and innumerable faces, a world rebellious to any classification that one must approach without fear of apparent inconsistencies; (...) a world that refuses the rigid articulation of a static logic, unable to conceptualize the plastic mobility of being" (Garin 20).

<sup>&</sup>lt;sup>584</sup> Delfino 137, 26-138,13. Kierkegaard agrees: "A perfect kiss requires that the agents be a girl and a man. A man-to-man kiss is in bad taste, or worse yet, it tastes bad. In the next place, it is my opinion that a kiss comes closer to the idea when a man kisses a girl than when a girl kisses a man (Kierkegaard 416)." In *Ad Ninam*, Sannazzaro anticipates the trope many decades before Patrizi: "Give, I beg you, Nina, six hundred kisses to me asking for them, but just to me: not what daughters nicely give their father, nor what sisters nicely give their brothers…" (1-6).

<sup>&</sup>lt;sup>585</sup> Delfino 138, 24. To a great extent, Kierkegaard relieves this too: "The kiss must be the expression of a particular passion. When a brother and a sister who are twins kiss each other, it is not an authentic kiss. The same holds for a kiss paid in Christmans games, also for a stolen kiss. A kiss is a symbolic act that is meaningless if devoid of the feeling it is supposed to signify, and this feeling can be present only under specific conditions (Kierkegaard 416)."

<sup>&</sup>lt;sup>586</sup> In a recent article, Vuilleumier Laurens argues that Patrizi introduces between Ficino's heavenly and beastly love, a third kind: "l'amour sensuel humain et non bestial," and he does so by rehabilitating the lower senses, in paticular touch (Vuilleumier Laurens 36).

perhaps constitutes the most detailed taxonomy of kisses since Johannes Secundus's *Basia*.

Lover's kisses are not just on the mouth, Patrizi starts, now possessed by the amorous spirit. There are six parts of the body suitable for romantic kisses, and four ways to kiss each one of these parts. The parts are enumerated in an ascending scale of "softness:" hands, chest, neck, cheeks, eyes and mouth.<sup>587</sup> The four possible ways to kiss are: with dry lips, with wet lips, with a bite (Monteverdi's *bacio mordace*), and with the tongue. In turn, the kiss on the mouth – the sweetest one – can be given in four different ways: with dry lips, sucking the beloved's lips, biting or being bitten, and sticking one's tongue in, or having the beloved stick their tongue in.<sup>588</sup> The highest peak of sweetness, Patrizi and Delfino conclude, is when the beloved sticks their tongue in our mouth.<sup>589</sup>

<sup>&</sup>lt;sup>587</sup> *Delfino* 141, 8-10. Even though the chest is softer than the neck, kissing the neck is sweeter, says Patrizi, and perhaps even sweeter than kissing the cheeks; this has to do with the "mystery of the kiss on the neck," something to which we shall return later.

<sup>&</sup>lt;sup>588</sup> Kierkegaard's narrator also attempts a very interesting and sophisticated taxonomy of the kiss: "If one wants to try to classify kisses, numerous possible principles of classification come to mind. The kiss can be classified according to sound. Unfortunately language does not have an adequate range for my observations. I do not believe all the languages of the world have the stock of onomatopoeia necessary to designate the variations I have come across just in my uncle's house. Sometimes it is a smacing sound, sometimes whistling, sometimes slushy, sometimes explosive, sometimes booming, sometimes full, sometimes hollow, sometimes like calico, etc, etc. The kiss can be classified according to touch –the tangential kiss, the kiss *en passant*, and the clinging kiss. The kiss can be classified according to time as short or long. In the category of time there is another classification, really the one I like. A distinction is made between the first kiss and all the others. What is under consideration here cannot be used as the measure of what appears in the other classifications –it has nothing to do with sound, touch, time in general. The first kiss is qualitatively different from all others. Very few people think about this." (Kierkegaard 417)

<sup>589</sup> Delfino 142, 13-16

receives at the same time."<sup>590</sup> Delfino agrees, although he is still ignorant about the reason for the superior sweetness experienced in the tongue-kiss.

The reason for the sweetness experienced in the kiss has to do with the fact that in kissing, "chi bacia si beve insensibilmente dello spirito del baciato. E questa è la cagione onde nel bacio si sente cotanta dolcezza ("whoever kisses, without feeling it, drinks from the spirit of the kissed one. And this is the reason for the great sweetness felt in the kiss").<sup>591</sup> "Spirit" is the second magic word, and it takes the dialogue to a part of profound contemplation, Patrizi announces.<sup>592</sup> In the pages that follow, Patrizi develops a theory of love that differs dramatically from the one defended by Tarquinia Molza in L'amorosa filosofia; a theory steeped in Neoplatonic notions of intermediary hypostases, and on Proclian elaborations of the myth of the voyage of the soul from the *Phaedrus*. Love is either born out of the similitude between two people, or from the admiration that the beauty of one of the two inspires in the other one. There is, however, an exterior and an interior similitude, Patrizi notes. The first one does not bring about true love, the second one does, and is of two kinds: it is either based on the qualities of the souls (qualities that, upon coming down from heaven, the ethereal body [*ethereo corpicello*] of the two took from one particular dominating planet), or on the qualities of the bodies, that

<sup>&</sup>lt;sup>590</sup> Delfino 142, 12-24

<sup>&</sup>lt;sup>591</sup> Delfino 144, 19-20

<sup>&</sup>lt;sup>592</sup> Delfino 144, 25. The notion of spiritus as an excepcional kind of material entity enters the Latin West in the works of Averroes (see Jütte 48). In the centrality of the concept of "spiritus" we can see, according to Muccillo, a perfect example of Patrizi's heuristic use of Ficinian terminology. Whereas Ficino appeals to the concept of spirit only when dealing with "beastly love" in the *De Amore* (141 ff), Patrizi uses the concept to explain the sweetness of the kiss. To him, says Muccillo, there is no qualitative distinction between noble and vulgar love, "instead, they are different instances of the same phenomenon (Muccillo 621-623)."

is the behavior of humors and spirits.<sup>593</sup> The ethereal body (a concept very common in post-Plotinian Neoplatonism) as well as the spirit, are entities that mediate between the purely spiritual and the corporeal, and that aim to a more satisfactory explanation of the descent of the soul into the body. When the soul, created by God, comes to rule over a body it first puts on an ethereal body by means of which it descends, that is why it is called vehicle, or chariot of the soul (this ethereal body), explains Patrizi.<sup>594</sup> Along the descent it acquires luminous impressions from each planet and sphere through which it journeys. The main concern of Patrizi's platonism is with the mechanism of mediation between matter and body. For him, a phenomenology of the kiss is therefore crucial to understand the complex manner in which the immortal soul intertwines and interacts with the decaying body.

After this long and complex digression, Delfino seems overwhelmed. He tells Patrizi that he is satisfied, though. As readers we are definitely not satisfied; the main issue has still not been addressed. Delfino, sympathetic with us, innocently proposes to go back to the original question: so, why are kisses sweet?<sup>595</sup> The answer, starts Patrizi, lies within the notion of spirit: "*Lo spirito* is nothing but a very subtle vapor of blood, generated in the heart from its natural warmth. The spirit travels through the arteries and brings this warmth to even the most remote parts of the body keeping it alive."<sup>596</sup> The spirits come to all the extremities of the body impulsed by the beating of the heart and the movements of the limbs, leaves the body through small fissures or holes that we call, the

<sup>&</sup>lt;sup>593</sup> Delfino 145

<sup>&</sup>lt;sup>594</sup> Delfino 146, 20

<sup>595</sup> Delfino 150, 15-7

<sup>&</sup>lt;sup>596</sup> Delfino 154, 25-31

pores (*pertugietti*, literally "little holes").<sup>597</sup> This the how the spiritual becomes tangible. But, as it was the case in the Neo-Latin poets, as well as in the writings of the men who carried out the anatomical revolution by standardizing the practice of dissection, touch operates in tandem with sight.

The spirit, says Patrizi, also comes out of the eyes mixed with the luminous rays. This is why the eyes are a gateway for love; they possess their own light, a light that they have taken from the Creator, and it is by means of rays of this light that they enter the lover's eyes, and then the heart. The rays that shoot out of luminous eyes are the true darts and arrows of love.<sup>598</sup> Delfino seems confused regarding the collaboration between sight and touch. But how do spirits and rays come together, he asks?<sup>599</sup> The spirit mixed with the ray comes out from one's eyes and enters another person's eyes, answers Patrizi; then, the other person's spirits penetrate our body and our substance inflaming it, and if there is similitude it makes the other body its home:<sup>600</sup>

"And that is how, oh loving Delfino, love enters our hearts through the warmth and through the similitude of foreign spirits that *penetrate* another body, and it brings along the flames and the sweetness that a heart feels when it is in love."<sup>601</sup>

The tactile image of subtle bodies (spirits) penetrating more dense bodies through the pores leads Patrizi, finally, to Delfino's main concern: "where the desire to touch the

<sup>599</sup> Delfino 156, 15

<sup>&</sup>lt;sup>597</sup> Delfino 156, 1-6

<sup>&</sup>lt;sup>598</sup> Delfino 151, 23-30

<sup>&</sup>lt;sup>600</sup> Delfino 157, 23-30

<sup>&</sup>lt;sup>601</sup> Delfino 158, 19-23

beloved and the sweetness of their kissing come from.<sup>3602</sup> Such desire stems from the constant yearning to renew the ardor and the joy of the heart, explains Patrizi appealing for the first time to his medical knowledge – Patrizi studied medicine at Padua. The heart is a muscle that shrinks and expands. When it expands it locks the air in the lungs, air that has entered through nose, mouth and pores. When it contracts it releases the air and the spirits run through the arteries up to the mouth and the surface of the skin, exiting the body through these same fissures, or pores. The body does this constantly as long as it lives, renewing and refreshing its spirits and its warmth.<sup>603</sup> Now, the heart that is in love requires not only this constant renovation of spirits, but also a renewal of its joy, that is dispersed every time the foreign spirits leave its body, Patrizi continues. This renewal can occur by contemplating the eyes of the beloved, or "by touching" (*per toccamento*):

It is by touching that the loving heart oozes spirits instead of air with its own natural strenght through the arteries, and at the same time sucks in the spirits, that have oozed from the heart of the beloved. (...) The more parts of his body the lover employs to touch the body of the beloved, the more intense are the ardor and the joy he feels.<sup>604</sup>

There is one rather obvious caveat, Patrizi adds, that explains why touch produces this exchange of spirits almost exclusively in the context of romantic love. Given that the cold closes the pores and makes it impossible for spirits to exit the body, when the body of the beloved is cold the lover feels no sweetness, no ardor; the exchange takes place when bodies are warm, and since its vehicle are the pores it takes place all over the surface of

<sup>602</sup> Delfino 160, 9-11

<sup>&</sup>lt;sup>603</sup> Delfino 160, 13-30

<sup>&</sup>lt;sup>604</sup> Delfino 161, 12-17

the body.<sup>605</sup> Even though Patrizi does not explore this, it is clear that he accepts that sexual intercourse is the most direct, the most intense, and the sweetest way two people have to exhange their spirits. The kiss, as Delfino had pointed out in the very beginning of the dialogue, is the second sweetest way, and its dissection a perfectly illustrative way to understand coitus and reproduction. When lovers kiss they drink and absorb the spirits of the beloved.<sup>606</sup> One kisses the mouth because it is the main gateway to the soul and to the heart, as well as the most ample home of the beloved's spirits. And the sweetest kiss is the tongue-kiss because through it lovers absorb the most quantity of spirits, given that the tongue is a spongy body, always full of spirits and flavored like the internal humor of the beloved body.<sup>607</sup>

Delfino is finally satisfied with the answer, but what about the other kisses? Switfly, Patrizi rushes through a explanation of the hidden motivation for the other kinds of kisses. The biting kiss comes from a desire to take revenge against the one who hurt us with their eyes and spirits making us fall in love.<sup>608</sup> The hands are kissed because they are ministers of the thoughts of the heart. The chest is kissed because is is the home of the

607 Defino 162, 10-15

<sup>&</sup>lt;sup>605</sup> Delfino 161, 17-9. In the fourth part of his major work, the Nova de universis philosophia (1591) –by far the most interesting and original according to Kristeller (Kristeller 122)— the Pancosmia, Patrizi introduces four basic principles of the physical world: space, light, heat and humidity. When discussing space he argues that bodies apart from being tridimensional have resistance. Humidity (*fluor*) is considered a passive and material principle, capable of different degrees of density, and it accounts for the resistance that characterizes physical bodies in distinction from pure geometrical forms. Humidity takes the place in Patrizi of Telesio's and Aristotle's matter, adds Kristeller, and the term fluor, as well as the insistence on its different degrees of density, evidently reflects certain notions of the pre-Socratic philosophy, known to Patrizi from a variety of ancient sources, in particular Anaxagoras (Kristeller 122-124). For this see also John Henry 's Patrizi's use of atomistic arguments.

<sup>606</sup> Delfino 161, 34-37

<sup>&</sup>lt;sup>608</sup> Once again, like in Pontano, Marullo and Johannes Secundus the eyes play a crucial, yet potentially deceptive role in love matters. In Guarini's *Pastor Fido* the shepherd says to his friend that the nymph's kiss made him feel like he was dying, and then "as I felt the deathly wound I felt the strongest urge to bite and mark those homicidal lips!" (*Pastor Fido*, Act 2, Scene 1, 232-235)

loving heart. The cheeks, because they are the see of the beauty in the face, and the eyes as vehicles of the light that humans have received directly from the realm of the divine.<sup>609</sup> The kiss on the neck, however, is a mystery that *Amore* is not ready to reveal to Delfino; yet another enigma is that, according to Patrizi it is much more pleasurable to kiss the left part of the neck than the right. The sweetness of the kiss on the neck Amor does not want to reveal because Delfino has not yet offered a sacrifice that is worthy of Him.<sup>610</sup> With this puzzling and bizarre *aporía*, the dialogue comes to an end, and Delfino recites a sonnet thanking Amore for having revealed such "wonderful secrets."<sup>611</sup>

The fact that a philosophical dialogue attempting a natural history of the kiss ends with poetry is, indeed, meaningful. Neo-Latin kiss poetry, especially Johannes Secundus's *Basia*, were immensely popular throughout the sixteenth century. *Basium 5*, in particular, even engages with figures and images crucial to Patrizi's own conception of the kiss. When the poet and Nerea use their tongues in their kissing, she exhales (*asparans*) into him "the spirit (*aura*) of her sweet soul" as she "drinks [his] fallen soul."<sup>612</sup> Towards the end of the sixteenth century, two of the most important and influential Italian poets, Giambattista Marino and Battista Guarini, explore the mechanism of the kiss. In doing so, they openly follow Johannes Secundus, but as they do so in the vernacular one must be aware of the important antecedent of Patrizi's dialogue, the first (and only?) major attempt in Italian (and in any language?) to explore

<sup>&</sup>lt;sup>609</sup> Equicola says that we kiss the eyes of the beloved believing that, in doing so, we kiss their soul (Equicola 232).

<sup>610</sup> Delfino 162-163

<sup>&</sup>lt;sup>611</sup> Delfino 164, 17-30

<sup>612</sup> Basium 5

the natural history of the kiss. When young Marino in *La canzone dei baci* (composed around 1590), invokes kisses saying: "Oh venturous kisses (...) in you I experience the deepest and most secret sweetness (...) you hide more than one soul in one mouth," the stress on "sweetness" as the most unique quality of kisses, and the notion that it is a secret and deep matter only accesible to the initiate, the kisser, comes under a new light after having read *Delfino overo del bacio*. But for Marino the mouth is also a dual, and contradictory nature: on the one hand it is "homicidal," because in kissing one "learns how to die," giving up the soul; on the other hand, it heals because in kissing one experiences rebirth by getting one's soul back. And the mouth needs the eyes, as it was the case in Johannes Secundus, and in Patrizi. Sight and touch work together, and Marino sings: "*Miro, rimiro et ardo; bacio, ribacio e godo* (I look once, I look twice and I burn; I kiss once, I kiss twice, I rejoice)."<sup>613</sup>

Even though poetry had been traditionally and would be after him the most preferred medium to explore the mystery of the kiss, Patrizi's dialogue is a remarkably original attempt to anatomize the kiss in search for the elusive spacetime where and when spirit and matter meet. Interestingly, in one of his early works, *Della Storia* (1560) Patrizi claims that history must proceed in a manner analogous to the scientific method, especially in dealing with the individual event. In order to illustrate this, he appeals to the example of the anatomist: "The anatomist's scalpel cuts into history looking for the

<sup>&</sup>lt;sup>613</sup> As for Guarini's pastoral tragi-comedy *Pastor Fido* –originally published in 1590 and tremendously influential throughout the seventeenth and even well into the eighteenth century, having especially percolated into the madrigal tradition— when the shepherd Ergastolo asks Mirtillo what he felt as he kissed a nymph. Mirtillo responds: "All of my soul came to these lips, Ergasto, and my whole life, locked in such small space, became nothing but a kiss (...) And as she let her mouth be kissed by the kisses of my mouth, I tasted only the sweetness of honey. But after she offered herself to me (...) those lips of ours made a smacking sound, and our kisses found each other and I felt the sharpest sting of the amorous bee stabbing my heart. As I felt the deathly wound I felt the strongest urge to bite and mark those homicidal lips!" (Guarini, Act 2, Scene 1, 195-235).

intelligible reason behind an action, a reason that lies in the soul and the spirit of the human person.<sup>3614</sup> When dealing with the kiss, Patrizi proceeds in the exact same manner. Thanks to Patrizi's heterodox hermeneutics of Plato and Platonism combined with his observational approach to the natural world, it is fair to say that the realm of the spiritual had never been so tangible as in the late sixteenth-century. And it is also fair to say that approaches towards tactility such as Patrizi's, or such as those adopted by the fathers of the anatomical revolution, paved the way for seventeenth-century poets, like Abraham Cowley, to turn the long-established image of Narcissus as the forsaken lover, on its head and sing:

Indeed I must confess when souls mix 'tis an happiness:

but not complete till bodies too combine (...)

for he whose soul nought but a soul can move

does a new Narcissus prove, and his own image love."615

<sup>&</sup>lt;sup>614</sup> *Historia* III, 13r *apud* Blum 208. The historian, according to Patrizi, is characterized by his clear narration, by his perspicuity. According to Quintilian (*De institutione oratoria* IV.2.31.33) *perspicuitas* ("clarity," "transparence") is the third highest rhetorical virtue, after brevity and verosimilitude. Perspicuity "consists in the presentation of an action by means of its constitutive elements, it is what makes narration tangible," adds Patrizi. Interestingly, in this work Patrizi engages in polemic with Aristotelian Francesco Robortello, one of the most important translators of Aristotle's *Poetics*. Robortello, when translating the Greek adjective *saphes*, chooses the Latin "perspicuitas." Later in the seventeenth century, when translating Thucydides's *History of the Peloponnesian War* Thomas Hobbes (1629) praises perspicuity as the highest virtue a historian can have. In the words of a Hobbes's scholar: "Perspicuity evokes the reality of the past, it makes the past palpable, tangible (Reik 46)."

<sup>&</sup>lt;sup>615</sup> Cowley, "Platonic Love" (Maclean 339)

## **Chapter 4:**

## Skin

The beat of a wolf skin drum also scares the sheep. Giambattista della Porta (*Magia Naturalis* I, 12)

Even if one has never suffered a serious skin affliction, it does not take much to get an idea of how appalling its effects can be on the body. Just by browsing through an atlas of diseases of the skin one can quickly get the picture: allergic eczema, papular urticaria, exfoliative dermatitis, dermatitis vegetans, extensive psoriasis, lichen planus, recalcitrant pustular eruptions, eczematoid ringworm, granuloma fungoides, tuberculosis of the skin, syphilitic chancres, neurofibromatosis type one, follicular syphilis, genital herpes, leprosy, malignant melanoma. The list, of course, continues; the illustrations of bodies affected by such diseases are quite ghastly, and reveal one astonishing fact: a bad case of a skin disease is a threat not only to a person's health, but also, and perhaps more shockingly, to their identity.

The skin is made up of connective tissue, blood vessels, lymphatic nerves and special cells. It can be separated in parts: the epidermis (cellular layer), along with its derivatives (hair follicles, hair, nails and the sebaceous and sweat glands) on the one hand, and the corium or "true skin," on the other. In an average adult weighing around

160 pounds (70 kg), the skin covers an extension of about 21.5 square feet (2 square meters) and weighs about 7 pounds (3 kg). It is by far the largest and one of the most complex organs of the human body. Sander Gilman adds: "the skin, which functions within other semiotic systems (such as physiognomy) is thus not only an organ of sense but it serves as the canvas upon we 'see' touch and its cultural associations (...) transmitting heat, cold, vibration, and pleasure/pain [as] the blank page upon which the signs associated with sensory impressions are written."616 Surely one of the reasons for the skin's mindboggling complexity is its function as creator of both individual and collective identity. In one of the most sophisticated attempts to unravel this function of the skin, Didier Anzieu coined the notion of *moi-peau* ("skin ego"), by which the French psychoanalyst meant: "a mental image of which the ego of the child makes use during the early phases of its development to represent itself as an ego containing physical contents, on the basis of its experience of the surface of the body."617 In developing his notions of skin and psychosomatic identity, Anzieu worked not only in the footsteps of Freud and Lacan, but he also enjoyed the intellectual fruit of almost three centuries of dermatology, a discipline that especially since the nineteenth century has become an essential part of medicine. This, however, was not always the case.

For many centuries in the pre-modern era the skin was almost consistently considered a mere envelope of the body, and its afflictions a matter of strict cosmetics. It was in the early modern period when this notion started to slowly change. Among medical doctors a renewed interest can be seen towards the end of the sixteenth century

<sup>616</sup> Gilman 199

<sup>&</sup>lt;sup>617</sup> Anzieu 40

in the work of Girolamo Mercuriale, who was the first physician to systematically argue that the skin was subject to pathologies just like the other organs. This trend gains popularity at the end of the sixteenth and beginning of the physicians seventeenth century as testified in the works of Tommasso Minadoi, Fabrizio D'Acquapendente, Santori Santorio, Samuel Haffenrefer and, of course, Sir Thomas Browne. Medicine was not the sole arena where the question of the skin started becoming one of great interest in early modern culture; practices such as physiognomy, chiromancy, and metoposcopy proliferated during the sixteenth and seventeenth centuries; and even in pamphlets, literature and the visual arts there is a noticeably recurring habit to address the skin, and specially the diseased skin in all its uncanniness.

As the last of our most notable examples of the early modern revaluation of tactility, it is now time to talk about the growing medical, scientific, psychological, and artistic interest for skin. I will approach it from least three different angles: First, the largest organ in the human body stops being considered a mere envelope of the body and acquires the status of organ, a status which brings along with it both the notion that the skin is subject to diseases as well as an according increase in scientific interest for the vicissitudes of its particular physiology. Second, according to the popular discipline of physiognomy (whose basic tenets also transpire into popular culture and literature) the particular and unique notes of the skin bespeak not only physical but also spiritual characteristics of the person. Third and finally, in the work of Sir Thomas Browne medicine, physiognomy, and theology come together to produce a strange intellectual amalgam that positions the skin, conceived as a hieroglyph of God, and designed in

quincuncial pattern as a reality that might hold the key to some of the biggest enigmas of creation and nature.

## Pox

In his classic History of Dermatology (1933), Allen Pusey introduces the sixteenth century by saying that "the study of skin diseases was more than ever a subject of major interest in medicine because of the cutaneous manifestations of syphilis."618 According to Pusey's narrative, sixteenth century physicians began to systematically study the skin and its pathologies upon experiencing first-hand the epidermic devastation that syphilis caused in patients' bodies. This argument holds water only to a certain extent. Indeed, syphilis exploded as a global pandemic in the early sixteenth century. Historians and paleo-anthropologists still argue whether the Spaniards brought it from the Americas, or whether it already existed in Europe before 1492. Be that as it may, the first cases of what we now call syphilis were detected in 1493 in Barcelona upon the arrival of one of Columbus's caravels, La Pinta. Alonso Pinzón, its commander, came back from overseas with severe skin lesions and was diagnosed by physician Ruiz Díaz de la Isla with a "great malady, which ulcerates and corrupts the skin."<sup>619</sup> Early in 1495 (exactly at four in the afternoon of February 22) the armies of French king Charles VIII, teeming with infected Spanish mercenaries, invaded the Kingdom of Naples; after a short period of time Neapolitans got rid of the invaders, and as the heterogeneous troops disbanded and went back to their home countries (England, Germany, Hungary, Poland, etc) they carried

<sup>&</sup>lt;sup>618</sup> Pusey 42

<sup>&</sup>lt;sup>619</sup> Hayden 13

the pox with them. Within a few years syphilis had become the most important endemic contagious disease in Europe, and it had even made its way to India and China.<sup>620</sup>

In June of 1495, Sicilian physician and historian Niccolò Squillaci wrote a letter to a colleague, Ambrogio Varese da Rosate, professor at the University of Pavia. This letter constitutes the first learned testimony of the new pandemic. Squillaci describes syphilis in horrifying detail:

The purulent pustules spread in a circle, and there is an abundance of the most virulent lupus. The signs of the sickness are these: there are itching sensations, and an unpleasant pain in the joints; there is a rapidly increasing fever, the skin is inflamed with revolting scabs and is completely covered with swellings and tubercules which are initially of a livid red color, and then become blacker. After a few days a sanguine humor oozes out; this is followed by excrescences which look like tiny sponges which have been squeezed dry; the sickness does not last more than a year although the skin remains covered in scars which show the areas it affected. It most often begins with the private parts... I exhort you to provide some new remedy to remove this plague from the Italian people. Nothing could be more serious than this curse, this barbarian poison.<sup>621</sup>

*Pocca* is an Anglo-Saxon word meaning "pouch or blister," that evolved into pocks or pox, "terms long used [in English] to describe any unpleasant skin eruption."<sup>622</sup> Since the symptoms of syphilis include appalling skin lesions, among other names the English called it "the French pox," or simply "the pox." The term syphilis was coined by none other than Girolamo Fracastoro in his poem *Syphilis sive de morbo gallico*, published for the first time in 1526. As I discussed in chapter one, it was here that

<sup>&</sup>lt;sup>620</sup> At first it was "the Neapolitan disease," because it was the siege of Naples that caused it to spread. Then it was "the French disease," since Charles's armies disseminated it all over Europe. From then on communities tended to name it after their most hated neighbors.

<sup>621</sup> Hayden 14

<sup>622</sup> Williams 1

Fracastoro, heavily influenced by Lucretian atomism, advanced the theory of a seminal origin of the contagion, purely based on physical contact between infected "seeds of disease" and healthy hosts. Surely, Fracastoro found the seeds for his revolutionary theory of contagion not only in Lucretius's recently rediscovered *De rerum natura*, but also in the new pox that was ravishing Europe. Is it fair then to argue, with Pusey, that the birth of dermatology was an epiphenomenon of the pox?

Before giving an answer to this question it would perhaps be advantageous to introduce the other pox. In order to distinguish it from syphilis, the "great pox," *variola*<sup>623</sup> whose effects on the skin were equally or even more atrocious, was the "small pox." As opposed to syphilis, smallpox was a disease with which the old continent was well acquainted.<sup>624</sup> But for a myriad reasons (that include the growth of rapidly overcrowding urban centers, and the development of much more frequent and agile lines of communication between countries) the sixteenth and seventeenth century saw a violent increase in the number of outbreaks of the disease. It would not be mistaken to assume that at the time everyone had experienced the disease, either directly in their own skin, or indirectly in the skin of others. And what this virus does to the skin, particularly to the face, is simply terrifying.<sup>625</sup> Those who survived the ordeal remained marked forever with their faces deformed by craters, and their bodies carved by the sickle of the Angel of Death. It was not uncommon for survivors to abandon the world and become hermits;

<sup>&</sup>lt;sup>623</sup> Variola comes from the Latin, varius (speckled). North American Indians, who received the disease from the conquistadors, simply called it "rotting face" (Williams 22).

<sup>&</sup>lt;sup>624</sup> For a comprehensive survey of the history of smallpox see Donald Hopkins's *The Greatest Killer: Smallpox in History* (Chicago, 1983).

<sup>&</sup>lt;sup>625</sup> Medical historian Gareth Williams points out that "the virus's predilection for sebaceous glands meant that the face was often badly affected" (Williams 22).

some even killed themselves,<sup>626</sup> refusing to live a life of deformity and disfigurement, refusing to live in their new monstrous body. The scarring could be so extreme as to actually deface the patient, depriving him or her of their identity. In an account of the 1884-5 outbreak in London, nurse Isla Stewart wrote: "I have known two sisters who lived in the same camp, ate at the same table and saw each other daily for a week before they recognized each other."<sup>627</sup>

Smallpox was vicious and it was relentless. Accounts of its devastation were not absent from literature. One of the best examples comes from Bosola, the ruthless villain of Webster's *The Duchess of Malfi*, who tells the story of "a lady in France that, having had the smallpox, flayed the skin off her face to make it more level; and whereas before she looked like a nutmeg grater, after she resembled an abortive hedgehog."<sup>628</sup> In the words of historian of medicine Kenneth Kiple, "as the Black Death retreated from its role as one of the most efficient controllers of population size, smallpox advanced to take its place." When finally in 1798 Edward Jenner discovered a vaccine that brought successful immunization, he called smallpox "the most dreadful scourge of the human race." As said before, the disease, albeit well known, extremely deadly and feared for millennia, became endemic and started appearing with much more frequency and attacking at a greater scale in the fifteenth and sixteenth centuries, mostly due to the growth of overcrowded urban centers. Fracastoro described it in *De contagione*, where he proposes the Lucretian thesis of the disease's *seminaria* that infect through contact (direct, via fomes, or through the

<sup>&</sup>lt;sup>626</sup> In *Biathanatos* John Donne references "Festus, Domitianus's minion, [who killed himself] onely to hide the deformity of a Ringworme in his face" (Part 1, Dist. 2, Sect. 3).

<sup>&</sup>lt;sup>627</sup> Williams 34

<sup>&</sup>lt;sup>628</sup> *The Duchess of Malfi*, Act 2, Scene 1. The play was written in 1612, first performed in 1614, and first published in 1623.

air). And, as Rahzes had already pointed out in his ninth century pioneer work on smallpox and measles, it was much more than a children's disease. Anyone could be a victim to smallpox, from children to elderly people, from farmers to monarchs. Queen Elizabeth I contracted it in the fall of 1562 and survived without much scarring in her face. This is indicative of how alarmingly the disease was spreading. In the words of Hopkins, "if smallpox began to reach alarming levels in Europe during the latter half of the sixteenth century, by the end of the seventeenth century [it] had clearly succeeded plague, leprosy and syphilis as the continent's foremost pestilence."<sup>629</sup>

As much as one cannot oversee the magnitude of skin-eating diseases like syphilis and smallpox in the sixteenth century as social game changers, and the enormous sense of shock and urgency that the new plagues inspired in early modern physicians it is also necessary to add the remarkable advancements in human anatomy as the other crucial factor that made it possible for dermatology to give its first steps as an independent branch of medicine. The history of dermatology is an unusually short one. Suffice it to say that the discipline takes off and becomes a fully respectable and established practice only in the early nineteenth century. The main obstacle that skin-abnormalities and diseases historically had to overcome was that they were considered cosmetic rather than strictly medical issues. This of course does not mean that physicians in antiquity and during the middle ages blatantly ignored issues concerning the skin. On the contrary, references to skin and skin abnormalities can be found almost consistently throughout medical history and going as far back as Babylon and Greece.

<sup>&</sup>lt;sup>629</sup> Hopkins 32. The historian quotes a seventeenth-century German proverb that said: "From love and smallpox but few remain free."

The two Greek words for skin (derma and chros) refer to the appearance, or the surface of the body. In a Hippocratic text dedicated to the nature of the bones we find the notion that flesh and skin give the body an aesthetic, completed structure, by providing, or putting together the connection and the overall set up of the body.<sup>630</sup> Hippocrates also discusses leprosy, scabies, pruritus, alopecia, but he considers them "disfigurements" (turpitudines) rather than diseases. A pseudo-Galenic text provides one of the very first definitions of skin: "Skin is a nervous body that protects the surface of the whole body, created for beauty's sake and to reinforce the sense of totality in the human body."631 Indeed, in Galen's teleological worldview, perforations and overtures in the skin proved that intelligent design operates behind the structure of the human body.<sup>632</sup> Such perforations allow for the evacuation of excrements and guarantee a healthy balance in the body. In a fairly recent study on the history of skin as a "cultural border" between the individual and the outside world, Claudia Benthien argues that, "the skin, the surface of the body, was conceived [in pre-modern Europe] as a place of permeability and mysterious metamorphoses for a continuous flux of bodily fluids that physicians did not differentiate as normal and pathological excretions, but only in terms of their various degrees of efficacy for the body."633 Benthien here points out the characteristic of skin that would eventually position it at the center of attention: liminality. Skin is the threshold where the relationship between the human insides and the outside world is negotiated. Therefore, in the minds of many early modern intellectuals a study of its

<sup>&</sup>lt;sup>630</sup> Hippocrates, Nature of the Bones XI, 1

<sup>&</sup>lt;sup>631</sup> Pseudo-Galen, *Definitions* XIX K 370

<sup>&</sup>lt;sup>632</sup> Galen, De Usu Partium, IV K 356 ff

<sup>&</sup>lt;sup>633</sup> Benthien 38

physiology, its complexities and its metaphysical aspects was aimed at bringing forth yet a new set of revelations concerning the relationship between body and soul, matter and spirit, and maybe even between the human and the divine. The process, however, would prove to be long and gradual.

In one of the most important medical works from the Middle Ages, Pietro D'Abano's *Conciliator*, the author – following Avicenna – recognizes that touch is a faculty diffused throughout the skin and the flesh and that the spirit is an intermediary.<sup>634</sup> Influential works by Guy de Chauliac (Chirurgia Magna, 1363) and Bernard de Gordon (Lilium Medicine, 1305) also deal with abnormalities of the skin. But in spite of this, it is safe to say that there is no such thing as a category for "diseases of the skin" in medieval nosology.<sup>635</sup> Mondino's Anothomia, composed in the first quarter of the fourteenth century, treats the skin as merely a layer that one must remove to get to the organs, muscles and even membranes that really matter. Not even the shocking effects that the Bubonic plague, at the peak of its devastation in the mid fourteenth century, had on the skin launched medieval physicians into a deeper exploration of the physiology of the *cutis.* It is in the sixteenth century when physicians first start paying proper attention to the skin, advancing it to the category of independent and vital organ, and attending to its unique pathologies. The process, however, was a tortuous one, and the purely cosmetic approach still had strong adepts throughout early modernity. Giovanni Martinello's Gli ornamenti delle donne (1563), for example, refers to the outside appearance as il corpo di fuori ("the outside body") and the skin as la carne di fuori ("the outside flesh").

<sup>&</sup>lt;sup>634</sup> Pietro d'Abano, *Conciliator* 64.1.A. and 65.3.E

<sup>&</sup>lt;sup>635</sup> For more on this see Jacquart 493-510

Interestingly, he uses that terminology even though he had at his disposal a number of Latin terms like *pellis, cutis, corium, derma, cuticula, epidermis*. In Gabriele Fallopio's work on cosmetics, from 1550, skin is still not an autonomous subject; he refers to it as *cutis, pellis* and *membrana*.<sup>636</sup>

It is in the works of the fathers of the anatomical revolution that the proper renaissance of the skin begins; and it begins with the notion that the skin is the organ of touch. Alessandro Benedetti is the first anatomist who dedicates substantial attention two chapters of his main work – to the skin. In the first book of Anathomice (1502), he follows Aristotle and describes *cutis* as a dried fleshy crust of sorts, much like the one seen on the surface of polenta. Thanks to its pores, skin allows the penetration of the tactilium rerum species ("forms of tactile things"), this notwithstanding he deems it insensible.637 Andreas Vesalius was one of the first anatomists ever to separate the membrane (or fleshy layer that Galen, Avicenna and Mondino had described) from the skin, as we learn from Matthaeus Curtius who recorded Vesalius's early anatomy lessons at Bologna in 1540. Instead of stopping there, Vesalius kept peeling and pointed out that the skin itself is composed of two layers: the exterior one (*corium*) and the interior one, or "true skin" (vera cutis).<sup>638</sup> Notwithstanding the clarity of his practical demonstrations and his undeniable skill in the art of dissection, Vesalius's general ideas about human anatomy and the organic connection between the body parts are still very much in line with the Galenic tradition. This is evident when Vesalius reminds his students about the

<sup>&</sup>lt;sup>636</sup> See Gadebusch Bondio 537-570

<sup>&</sup>lt;sup>637</sup> Benedetti, 112-115. This he confirms in a chapter dedicated to the scalp (Book 4, chapter 5: "De cute capitis") (Benedetti, 242).

<sup>638</sup> Eriksson 69-71

first and most important function of the skin: "to shelter the organs from damage by contact."<sup>639</sup> This has driven contemporary philosopher François Dagognet in his study on skin (*La peau découverte*, 1993) to advocate for a new "anti-Vesalian" stand. According to Dagognet – who argues that the skin, or "periphery," is a mirror and summary of the totality of the organism – Vesalius's position reinforced the paradigm of the "essential interiority," and of the skin as a mere barrier, or wrapping under which lies the treasure of the human insides.<sup>640</sup>

However, and also following Galen,<sup>641</sup> Vesalius separates skin by substance, thickness and flexibility. This drives him to conclude that, due to the "broad tissue-like sinew [that constitutes it] the [skin of the] palm of the hand has the most perfect sensation of touch." The strict connection between skin and touch is presently confirmed, as Vesalius notes that, "the skin possesses the function of feeling that with which it comes in contact." And not only that: "among all the organs (*membra*) of the body it is the most complicated as regards its composition since it is something between the warm flesh and the cold sinews."<sup>642</sup> It is, therefore, clear that for Vesalius skin was not a mere envelope, or barrier; it was instead a many-layered, incredibly complex organ whose two main functions were to protect the inner organs, and to feel, to touch. As such, it deserved to be carefully dissected and described.

 <sup>&</sup>lt;sup>639</sup> *Ibid.* For the skin as envelope (*indumentum*) see also Vesalius, *De humani corporis fabbrica* 231
<sup>640</sup> Dagognet 7-10

<sup>&</sup>lt;sup>641</sup> See *De Usu Partium* XI, 15

<sup>&</sup>lt;sup>642</sup> Eriksson 73

From here on out anatomists start refining the dissection and the notion of the skin as the organ of touch. Realdo Colombo in De re anatomica (1559) argues than the skin has nerves, therefore can have sensitivity. In Melanchton's commentary on Aristotle's De anima (1567), revised and corrected following Vesalius's anatomy, the author declares that the organ of touch is a nervous *pellicula* that exists all over the body under the cuticula.<sup>643</sup> Also in 1567, Jean Fernel published his very influential – and Galenic – *Physiologia*. In book one Fernel discusses the skin and the membranes, and insists on the traditional view of both as "covers" or envelopes of the inner organs. The skin is described as thicker and less dense than the membranes, as well as characterized by perforations that allow for excrements to exit the body.<sup>644</sup> Soon after, however, when giving instructions for a successful dissection, Fernel stresses the fact that the anatomist should always engage with the skin, describing it and making the first incision "from the mid-sternum to the pectinate bone" in order to show its two main layers: epidermis, and true skin.<sup>645</sup> The skin was not a mere cover, after all. It deserved attention, it called for taxonomies and it was a complex and sophisticated organ. This growing concern for the physiology of the skin would finally produce its first major instantiation when, in 1572, Emilian physician Girolamo Mercuriale published in Venice the first systematic treatise on diseases of the skin: De morbis cutaneis et omnibus corporis humani excrementibus tractatus. In the words of Gadebusch Bondio: "Mercuriale takes a step that no one else

<sup>&</sup>lt;sup>643</sup> See Gadebusch Bondio 537-570. Fabrizio d'Acquapendente takes the notion a step further and replaces *cutis* for *tactus sensorius*. But it is his main disciple (and worst enemy), Giulio Casserio who truly explores the function of skin as the organ of touch in *Pentaestheseion* (1609).

<sup>644</sup> Fernel 149

<sup>&</sup>lt;sup>645</sup> Fernel 163
had taken before, he declares cutaneous disturbances to be pathological, not aesthetic phenomena.<sup>3646</sup>

The main question for Mercuriale is whether skin abnormalities can be considered diseases or not. He distinguishes the actions of the body as either "common and useful to other parts" or as "germane." Skin does not perform common actions, since its actions are not useful to any other parts; however, is it irrigated by veins and it attracts, unites, holds together and distributes; therefore when these functions are disturbed the skin is diseased. Skin diseases make the body ugly, so the task of the doctor is both to restore health and to make the affected area look good. Mercuriale's treatise – composed of his lectures, transcribed by Paulus Aicardius – is divided in two parts. The first part is dedicated to diseases of the skin (head/hair and the rest of the body), and the second part to excrements (urine, feces, sweat, *et al.*). The physician starts by defining skin:

The skin (*cutis*), all physicians agree, has been placed about the bodies of animals as a protective covering for the flesh and members... since this is the only function of the skin, which has no other use save as a receptacle for waste materials (...) it is subject to a variety of diseases, all of which I intend to discuss.<sup>647</sup>

Apart from being a "protective covering" the skin is also a porous body that purifies the body of excrements. Mercuriale continues, contesting Hippocrates and Galen who argued that the skin is subject to disfigurements and not diseases: "The skin does not have common functions; its functions are neither necessary nor useful to any body part. It does have its individual actions. We know that it receives nourishment from the veins, nourishment which the skin must, of necessity attract, assimilate, unite and distribute.

<sup>&</sup>lt;sup>646</sup> Gadebusch Bondio 565

<sup>647</sup> Sutton 11

Since these functions not rarely become abnormal in the skin, it is not unreasonable to believe that their abnormalities are diseases."<sup>648</sup> And they are not "diseases of appearance or of comeliness," as many in Mercuriale's times believed: they attack the harmony and health of the body precisely because comeliness is health.<sup>649</sup>

Skin diseases are of two kinds: those peculiar to the scalp – discussed by Mercuriale in book one – and those affecting the entirety of the skin (color, roughnesssmoothness, bulk) – treated in book two.<sup>650</sup> In the introduction to book two, the physician expresses one caveat: "Many diseases that occur in the skin originate elsewhere, and I will not discuss these but will limit myself to diseases that seem to originate in the skin itself or only a little deeper."<sup>651</sup> In book two Mercuriale only discusses pruritus, scabies, leprosy and the lichens. We can safely assume that the plague, syphilis, smallpox, and tumors were among those diseases that occur in the skin but that originate elsewhere, and that Mercuriale chooses not to include. We know, however, not only that he had a deep intellectual curiosity and concern for such ailments, but also that he was involved in public prevention and diagnosis of potentially epidemic diseases. In his treatise on children's diseases he thoroughly discusses smallpox stressing its appalling effects on the skin.<sup>652</sup> Another example of Mercuriale's interest for diseases that develop on the skin, but come from elsewhere is his Medicina Practica, a collection of treatises on disease and therapy edited and published for the first time posthumously in 1617. This treatise

<sup>&</sup>lt;sup>648</sup> Sutton 13

<sup>&</sup>lt;sup>649</sup> Sutton 13

<sup>650</sup> Sutton 11

<sup>&</sup>lt;sup>651</sup> Sutton 89

<sup>652</sup> Mercuriale [1601]1.2

differs from other contemporary medical textbooks, among other things, in that it includes a rather long (27 pages) section on syphilis. The Medicina Practica also includes a treatise on the plague, *De peste*, a transcription of Mercuriale's lectures on the plague that struck the Veneto region in 1576, published by his disciple Girolamo Zacchi in 1577. It is very interesting, points out Siraisi, that Mercuriale chose to lecture on the plague in early 1577, because in June of 1576 Venetian authorities had asked for his advice concerning an outbreak in the city. After seeing patients and assessing the situation, Mercuriale concluded that the disease at hand was not the plague and advised against any quarantines. Unfortunately, a horrific epidemic broke out within a month and the physician suffered public embarrassment.<sup>653</sup> In addition to this, in *De peste*, Mercuriale errs catastrophically once again as he announces that the plague in the Veneto is extinct forever. As a counterbalance to these two errors of judgment, Siraisi adds that, "conservative as his medical treatment was in most respects, [Mercuriale] was nonetheless among those who explicitly endorsed Fracastoro's theory of contagion,"654 by means of physical contact with infected particles. This view was still very contested at the time, as one can see, for example, in Thomas Lodge's *Treatise of the Plague* (1603) (a translation of a French treatise) where the Hippocratic-Galenic theory of bad airs, corrupted vapors and miasmatic contagion still prevailed as the most viable explanation for epidemics.655

Mercuriale's pioneer work on skin and skin-related diseases shows that towards the end of the sixteenth-century the study of the skin was becoming more and more

<sup>653</sup> Siraisi [2008] 303

<sup>654</sup> Siraisi [2008] 303

<sup>&</sup>lt;sup>655</sup> Lodge 14

important as the organ of touch, and therefore as the gateway to the body for sensations but also for disease. Perhaps the most interesting example of this is Giulio Casserio's *Pentaestheseion* (Venice, 1609), one of the first treatises on the five senses, that begins with a remarkable vindication of touch as the most fundamental of all senses. In book one, dedicated to touch, Casserio discusses the different layers of skin and flesh: *cuticula*, *epidermis, membrana*, and *pellicula*, to conclude that the "means" of *tactus* is the *cuticula*, a fleshy membrane that constitutes the most superficial layer of skin, something that neither Aristotle nor Galen succeeded in realizing.<sup>656</sup> Touch is diffused throughout the body, through the skin, but also has a precise organ in the hands, whose *cuticula* exceeds in sensitivity and complexity.<sup>657</sup>

In spite of the evidence that supports notions concerning a new fascination with skin in the sixteenth century, some critics insist on the fact that anatomists actually continued to neglect the largest organ of the body. Claudia Benthien argues that: "the history of anatomy can thus be read as reverse archaeology, a paradoxical uncovering of layers in which the deepest strata were conquered first and the gaze returned only gradually to the surface."<sup>658</sup> As seen in the case of Vesalius, Fernel and, of course, Mercuriale, this is not at all an accurate claim. Especially interesting is the case of Italian anatomist and historian Tommaso Minadoi, who wrote extensively on skin and also on smallpox, albeit siding with Galen against Mercuriale, arguing that skin afflictions were a

<sup>&</sup>lt;sup>656</sup> Casserio 38

<sup>&</sup>lt;sup>657</sup> Casserio 45

<sup>&</sup>lt;sup>658</sup> Benthien 53. Dagognet proposed an anti-Vesalian approach (from the core back to the periphery) (Dagognet 7-10). Anzieu agrees with this narrative: "Since the Renaissance, Western thought has been obsessed with a particular epistemological conception, whereby the acquisition of knowledge is seen as a process of breaking through an outer shell to reach an inner core or nucleus. This notion has now been exhausted." (Anzieu 9).

matter of hygiene and cosmetics.<sup>659</sup> Also in support of this revision of the long-standing belief that the skin was neglected until the nineteenth century, historian Joseph Ziegler points to Juan de Valverde de Hamusco's Historia de la composición del cuerpo humano (1556), whose frontispiece shows the dissected cadaver "holding up his own skin like a trophy." This, says Ziegler, is yet another proof that "the notion of skin as organ first emerged in Western imagination around that time."660 But Valverde de Hamusco's work is not the only example of this curious motif. Well into the seventeenth century, the frontispiece of Alexander Read's Manuall of the Anatomy or Dissection of the Body of Man (1638) portrays the extended skin of a cadaver as drapery where the title and author of the book are inscribed. This is also the case in Nathaniel Highmore's Corporis humani disquisitio anatomica (The Hague, 1651), as well as in Bartholin's Anatomia Reformata (1651), where the skin – apart from being the subject of the first two chapters of book one - is the frontispiece on which author and title read.<sup>661</sup> Finally, not a few copies of medical books bound in human skin have survived from the early modern period, including a 1568 edition of Vesalius's *De humani corporis fabrica*.<sup>662</sup> It seems to me that this curious fascination with flayed skin can be understood from, at least, three different angles.

<sup>&</sup>lt;sup>659</sup> In his *De humani corporis turpitudinibus cognoscendis et curandis* (Padua, 1600) Minadoi argues, faithfully that afflictions of the skin are *turpitudines* (desfigurements) and not diseases, since skin is not a body part (Minadoi [1600] 1.6 and 1.9). Interestingly, Minadoi also wrote a book on smallpox (*De variolis et morbillis*, Padua, 1603) where he makes sure to clarify that the visible signs that the disease leaves on the skin do not mean that it is a skin disease (Minadoi [1603] chapter 6).

<sup>&</sup>lt;sup>660</sup> Ziegler 511

<sup>&</sup>lt;sup>661</sup> Bartholin's treatment of the skin (Book 1, chapters 1-2) shows that by the mid-seventeenth century the notion of *cutis* as *tactus instrumentum* and *integumentum corporis commune* was a standard one in anatomy manuals (Bartholin 13).

<sup>&</sup>lt;sup>662</sup> This curiosity, owned by a Mr. William Easton Louttit Jr. of Providence, Rhode Island, "bears a label reading *humana cute vestitutus liber*" (Connor 44). The practice of binding books in tanned human skin, known as "anthropodermic bibliopegy," continued in England until the Victorian period.

First there is the old Hippocratic-Galenic notion that the skin is the envelope of the body. Such a notion acquires a whole new meaning in the age of dissection, and the skin becomes a trophy that the explorer of the insides of man, exhibits as one of his most precious spoils. It need not surprise us then that, in sixteenth and seventeenth century anatomical iconography, the envelope of the body becomes the cover of the book on the body. Second, at a time when the scourge of deadly skin-disfiguring diseases was reaching levels of extreme public alarm, and new revolutionary theories of contagion determined that the skin – the porous and permeable organ of touch – was the gateway into the body, it makes sense that flayed skin becomes a symbol for the importance of a long-neglected bodily organ that, as it turned out, plays such a crucial role in the cycle of health-contagion-disease and its outcome, be this death or healing and scarring. Finally, the skin is a principle of human identity. When the body is stripped of its skin so that the inner organs can be analyzed, it loses its identity, its humanity, and becomes nothing but a cold, dead and very complex mechanism to be anatomized. Exposing the skin of a dissected cadaver reminds the reader, the student, and the anatomist that they are dealing with individual human beings. In *De humani corporis fabrica*, Vesalius tells a story that illustrates beautifully the connection between skin and identity, as well as the decorum of the anatomist. It so happened once that, in his constant search for fresh corpses to dissect, he was offered the body of a recently deceased young woman. Upon finding out that the woman had been romantically involved with a priest of the parish that had donated the body, Vesalius decided to flay the corpse completely before dissecting it so that no one could recognize her identity.<sup>663</sup>

<sup>&</sup>lt;sup>663</sup> Vesalius 538

During the years she spent sitting in on anatomy classes, Nina Jablonski, professor of Anthropology at Pennsylvania State University, observed that new students usually got scared when they first had to manipulate and cut a dead body, but as soon as the skin was off they felt at ease. "The cadaver is human, but it is not a person," concludes Jablonski in the introduction to her work on the natural history of skin.<sup>664</sup> The notion of *persona* ("mask" in Latin) associated with skin cannot be more relevant to the issues that concerned early modern intellectuals. A mask is a contraption that conceals and reveals at the same time. It conceals and safeguards an interiority, but in doing so it constitutes the only visible and tangible expression of that interiority. Early modern intellectuals believed that they could learn a tremendous lot about human beings by focusing on the wrapping of the body. The skin was becoming in their eyes the main bearer of individuality and identity. Nowhere is this clearer than in the many treatises dedicated to physiognomy, metoposcopy and chiromancy, which this period produced. It is there that I would like to direct the attention at this point.

## **Before Skin**

In the context of the anatomical revolution of the sixteenth century, physicians began considering the importance of skin as a crucial and complex bodily organ subject to pathologies and worthy of dedicated attention. Skin was the battle ground where the organism fought its wars against some of the most terrifying diseases of the time, and as such it often bore deforming stigmata and defacing craters that maimed its naturally

<sup>664</sup> Jablonski 5

smooth, permeable complexion. The medical discovery of the realm of the skin bears one crucial resemblance with that of the inner body: it is the product of dissection, and therefore the product of a subcutaneous journey from the surface into the depths of human anatomy. The more they peeled, the more anatomists learned about the particularities of the skin. This, however, was not the only mark of a renewed concern with skin in early modern Europe. As a matter of fact, in the eyes and hands of many intellectuals, the very surface, that which lies before the skin, was also a world worth exploring.

Throughout early modernity the skin becomes a, if not *the* universal mark of individuality. This is apparent in the growing habit to carefully study and describe scars and marks in the body, in order to recognize people for legal purposes, for example. More interestingly, though, marks in the body and the particulars of the geography of each individual's skin correspond, in the views of many learned men of the time, to moral and spiritual characteristics. Physiognomy, the discipline that studies the correspondences between appearance and personal mores, was an ancient form of knowledge, but in early modernity it fusions with the new observational-descriptive approach to the human body, and is enriched by the groundbreaking advances in human anatomy. According to historian Joseph Ziegler, "the only example in learned physiognomy before 1500 of treating cutaneous marks other than wrinkles as physiognomically significant" is Michele Savonarola's *Speculum Physionomiae*, written some time before 1450.<sup>665</sup> According to Savonarola, who was a professor at Padua, "the well tempered person has fine, brilliant

<sup>&</sup>lt;sup>665</sup> Ziegler 530. "Scars, moles, freckles, birthmarks and other spots hardly interested the medieval and early renaissance physiognomers (Ziegler 531)." Porter adds, "Savonarola's *Speculum Phisionomia* continues the process of the medicalization of physiognomy (Porter 73)."

skin and the morally depraved person has dry skin, wrinkled forehead and black spots.<sup>3666</sup> Sixteenth and seventeenth century studies on physiognomy, albeit continuing the work of classical and medieval physiognomists, show a more evident concern with anatomy and particularity.

Physiognomy studies the connection between a person's character and their physical appearance, in particular the appearance of their face. Commonly, the practice was used as divinatory. The connection between the study of the skin and physiognomy is therefore and, to a certain extent, obvious. In fact, throughout history many physicians who were particularly interested in the skin, and in diseases that gravely affect it, also engaged with physiognomy. As a matter of fact, the very first references to physiognomy are to be found among Hippocrates's fragmentary writings on skin-ravishing epidemics. So too, Rhazes, Avicenna, Albertus Magnus and Pietro d'Abano, four medieval physicians who paid particular attention to the skin wrote about physiognomy.<sup>667</sup> Another ancient discipline that is related to physiognomy, chiromancy – divination by examining the lines of the hand – also received a great degree of enthusiasm in the period. And the sixteenth century even produced a new practice, metoposcopy, or divination by a careful examination of the lines and wrinkles of the forehead. The first work of metoposcopy was Tadeas Hájek's Aphorismorum metoposcopicorum libellus unus (Prague, 1562). Other examples are, Rodolphus Goclenius's Contemplatio (1603), Jean Taxil's Astrologie et physiognomie en leur splendeur (1608),<sup>668</sup> and Samuel Fuchs's

<sup>666</sup> Savonarola 54rb-58rb, in Ziegler 530

<sup>&</sup>lt;sup>667</sup> For more see Baroja and Porter.

<sup>&</sup>lt;sup>668</sup> Taxil defines physiognomy as the lore of the "laws, or secrets of nature," and divides it in three branches: metoposcopy, physiognomy and chiromancy (Taxil 2).

*Metoposcopia et Ophtalmologia* (1615). In Hájek's foundational work the science is defined as "*ars divinandi ex fronte*,"<sup>669</sup> *frontis* being the space between the hairline and the eyes. For Jean Taxil, however, metoposcopy, the art of reading "*l'interieur de l'homme*" by studying the geography of a person's face (not just the forehead), was the main part of physiognomy.<sup>670</sup>

In his very thorough and recent study of the phenomenon of physiognomy, Porter concludes that this type of science, along with its epiphenomena (ie. chiromancy and metoposcopy) had two main objectives: on the one hand, by looking at the particularities of the skin one could gain access to the moral and spiritual particularities of a person; on the other hand, by attending to an established connection between certain particularities of the skin and certain planets, one could also predict with a considerable degree of accuracy a person's future. The first notion, the skin as "window to the soul," would prove to suffer under the yoke of censorship due to the threatening divinatory character of the second. Among the many things that the traits of the face, the lines of hands or forehead could announce was a proclivity to fall victim to disease. In 1599, Livio Agrippa da Monferrato published his *Discorso sopra la natura e complessione humana, et alcuni preservativi dal mal contagioso di peste*, confirming the strong connection between physiognomy and contagion. In Porter's view, "these books signal the fact that the early modern understanding of the plague was distinctly physiognomical in

 $<sup>^{669}</sup>$  Hájek 29. Massimo Rizzardini defines metoposcopy as: "reading the forehead [as a] microcosmic mirror that reproduces the planetary influences on man (...) the lines of the forehead correspond to different planet and signal specific qualities of the person" (Rizzardini 614).

<sup>670</sup> Taxil 3

conception, in so far as particular temperaments and particular families were thought to be more susceptible to developing the plague."<sup>671</sup>

Some of the most widely read physiognomists of the early modern era were Bartolomeo della Rocca (aka Cocles), Patrizio Tricasso, Girolamo Cardano, Rutilio Benincasa, Giovanni da Indagine, Andrea Corvo, Michelangelo Biondo, Paolo Pinzio, and Thomas Hill. But, in the words of Baroja, "undoubtedly the prince of physiognomists in the sixteenth and seventeenth centuries was Giambattista della Porta."<sup>672</sup> Throughout his life della Porta (1535-1615) composed a physiognomical tetralogy. The first work, published in 1586, is also his most famous one, the *De humana physiognomia*, which saw over fifteen editions in less than a century. The bizarre *Phytognomonica*, a study of the physiognomy of plants, animals and minerals and their resemblances to human physiognomy came next in 1588. In 1603, the author published Coelestis physiognomonia, and finally, and posthumously, his Della Chirofisonomia, on the physiognomy of hands, saw the light in 1677. Although his works enjoyed enormous popularity, della Porta encountered trouble with the religious authorities that made it painfully difficult to get the required printing permits, and that eventually prevented him from publishing the last installation of his opera physiognomonica. Given the close relationship between physiognomy and divination, pope Sixtus V signed a bull in 1586 (the Coeli et Terrae) that officially forbade all divinatory arts - explicitly including chiromancy. This bull would prove highly detrimental to della Porta's enquiries. The Neapolitan virtuoso first encountered ecclesiastic opposition, from the Venetian

<sup>&</sup>lt;sup>671</sup> Porter 104

<sup>&</sup>lt;sup>672</sup> Baroja 107. Della Porta enjoyed a fantastic reputation among his contemporaries, and was considered by some to be "the greatest natural scientist of his age" (MacDonald 397).

inquisition, when he asked for permission to publish an Italian translation of *De humana physiognomia* in 1592. His request was denied, and he was sternly warned not to attempt to publish anything without the permission of the Sacred Congregation of the Index. Disregarding this warning – the risk of antagonizing the religious authority was enormous for intellectuals, as Giordano Bruno's trial and execution in 1600 would soon prove – della Porta published the first Italian translation of his work on human physiognomy in Naples in 1598.

Although della Porta does not directly link the notion of physiognomy with particularities of the study of skin proper, his approach bespeaks a deep concern with outside appearance, and its relation to both inner and spiritual vicissitudes of any given body, that legitimizes the claim. Physiognomy, or physiognomony, is a method that can be applied to the human face, the forehead, the hands, and also to the overall outside appearance of humans, but also of animals, plants, stones and celestial bodies. The physiognomist's method is based on the observation of appearances; the appearance is a complex phenomenon that comprises skin, hair, moles, warts, birthmarks, freckles, color, texture, gestures, and particularities of all sorts; but it is a phenomenon, a wrapping aura of sorts, which lies before the skin proper, or the skin as object of medical study. In a way, the appearance is the skin of the skin, that very first layer that wraps the totality of a specific being, too subtle for the anatomist's hand, and too diffuse for his eye.

The first part of the tetralogy, *De humana physiognomia* (1586), establishes the theoretical foundations of physiognomy, which rely on the overwhelming permeability that exists between soul and body. This is clearly attested by passions and diseases, della Porta argues, that affect both body and soul symmetrically and contemporaneously. The

body is a book where the soul can be read, but also the soul is revealing in regards to the nature of the body. Della Porta talks about mutua consequatione between body and soul,<sup>673</sup> and such can be analyzed by considering the temperature of the body, its color, its pilosity, its humoral balance, or imbalance, its nourishment, and more. Towards the end of book one, della Porta provides a definition of physiognomy based on etymology: it is the science that reveals the rules of nature. Rules (regulae) are "almost laws" (quasi *leges*), since they are ordinations but not established by man.<sup>674</sup> These rules, articulated by what della Porta calls, the "physiognomonical syllogism," teach us to establish relationships between appearance (body) and soul, but also between different beings: "Hector is strong and has large extremities; the lion is strong and has large extremities; therefore Hector is akin to the lion."<sup>675</sup> The rest of the work is a descriptive catalogue of human characteristics that bespeak both spiritual conditions and familiarity with different animals, and it comes with fascinating illustrations of human faces next to the animal they most resemble, both in appearance and temperament. Della Porta was convinced that all of nature was linked together by the same characteristics, which were both physical and spiritual.<sup>676</sup> Physiognomy is, thus, a discipline for polymaths.

The second installation of della Porta's *physiognomia universalis* was first published in 1588. The *Phytognomonica* constitutes, in the words of Baroja, "a formal and general correlation between animal and human organisms and the structure of plants,

<sup>&</sup>lt;sup>673</sup> De Humana Physiognomonia 5

<sup>&</sup>lt;sup>674</sup> De humana Physiognomonia 26

<sup>&</sup>lt;sup>675</sup> De Humana Physiognomonia 26-27

<sup>&</sup>lt;sup>676</sup> As Lucia Rodler concludes in her history of physiognomy, della Porta's method is based on "comparison and analogy," and presupposes an outstanding degree of polymathy (Rodler 37).

in order to demonstrate the spiritual unity founded on morphological criteria."<sup>677</sup> The theoretical basis for della Porta's belief in universal correlation can be found in his very first, and immensely popular work: Magia Naturalis (1558). In book one lie the roots of della Porta's thought and natural philosophy. After establishing what magic is with a learned digression on *prisca theologia* and natural philosophy that takes him all the way back to the lore of the Persians and Indians, della Porta takes the time to distinguish black magic - used for evil purposes - from natural magic, which he calls the "truest philosophy."<sup>678</sup> According to this worldview, deeply steeped in Neoplatonism, all things in nature ultimately proceed from God, through a stratified process of descent, that della Porta assimilates to "the rings of Plato" in the *Ion*, or "the chain of Homer." This process by which beings are both generated and connected is what makes it possible for the magus to unveil the secrets of nature.<sup>679</sup> All material things are composed of elements and qualities, and these properties are, of course, material but they are also composed of other more abstruse qualities. The occult properties of things, those that pertain to the form, not the matter, are the most difficult to unravel, and they are precisely the ones that explain the laws of sympathy and antipathy.<sup>680</sup> These two laws are the basis for the universal physiognomy.

The *Phytognomonica*, divided into eight books, was only ever published in Latin and there are, at least, seven known editions of it in the century after its publication. If the *De humana physiognomia* had as principal goal to establish and describe the intrinsic

<sup>&</sup>lt;sup>677</sup> Baroja 110

<sup>&</sup>lt;sup>678</sup> De i miracoli I, 1

<sup>&</sup>lt;sup>679</sup> De i miracoli I, 5

<sup>680</sup> De i miracoli I, 9

connections between body and soul, this new work seeks to describe the chain of connections between humans and the rest of the natural world. Della Porta defines phytognomonica as "a method of investigating men and plants based on their parts and their lives."681 After establishing the physiological similarities between the human and vegetal realms (especially focusing on the disposition of body parts, the way nourishment is provided for in both, and the similar humors) della Porta goes on an exhaustive survey of the mineral and animal realms, on the premise that some outside traits, shared by members of all these realms, indicate the same inner qualities. Della Porta's methodology is that of the antiquarian; he follows Theophrastus, Dioscorides, Aristotle and other classical writers to find historical examples of his claims for universal similarities, but simultaneously he stresses with vigor, and describes with precision the uniqueness of particularity. The work includes illustrations that show the similarities between human eyes and disk flowers, certain types of bushy plants and heads of hair, roots and hands, fruits and bodily organs such as heart, or lungs, as well as plants and roots and specific animals. According to the laws of natural sympathy and antipathy, della Porta argues that the appearance, color, texture, and temperament of any given being indicates, by means of similarities and differences, to which group it belongs.

Humans, however, are not only akin to plants, animals and minerals. Planets and celestial bodies also belong to the same Homeric chains, or Platonic rings that link all forms of existence together. The third part of della Porta's universal physiognomy, the *Coelestis physiognomonia* was published in 1603 even though the manuscript was ready by 1594. Della Porta was suspected of dabbling in the divinatory arts, therefore in the

<sup>681</sup> Phytognomonica I, 22

preface he makes sure to clarify his position: "whatever truth there is in astrology it comes from physiognomy." Astrologists say that human behavioral disposition and destiny comes from the planets, but della Porta staunchly rebukes this; it comes from the temperaments of the human body, or a harmonious combination of qualities, temperatures, and balances.<sup>682</sup> The study of the planets is relevant because they are made of the same components as the body, but the Neapolitan virtuoso goes out of his way to refute the divinatory assumptions of astrologists. Beyond the veil of a refutation of divinatory astrology, however, della Porta seems to be writing what he really wants to write about: astrology.

When it comes to temperaments, the combinations of warm and humid, he argues, are always the healthiest ones. These combinations are associated with Jupiter, and so are diseases of the blood, as well as smallpox.<sup>683</sup> The link between bodily dispositions and the planets is one of mere sympathy. For example, the melancholy complexion does not come from Saturn (a planet which is cold and dry), but from an imbalance in the body. Melancholy people tend to be extremely ugly, have dry skin<sup>684</sup> and poor eating habits (they also stink like old goats).<sup>685</sup> However, once this caveat is made della Porta feels free to speculate about possible ways in which the similarity between certain people and certain planets can foretell a person's future. The fifth book is dedicated to marks on the

<sup>&</sup>lt;sup>682</sup> *Coelestis physiognomonia* 189. As for the temperaments, Della Porta seems to either follow or share Jean Fernel's notion of them. The French physician in the *Physiologia* had defined them as: "The special nature of a temperament is closely linked to the borders it shares with the elements, and is in a way the fruit and offspring of a mixture. (...) The temperament is not the mixture itself but the pattern of it (*Physiologia* 215).

<sup>&</sup>lt;sup>683</sup> Coelestis physiognomonia 2, 8-9

<sup>&</sup>lt;sup>684</sup> Coelestis physiognomonia 196-197

<sup>&</sup>lt;sup>685</sup> Coelestis physiognomonia 212

body and discusses moles, warts, birthmarks and others, assuming that they can be the product of an obsession of the mother during pregnancy.<sup>686</sup> Della Porta also goes over the divinatory significance of moles, teeth stains, white marks on nails considering them a product of Nature, not of the planets: "Oh great generosity of Nature, even from the time when we're born she gives us documents, and prints in our own bodies signs of what is to follow."<sup>687</sup> Della Porta's method is also based on analogy and sophisticated tables of correspondences, like his overall universal physiognomy, and it proceeds as follows: a specific mole indicates that the person must have another mole in another specific body part. As an example, the author mentions a mole on the lips, which means that there must be one on the testicles, or on the labia if it is a female; such moles are a sign of gluttony.<sup>688</sup>

Della Porta's dialectical acrobacies to protect physiognomy from accusations of being a divinatory practice did not work for the fourth installation of his tetralogy, *Della Chirofisonomia*, a treatise on the physiognomy of hands. The particulars of this new discipline were just too similar to those of chiromancy, and in the bull of 1586, Pope Sisto V had explicitly forbidden this practice, as well as any books that dealt with it. But chiromancy had been an intellectual outcast for quite some time. In the thirteenth century Pietro d'Abano rejected it arguing it was incompatible with physiognomy, and Martín del Río, the famous sixteenth century watchdog for the Catholic Church, associated it with the gypsies, who were seen as a disruptive human element to social order. All the authors

<sup>&</sup>lt;sup>686</sup> Coelestis physiognomonia 311

<sup>&</sup>lt;sup>687</sup> Coelestis physiognomonia 309

<sup>&</sup>lt;sup>688</sup> Coelestis physiognomonia 5.8

who had tried to revive it had been added to the Index: Bartolommeo Cocles, Andrea Corvo, Patrizio Tricasso, Antioco Tiberto, and Giovanni da Indagine.

Della Porta wrote Della Chirofisonomia between 1608 and 1610, but did not receive permission of the Sacred Congregation of the Index to publish it in his lifetime. Cardinal Bellarmine was in charge of assessing the work, and eventually denied it publication rights in 1610. Francesco Stelluto requested permission to publish it in 1637, over twenty years after della Porta's death, but the request was again denied. Finally, in 1677 Pompeo Sarnelli published the Italian translation of it. The original Latin manuscript was found among William Osler's private collection, at McGill University, and published for the first time in 2003. In Della Chirofisonomia della Porta makes strenuous attempts to subordinate the dangerous methods and principles of chiromancy to those of physiognomy. His first editor Pompeo Sarnelli, writing an introduction to the work over sixty years after della Porta's death, is still concerned about chiromancy, and defines chirophysiognomy as: "A science which, by means of the lines of the hand, sheds light on the temperament and complexion of each person; and from this one can speculate with some degree of probability how long or how brief their life will be, and what the machinations of their soul might be."689 The key words, of course, are "speculate," "some degree of probability," and "might."

In the preface to his last work on physiognomy della Porta trashes Tricassio, Corvo and Cocles considering them charlatans and "buffoons" (*saltimbanca*),<sup>690</sup> who ruined the prestigious lore of the hands for everybody else with their divinatory claims.

<sup>&</sup>lt;sup>689</sup> Della Chirofisonomia 83

<sup>&</sup>lt;sup>690</sup> Della Chirofisonomia 90

The bad reputation that the study of hands had acquired discouraged him for a long time, the author confesses, but remembering that Aristotle discussed the meaningful lines of the hands,<sup>691</sup> he decided to give it another chance. The first order of business was to separate truth from falsehood, and nature from superstition. Considering that God has assigned an order to all things, the author decided to appeal to the principles of (human, celestial and vegetal) physiognomy in order to unravel the mysteries of hands. He conducted research for his work observing the hands and feet of executed criminals drawn from the gallows, but also those of decent men buried in cathedral. He also observed living subjects, among which honest members of his community as well as convicted felons in local jails.<sup>692</sup> His approach is that of the natural philosopher enriched by that of the humanist; he relies on his own observation and on the observation of natural philosophers from the past. As it had been in the previous works, the approach is also comparative.

In order to not fall in charlatanry, della Porta sticks to his scientific method and begins by comparing human hands with animal hands trying to find principles that go beyond species in nature.<sup>693</sup> He thoroughly describes the five fingers: *pollex* (the thumb, or "powerful" finger, from the Latin verbs *pollere* and/or *potere*), *index* (the one we use to indicate and greet), middle finger or *impudico* (often used to express "something dirty"), ring finger (directly connected to the heart by a nerve) and the "pinky," or

<sup>&</sup>lt;sup>691</sup> Historia Animalium 1.15

<sup>&</sup>lt;sup>692</sup> Della Chirofisonomia 91-92

<sup>&</sup>lt;sup>693</sup> Della Chirofisonomia 1.3

*auricolare* (since we use it to clean our ears [sic]).<sup>694</sup> He then goes over the theory of the seven *tuberculi* (or "mounts"): the protuberances on the palm of the hand under the fingers. Each one of them is associated with a planet: the one under the thumb is the mount of Venus, under the index we have that of Jupiter, under the middle finger there is the Sun, under the ring finger, of course, the mount of Saturn, and under the pinky, Mercury. Also under the pinky finger there is a big area called the mount of Mars, and the bottom of the hand is the mount of the moon.<sup>695</sup> The shape, size, texture and color of mounts reveal the different characteristics of people. The saturnine person's hand, for example, has long fingers and dry skin.<sup>696</sup> The jovial person's hand has very rough skin.<sup>698</sup>

Giambattista della Porta's meticulous study of physiognomy, conducted through direct observation, experimentation, induction, comparison, and enriched by the study of past authorities on the matter, turns the dichotomy "appearance-reality" on its head. If appearance had been traditionally considered a deceitful veil that hides reality, and reality is that which lies beneath, inside, or beyond what the senses can perceive, with della Porta's universal physiognomy they are both put at the same level, inexorably linked in *mutua consequutione*.<sup>699</sup> If the vertical hierarchy of the five senses is put in question among early modern intellectuals, who are more concerned with how the senses

<sup>&</sup>lt;sup>694</sup> Della Chirofisonomia 1.2

<sup>&</sup>lt;sup>695</sup> Della Chirofisonomia 1.4-11

<sup>&</sup>lt;sup>696</sup> Della Chirofisonomia 1.12 (108)

<sup>&</sup>lt;sup>697</sup> Della Chirofisonomia 1.13

<sup>&</sup>lt;sup>698</sup> Della Chirofisonomia 1.14

<sup>&</sup>lt;sup>699</sup> De Humana Physiognomonia 46

collaborate and compete as gateways to the world, it is precisely because the ontological difference between matter and spirit, soul and body is also put in question. Appearance, that complex phenomenon that exists before the skin, is not a mere surface one must trespass to get to "reality," instead it determines each individual's uniqueness, as well as their precise place in the world and their relationship to all other individuals. Appearance is the book from which the natural philosopher draws knowledge about nature and its rules, about providence, and about God. The notion of the two books (nature and scripture) had had a long history in Western Europe. Early modern intellectuals, however, and perhaps many of them without even knowing it, were slowly but surely making the appearance of things the *sola scriptura* of natural philosophy.

## Quincunx

Among the many and diverse works that Giambattista della Porta wrote in his lifetime, there is one of particular interest to me at this point. *Villae*, first published in 1592, is an incredibly learned antiquarian study on how to design, curate, plant, and maintain gardens. In book four (chapter 13), della Porta addresses the quincuncial order, an archaic way of planting trees in groups forming a cross in the manner of the number five in dice (:::). Such order, far from being a particularity of artificial plantations, can be seen "in every single thing and creature of nature."<sup>700</sup> Following Benoît de Court's treatise on gardens, the *Hortorum libri triginta* (1560), della Porta quotes Cicero, Virgil and Quintilian among others on the importance of the quincuncial order of plantations,

<sup>&</sup>lt;sup>700</sup> Villae 197

but the idea that the pattern extends to all of nature seems to be his, and seems to fit in perfectly with his notions of universal sympathy and trans-species physiognomy, as developed contemporaneously in his *opera physiognomica*. Unfortunately della Porta did not go deeper into this idea, leaving the task to one of his brightest readers.

Over six decades after *Villae* was published, and four after della Porta died, an English polymath wrote a short and strange treatise on the quincunx, entitled *The Garden* of Cyrus, or the Quincunciall, Lozenge, or Network Plantations of the Ancients, Artificially, Naturally, Mystically Considered (1658). Thanks to a 1940 article by Jeremiah S. Finch, we know that Sir Thomas Browne borrowed the topic, many basic notions, the title, and even the frontispiece from della Porta's Villae, as well as - to a lesser extent – from Benoît de Court's *Hortorum libri triginta*.<sup>701</sup> Browne published *The* Garden of Cyrus along with another bizarre work of great beauty: Hydriotaphia, or Urne-Buriall, an antiquarian exploration of funerary habits throughout history that develops into a lyrical reflection on life and death, the inexorable nature of caducity and the overpowering anxiety produced by the prospective of eternal oblivion. The connection between the two works – both of which are quincuncially divided in five chapters – is made clear in the commendatory letter to Nicholas Bacon that introduces The Garden of Cyrus: "That we conjoin these parts of different subjects; or that this should succeed the other your judgment will accept without impute of incongruity; since the delightful world comes after death, and paradise succeeds the grave. Since the verdant state of things is the symbol of the resurrection, and to flourish in the state of glory we must first be sown

<sup>&</sup>lt;sup>701</sup> Finch [1940]. Both books were in Browne's own personal library. Benoît de Court's (or Curtius) work discusses the quincunx very briefly in book 10, chapter 13, as a specific manner of planting trees; and includes the famous quote by Quintilian that Browne includes in the frontispiece (de Court 267-268).

in corruption."<sup>702</sup> Indeed, *The Garden of Cyrus* is presented initially as a work on gardens and plantations, and begins with the quintessential garden, which is, of course, the Garden of Eden.

Since its publication *The Garden of Cyrus* has baffled and annoyed readers; critics hardly know what to do with it. It has been considered strange, majestic, irrelevant, superb, mesmerizing, and just plain bad; it has been read as a piece of prophetic writing, as a praise of the constant dance of order and chaos, a reaction against the authoritarian regime of Oliver Cromwell, as a platonic essay on generation, and as an abstruse and wordy flight of Browneian fancy.<sup>703</sup> Interesting though these readings be, they all neglect the most important question, the *ti esti*: What *is* the quincunx? It is an artificial order, yes, a ubiquitous disposition, and a recurrent pattern. But the quincunx is much more than that: it is the stroke that sketches reality, the design that contrives universal physiognomy. Not unlike his predecessor Giambattista della Porta, Browne explores the depth of the surface, the physiognomy of nature, and elaborates a unique yet asystematic epistemology based on the evidence gathered by the senses – particularly sight and touch. In Sir Thomas Browne's unique world-view the quincunx is the skin of the real.

In an article published in the 2008 collection *Sir Thomas Browne: The World Proposed* Reid Barbour explores Browne's lifelong concern with skin. Barbour also happens to have discovered the topic of Browne's doctoral thesis, defended at the University of Leiden in December of 1633. The topic was smallpox. As Barbour points out, whether Browne chose the topic or it was assigned to him by his professors "an

<sup>&</sup>lt;sup>702</sup> Browne 321

<sup>&</sup>lt;sup>703</sup> See Bennett 208; Huntley [1982] 142; Murphy 242; Preston 160

interest in skin and the diseases that afflict it appears elsewhere in his writings.<sup>7704</sup> After his years abroad, having studied anatomy in the most important medical schools of the continent – Montpellier, where he met Lazare Rivière, a physician who placed enormous importance on skin diagnoses,<sup>705</sup> Padua, and Leiden – Browne went back to England with an invaluable share of experiences, including expertise in the skin-ravishing smallpox. Among the things Browne saw in the Continent – and on which he later reminisced – some of the ones that made a stronger impression in him had to do with vicissitudes of the skin. For example, children afflicted by the 'morgellons'<sup>706</sup> – a mysterious skin condition characterized by the appearance of thick hairs in the back, and a continuous itch – and mummified bodies with skin that was dry as parchment, conserving the physiognomical traits of the deceased.<sup>707</sup>

Browne's medical interest in skin accompanied him throughout his life. This is evidenced in some of the letters to Edward Browne, his son who practiced medicine in London. In a letter from June of 1676 – Browne was seventy years old – he refers to people who are "goose skinned" and observes that this characteristic might be a consequence of not having not suffered the *lues venereal*, i.e. syphilis.<sup>708</sup> One of the longest letters to Edward, from August 7<sup>th</sup> of 1676, is entirely dedicated to skin. In it, Sir Thomas Browne goes over some basic taxonomies. The *cuticula* "is conceived to bee a

<sup>&</sup>lt;sup>704</sup> Barbour [2007] 39

<sup>&</sup>lt;sup>705</sup> Barbour [2008] 283

<sup>&</sup>lt;sup>706</sup> Browne Letter to a Friend in The Major Works 397

<sup>&</sup>lt;sup>707</sup> Museum Clausum in Miscellaneous Writings 140. See also Letter to a Friend in Major Works 398, and the fabulous Fragment on Mummies in Miscellaneous Writings 459-463

<sup>&</sup>lt;sup>708</sup> Browne, Letters 70-71

kind of efflorescence of the skinne made like the thinne skinne filme or web upon milk & broaths when they remit their heat & beginne to coole, and somewhat resembleth the pellicules or tenuous skinnes of onyons," whereas *cutis* is the skin proper.<sup>709</sup> In what follows Browne shows that his understanding of the nature and purpose of skin was completely aligned with the Galenic-Vesalian tradition to which also Mercuriale and Haffenreifer - Browne's two main sources - subscribed. Skin is "the common tegument of the body," that "encloses," "enfolds," and "wraps up" all the rest. It is furthermore porous, and permeable thus allowing perspiration and the elimination of excremental fluids. The complexity of the skin, its different layers and their uses are, Browne reminds his son, a crucial matter for physicians, and one needs to experience it first-hand. Therefore he recommends boiling hot water, or even *acqua fortis* – a solution of nitric acid in water that is extremely corrosive – to separate *cuticula* and *cutis* in a cadaver, as he himself had done; but to avoid *cantharidin* – a blister-inducing substance – since, in his own experience, it does not properly separate the different layers.<sup>710</sup> This seemingly banal detail is incredibly telling, since it shows Browne instructing his son on the vital importance of first-hand experience. A faithful heir to the fathers of the anatomical revolution, with whose successors Browne had trained in Montpellier, Padua, and Leiden, the Norwich physician reminds the new generation, that the key to success in the science

<sup>&</sup>lt;sup>709</sup> Letters 79

<sup>&</sup>lt;sup>710</sup> Letters 80. In the Observations in Anatomy, edited with Browne's Miscellaneous Writings, the Norwich physician insists on the importance of having experience dissecting bodies, and among other topics of interest he goes back to skin and insists that the best way to separate the *cuticula* is "by fire or hott water." He also points out that the *cutis* "consisting of many fibrous particles & membranes hath a signall propertie to make glue" (Browne, Miscellaneous Writings 304-305).

of knowing, diagnosing and healing is a strict collaboration between the eye and the hand.

Without a doubt, his years as a student in Europe taught Browne that first-hand experience with cadavers was of the utmost importance for a physician, especially when it came to the most difficult of all dissections, that of the skin. As we saw in chapter two, physicians liked to remind their readers, and themselves, of the importance of the touch of the hand. Upon discussing the qualities of the skin Browne adds that it is also the "generall organ [...] we commonly use to distinguish of the tactile qualities."<sup>711</sup> In the notes published posthumously as *Observations in Anatomy* the Norwich physician expands on this notion as he enumerates the properties of skin:

To bee the primarie instrument of *tactus* or feeling, and thereby to distinguish of the tactile qualities of heat, cold, moist, dry, smoothness, roughness and the like; for though there be a sense of feeling in inward membrane parts yet the primary and general organ is the skin wherin the nerves are dispersed, and some parts of the skin more sensible than others, as the thinner parts, the hands and fingers, and some tempers more exquisite than others.<sup>712</sup>

Skin, however, was not just an object of anatomical interest to Browne. Throughout his life and work he continued to ponder it in diverse and exciting ways. As I pointed out in chapter two, Browne's first work, *Religio Medici* (written less than two years after he received his doctorate) finds the young physician insisting once and again on the actual and symbolic importance of hands as intelligent instruments that link the human and the divine, that create, that know and that heal. Browne makes a point of

<sup>711</sup> Letters 81

<sup>&</sup>lt;sup>712</sup> Miscellaneous Writings 304

reminding the reader in this early work that he himself had thoroughly examined our inner parts, and exhausted the mysteriously and curiously intricate "fabricke of man"<sup>713</sup> by "raking into the bowels of the deceased" with his own hands<sup>714</sup> only to discover frailty, imperfection and expiration. "I that have examined the parts of man and know upon what tender filaments that Fabrick hangs, doe wonder that we are not always [sick]."<sup>715</sup> Thus, since one cannot discover in the dark depths of human anatomy the seat of the rational and immortal soul, which God laboriously modeled within us making of us a "substance like himself,"<sup>716</sup> this proves to Browne that what makes us men is the product of an immaterial touch of the hand of God. And traces of this masterpiece of divine craftsmanship are to be found in the skin, "for there are mystically in our faces certaine characters which carry in them the motto of our Soules."<sup>717</sup> But Browne goes further:

The finger of God hath left an inscription upon all his workes, not graphical or composed of letters, but of their severall formes and constitutions, parts and operations which aptly joined together doe make one word that doeth expresse their natures (...) Now there are besides these characters in our faces, certaine mysticall figures in our hands in our hands (...) delineated by a pencil that never works in vaine; and hereof I take more particular notice because I carry that in mine owne hand, which I could never read of, nor discover in another.<sup>718</sup>

- <sup>714</sup> RM 1.38
- <sup>715</sup> RM 1.44
- <sup>716</sup> Ibid
- <sup>717</sup> RM 2.2

<sup>718</sup> Ibid

<sup>713</sup> Religio Medici 1.36

Our skin is the canvas of God and from it we can learn about our own mysteries, but more importantly it reveals to the trained and devout eye, and to the devout hand, one of the darkest mysteries of the Divine Nature, God's most exceptional work: the sensible making of man. Here Browne is hinting the mystical implications of physiognomy, which are to be extracted from careful examination of the skin. The instrument is the eye, but an eye especially trained to discern texture. In Browne's metaphysical physiognomy, as in della Porta's *physiognomia universalis*, the epistemological principle is as visual as it is tactile: both senses work in tandem.

Browne's *Notes in Natural History*, published posthumously as part of the *Miscellaneous Writings*, include some scattered notions of physiognomy such as the analogical correlation between moles and other birthmarks, and colors, as we had seen in della Porta. Such beliefs, says Browne, "however undervalued I observe made out in the colors of parts of severall animals."<sup>719</sup> Immediately after there is a note on natural sympathy and antipathy, notions that Browne had fully endorsed already in *Religio Medici*,<sup>720</sup> followed by a passage on chirophysiognomy: "Great variety there is in the lines of the hand, almost no strict conformity."<sup>721</sup> The particularities of the skin determine who we are, and in what manners we are related to the world around us, as they bear testimony to the virtually inexhaustible variety in nature. The natural philosopher is, thus,

<sup>&</sup>lt;sup>719</sup> Miscellaneous Writings 337

<sup>&</sup>lt;sup>720</sup> Miscellaneous Writings 337, and RM 2.1

<sup>&</sup>lt;sup>721</sup> Miscellaneous Writings 337

a physiognomist whose object of study is the texture of reality.<sup>722</sup> Among the myriad aspects of the texture of the real that deserve attention, color is one of the most enigmatic.

"A greater division of mankind is made by the skinne than by any other part of the body, that is into white and black," Browne summarizes in one of his notes.<sup>723</sup> In the letter from July 1676, he repeats this idea as he urges his son Edward to carefully compare the *cuticula* and the *cutis* of black and white men. In doing so, Browne Jr. will find that the many differences are mostly superficial, and this is proven by the fact that black men have white scars.<sup>724</sup> This notion stresses the importance of the surface, as well as that of the *cutis*. Browne had had an interest in color and complexion since early on in his career. In book six of *Pseudodoxia Epidemica*, he tackles issues of skin pigmentation. He dedicates three chapters -more than he does to any other topic - to the causes of the "blacknesse of negroes," refuting the two most common beliefs, namely that it was caused by the scorching sun in sub-Saharan countries, and that it had been caused by a curse against Canaan and his progeny.<sup>725</sup> Browne proposes that "this [black] complexion was first acquired and evidently maintained by generation and by the tincture of the skin as a spermatical part traduced from father unto son."<sup>726</sup> Color in general, Browne admits, is one the biggest mysteries of science: "No man has yet beheld the nature of color under

<sup>&</sup>lt;sup>722</sup> In *Urne Buriall* Browne says: "Physiognomy outlives ourselves and ends not in our graves (*Major Works* 297)."

<sup>&</sup>lt;sup>723</sup> Miscellaneous Writings 303

<sup>&</sup>lt;sup>724</sup> *Letters* 75

<sup>&</sup>lt;sup>725</sup> Genesis 9:20-27

<sup>&</sup>lt;sup>726</sup> PE 404

whose glosse and vernish all things are seen."<sup>727</sup> From then on, the physician sets out to refute the two prevailing theories, using once and again the term "complexion," which, at the time, according to the Oxford English Dictionary meant "the natural color, texture, and appearance of the skin."<sup>728</sup> Sight and touch thus come together in the notion of complexion, as they did in the studies of physiognomy. The eye is the instrument, but it needs to be trained to methodically discern textures, which are the true object of study. Interestingly, in the very origin of the word color lie the notions of skin, texture, and tactility. The Latin word *color* derives from a Sanskrit word that means "the skin on the surface of milk;" the Greek word *chroma*, on the other hand, shares the same root with chros, "skin," and chrozein, "to touch a surface." As Connor points out in The Book of Skin, "color thus harbors the idea of something that both touches the skin, and is also itself a kind of second skin, a layer, film, or veil."729 For Browne, complexion is a synesthetic notion, apprehended by the eye, and based on direct, first-hand tactile experience. This experience, indispensable to the physician as well as to the natural philosopher, aims at discerning textures.

In the first half of the 1640's, as the civil war exploded and lacerated the fabric of England not unlike a skin-ravishing disease, Browne – who remained a staunch royalist through thick and thin – wrote and published *Pseudodoxia Epidemica* (1646),

<sup>&</sup>lt;sup>727</sup> PE 308

<sup>&</sup>lt;sup>728</sup> Complexion – literally "intertwining" – in the late Middle Ages and Early Modern period was often used to refer to bodily constitutions or conditions. The term starts being used to designate "the color, texture or condition of the skin (...) about the middle of the sixteenth century" (Connor 19).

<sup>729</sup> Connor 151

characterized by an Italian critic as Browne's "personal war" against error.<sup>730</sup> Also Pseudodoxia Epidemica is perhaps Browne's most Baconian work. In it, the physician subscribes to a notion of knowledge and science that is collaborative, experimental, and methodically skeptical. One could argue that the work is Browne's belligerent pars *destruens*: the main aim throughout it is to refute false beliefs, to banish the idols of the theater, and set the stage for the long, laborious and communal enterprise of true knowledge. The only constructive work of natural history published by Browne in his lifetime is, arguably, The Garden of Cyrus, published along with Urne Buriall. Both works are linked thematically, as Browne points out in the letter to Bacon. The first one deals with death, the second one with generation and life. But that is not all. Both works are divided in five chapters, and they both propose a bizarre and disconcerting game to the reader. *Hydriotaphia* starts as an antiquarian dissection of funerary practices through the ages, to suddenly become a melancholy reflection on life and death, peppered with mystical flights of fancy and lyrical raptures. The Garden of Cyrus, instead, is presented as a treatise on plantation techniques through the ages, and turns out to be an exploration of a specific pattern, the quincunx, or lozenge that turns out to be nothing short of the blueprint of reality. Browne announces in the very title of the work that he will consider the quincunx artificially, naturally, and mystically, or as Huntley points out, "in a Platonic progression from the lowest to the highest."<sup>731</sup> Browne, however, gives a twist to the traditional Platonic moral and ontological hierarchy: to him, the biggest cause of fascination seems to be the fact that the same pattern, the quincunx, can be found in anything from gardens to windows, from rocks to the tail of the beaver, from

<sup>730</sup> Mazzolini 575

<sup>&</sup>lt;sup>731</sup> Huntley 206

constellations to the design of the universe as a whole. The ontological *appartenance* of each singular object of study is of little relevance; what Browne wishes to stress is what remains the same throughout creation. He calls this the quincunx, and he clarifies: it is a texture.

Before the essay begins Browne includes a graphic of the quincuncial pattern made up from illustrations in both della Porta's and de Court's works. This design will be a roadmap for the whole work, since the image of the quincunx helps the reader visualize it in his or her mind every time Browne gives examples of the quincuncial pattern. Under the illustration Browne includes a quote from Quintilian, also included by della Porta: "What is more beautiful than the well-known quincunx, which in whatever direction you view it, presents straight lines?"<sup>732</sup> Sight is the preferred sense when it comes to recognizing the quincunx. But it is a special kind of sight, a sight that is particularly attentive to texture: the effect is a complex synesthesia comparable with Lucretius's poetic haptic imagery, a sight that is like touching. Not surprisingly, in describing the quincunx Browne makes constant references to tactility.

Originally the quincunx was an arrangement of five followed in ancient civilizations to plant trees. King Cyrus was famous for having embellished the hanging gardens of Babylon by following it, thence the title of Browne's work. The garden is a suitable beginning for Browne as it brings together artifice and nature. The Garden of Eden was planted on the third day after creation, according to the Bible, which makes

<sup>&</sup>lt;sup>732</sup> Major Works 323

gardenry the oldest form of art.<sup>733</sup> For this reason, Browne calls God "that eminent Botanologer."<sup>734</sup> The quincuncial order, at the basis of the creation of gardens, is a pattern for design and for generation. In chapter two the focus of attention moves from gardens (nature-artifice), to man-made artifacts in which one can also find the quincunx as ubiquitous design-pattern. Browne's examples, taken mostly from antiquity, include statues, paintings, jewels, board games, chirurgical instruments, battle formations, and the urban design of ancient cities. Among the many examples, he particularly stresses windows, nets ('retiarie'), tapestry ('hanging textures') and embroidery.<sup>735</sup> The art of weaving, that Browne refers to as 'textury,' is dominated by the lozenge pattern, both among humans and spiders, whose webs are quincuncial.<sup>736</sup> The link between the spider – a classical symbol of touch – and textury, the art of weaving, draws attention to the tactile aspect of the quincunx. This connection becomes even more conspicuous in chapter three, the longest one and, according to Huntley, "the heart of the whole matter."<sup>737</sup> Chapter three deals with the quincunx in nature.

As Browne discusses flowers, early on in the third chapter, the tactile imagery acquires prevalence. We thus learn about pricks and sockets, pulp and specks, fringes and pestills and clusters, and "the spongy leaves of some sea-wracks, fucus, oaks in their several kinds, found about the shore, with ejectments of the sea [that] are overwrought with net-work elegantly containing this order, which plainly declareth the naturality of

<sup>735</sup> Major Works 336

<sup>737</sup> Huntley 208

<sup>&</sup>lt;sup>733</sup> Major Works 326

<sup>&</sup>lt;sup>734</sup> Major Works 333

<sup>&</sup>lt;sup>736</sup> Major Works 337

this texture."<sup>738</sup> Chapter three actually finds Browne changing terminology: The quincunx is a texture, and its presence in vegetation is sufficient proof that it is a natural pattern as much as it is an artificial one. It can be a prickly ("palisadoed, aculeous") texture, a bumpy, or "favaginous" texture, a "rhomboidal protuberance," like the skin of pineapples,<sup>739</sup> it can be an "elegant texture" like that of the spider web,<sup>740</sup> neat and angular as that in honeycombs, or "that elegant net-worke texture" often found in "cottonary and woolly pillows, which sometimes we meet [...] fastened unto leaves [...] out of which come many small flies."<sup>741</sup> Sharp, bumpy, and soft; all characteristics perceived first by touch, and only then recognized by sight. As Browne moves from the vegetal to the animal kingdom, he addresses what the reader had been anticipating: skin.

"A like correspondency in figure is found in the skins and outward teguments of animals, whereof a regardable part are beautiful by this texture."<sup>742</sup> Some of the most dazzling examples are the backs of certain snakes, the tail of the beaver, the feathery coat and bumpy skin of fowl, "the scaly covering of fishes," and the "reticulate grain [...] in some Russia leather:"<sup>743</sup> "Thus works the hand of nature," Browne proclaims.<sup>744</sup> Whereas *Religio Medici* was dominated by images of a hand, that of God, which created, healed and saved, in this, his work on natural philosophy, there is also a dominant hand, the hand

<sup>738</sup> Major Works 344

<sup>739</sup> Major Works 345-6

<sup>740</sup> Major Works 354

<sup>741</sup> Major Works 356

<sup>742</sup> Major Works 356

<sup>&</sup>lt;sup>743</sup> Russia leather is "a smooth leather tanned with willow, birch, or oak and scented on the flesh side with birch oil" (OED).

<sup>&</sup>lt;sup>744</sup> Major Works 357

of nature.<sup>745</sup> And the beauty of nature's handy work is first appreciated on the surface, on the skin of things, a texture which is quincuncial and which can be observed in plants, animals, and, last but not least, man: "The same is observable in some part of the skin of man, in habits of neat texture and therefore not unaptly compared unto a net."<sup>746</sup> So too, the insides of man are of quincuncial texture, "not only the first subtegmen or warp of his formation, but the netty fibres of the veins and vessels of life."<sup>747</sup> And this, says Browne paraphrasing Psalm 139, confirms the Scriptures when man addresses God and thanks Him: "Thou hast curiously embroidered me, thou has wrought me up after the finest way of texture, and as it were with a needle."748 The terms "embroider" and "texture" are additions by Browne and perhaps shed light on that mysterious passage of Religio Medici where the young physician notices that whereas God created the rest of the world with "a blast of his mouth (...) at his bare word (...), in the frame of man (...) he played the sensible operator, and seemed not so much to create as make him."<sup>749</sup> This "making" of man is the quincuncial intertwining of veins, weaving of tendons, braiding of muscles, and embroidery of the skin.

Faithful to the legacy of della Porta, in what follows Browne refers to human physiognomy and the quincuncial disposition of moles in their correspondences across

<sup>&</sup>lt;sup>745</sup> Later on Browne says "studious observators may discover more analogies in the orderly book of nature, and cannot escape the elegancy of her hand in other correspondencies (*Major Works* 360);" and "[one] cannot overlook the orderly hand of nature..." (*Major Works* 361).

<sup>&</sup>lt;sup>746</sup> Major Works 357

<sup>&</sup>lt;sup>747</sup> Major Works 358

<sup>&</sup>lt;sup>748</sup> The King James version of this passage of the Psalm simply reads: "My substance was not hid from thee, when I was made in secret and curiously wrought in the lowest parts of the earth (*Psalm* 139.15)."

<sup>&</sup>lt;sup>749</sup> RM 1.36

the body.<sup>750</sup> The surface of the human body, as well as the interior, is a book where the manual craftsmanship of God can be read with extreme radiance. This might be the reason, says Browne, why ancient Egyptians mummified bodies producing the quincuncial texture as they folded and wrapped their linen over the corpse.<sup>751</sup> "Nor is it to be overlooked – Browne adds – how Orus, the hieroglyphic of the world, is described in a net-work covering from the shoulder to the foot."<sup>752</sup> Man's surface, its skin, is too the hieroglyphic of the world.

In the last two chapters Browne focuses on mystical considerations of the quincunx. Going back to the beginning of the work (the quincuncial order in tree plantations) the reader is led upwards from the vivid and tangible detail of nature in chapter three, to a vantage point from which we see dots and lines, squares, rhombuses, cones, and finally mere numbers in an intermittent game of light and shadow; much like in the illustration that Browne borrowed from de Court and della Porta. "Darknesse and light hold interchangeable dominions and alternately rule the seminal state of things."<sup>753</sup> It is at this point that the author addresses the much anticipated issue of perception: "It is no wonder that this quincuncial order was first and still affected as gratefull unto the eye, for all things are seen quincuncially."<sup>754</sup> We perceive the world as though through those windows in the Temple of Salomon that were framed like nets, the *fenestrae reticulatae* 

<sup>&</sup>lt;sup>750</sup> Major Works 362

<sup>&</sup>lt;sup>751</sup> *Major Works* 357. Browne had closely inspected mummies, as attested in *Letter to a Friend (Major Works* 398).

<sup>&</sup>lt;sup>752</sup> Major Works 357. See Athanasius Kircher, Oedipus Aegyptiacus (1652).

<sup>&</sup>lt;sup>753</sup> Major Works 375.

<sup>&</sup>lt;sup>754</sup> It continues: "For at the eyes the Pyramidal rayes from the object receive a decussation and so strike a second base upon the Retina or hinder coat" (*Major Works* 376).
that Browne describes in chapter two as a magnificent example of quincuncial artifacts. The world is to us, much like the mystery of Jesus Christ – whose nature is visible and invisible – "partly seen and unseen."<sup>755</sup> In the essential chiaroscuro of Browne's world, "the sence and ocular observation [...] seem [...] the surest path to trace the Labyrinth of Truth."<sup>756</sup> Our quincuncially ordained eyes guide us when the world is visible, our "sence," our touch, savvy of the quincuncial texture of the world, when it is not.

The path along the labyrinth of truth seems to be a two-sided process by which the mind and the senses working collectively move in and out of the natural world. As they move in they emulate the craft of the anatomist, peeling off layers, entering deeper and deeper into the cavities of nature. As they move out they first play the part of the physiognomist, analyzing appearances, then that of the geometrician, who sees dots, lines and figures, and finally that of the theologian who contemplates the cycle of life, death and resurrection in the orbit of "the quincunx of heaven."<sup>757</sup> The main instruments are a sensible eye, trained in the vicissitudes of texture, and a liberated, unprejudiced mind, described thoroughly in the first part of *Religio Medici*. Thus, Browne's life-long fascination with skin, his personal experiences peeling it off with boiling water, with fire, with *acqua fortis*, is intrinsically related to this unique epistemology that leads the natural philosopher in his quest to unravel the mysteries of creation: to know is to peel off surfaces, and the object of knowledge is not just the inner kernel, but also – and perhaps more importantly – the layers that one removes. In *Religio Medici* he peels off layers of

<sup>755</sup> Major Works 336

<sup>756</sup> Major Works 386

<sup>&</sup>lt;sup>757</sup> Major Works 387

dogma and intolerance, in *Pseudodoxia Epidemica* layers of error, in *Urne-Buriall* layers of earth. In *The Garden of Cyrus*, for the first time, Browne stays on the surface and describes the texture of the layers.

The Garden of Cyrus is a systematic study of the universal recurrence of a specific texture, the quincunx, which is the universal layer of things. But Browne's obsession with layers appears in other, much more tangible accounts, too. In *Pseudodoxia Epidemica* Browne also discusses the skin, stressing its "onion-like" nature. In book five he attacks the popular belief that the remnants of amniotic sac that some new born babies have in their heads upon coming into the world has medicinal powers, or can serve as a growth booster. In doing so, Browne provides the reader with a comprehensive taxonomy of the teguments that wrap the fetus inside the womb – which are, as we learn in The Garden of Cyrus, quincuncial.<sup>758</sup> Browne explains that during our first nine months we exist wrapped in three teguments, or membranes: the corion, the amnios, and the allantois.<sup>759</sup> As we are born we break through these layers, but sometimes remnants from the amnios stay on the infant's head. There is nothing supernatural about this tegument, quite the contrary: it nature at its best. Here Browne seems to be following Flemish anatomist Adrian Spigelius - who had taught at Padua until the mid 1620's - and confirming that he was both carefully trained in and fascinated by an awareness of the complexity and versatility of the skin. Just like our skin is a many-layered organ, we too, during the nine months of gestation, develop wrapped in layers that we eventually break

<sup>758</sup> Major Works 358

<sup>&</sup>lt;sup>759</sup> "The Corion is the outward membrane wherein are implanted the veins, arteries and umbilical vessels (for nourishment); the Allantois is a thin coat seated under the Corion wherein are received the watery separations conveyed by the Urachus that the acrimony thereof should not offend the skin. The Amnios is a general investment containing the sudorous or thin serosity perspirable through the skin" (*Pseudodoxia Epidemica* 5.21.17).

through as we come to the world. And when we die, once again we are cocooned in funeral layers: the shroud, the coffin, or the urn,<sup>760</sup> and the many layers of earth.

As one traces this unique epistemology, one of the most intriguing texts are Browne's *Notes on Bubbles*, published posthumously in *Miscellaneous Writings*. The beginning of the two-and-a-half page note is as enigmatic as it is revealing:

That the last circumference of the universe is butt the bubble of the chaos and pellicle arising from the grosser foundation of the first matter containing all the higher and diaphanous bodies under it, is no affirmation of myne; butt that bubbles on watery and fluid bodies are but the thinne parts of ayre, or a diaphanous texture of water arising from the ayre and holding awhile from eruption.<sup>761</sup>

Browne (perhaps echoing Bacon)<sup>762</sup> thinks of bubbles in terms of layers, of teguments, of skin, or pellicle. Bubbles are the thin texture of water and air, the material instantiation of borders between the elements. They can be made out of wines and spirits, *acqua fortis*, vinegar and lemon juice, and the most consistent and long-lasting ones are those produced by the manufacture of soap and sugar. Boiling "is nothing but bubbling," says Browne, but bubbles are also produced without any heat in the process of fermentation and putrefaction. Such is the case of skin bubbles, or blisters, produced by the

<sup>&</sup>lt;sup>760</sup> In *Urne Buriall* Browne adds: "In the *Homerical* urne of Patroclus, whatever was the solid tegument, we find the immediate covering to be a purple piece of silk" (*Major Works* 285). The obvious connection between silk and tactility appears too in Thomas Moffet 's strange and fascinating apology for sericulture, *The Silkwormes and their Flies* (1599). As he defends silk against accusations of being a lavish and degrading luxury, Moffet reminds the reader that it is pleasing to all the senses: "the touch of it so sweet (Moffet 74 b)."

<sup>&</sup>lt;sup>761</sup> Miscellaneous Writings 421

<sup>&</sup>lt;sup>762</sup> "Bubbles are in the form of a Hemisphere: air within and a little Skin of water without" (Francis Bacon, *Sylva Sylvarum*, 24).

inflammation of internal humors.<sup>763</sup> Continuing with his taxonomy of bubbles, and after explaining their coloration, Browne says: "Even man is a bubble if wee take his consideration in his rudiments and consider the *vesicula* or *bulla pulsans* wherein begins the rudiment of life."<sup>764</sup> Considering that in the sixteen and seventeen centuries bubble meant also "anything fragile, unsubstantial, empty of worthless: a deceptive show,"<sup>765</sup> and thus, a symbol of vanity, in calling man a bubble, not for his quality of being an ephemeral creature, or on account of his spiritual deficiencies, but in a literal and scientifically rigorous manner, Browne once again subscribes to the idea that the wrapping is as relevant as that which it wraps. An idea that centuries later Paul Valéry expressed in one gorgeous line: "What lies deepest of all in man is the skin."<sup>766</sup>

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*Museum Clausum, or Bibliotheca Abscondita* is one of Thomas Browne's most fascinating pieces of writing, as well as his only work of fiction. In its pages, the physician leaves scientific rigor aside and lets his curious imagination fly, as he imagines

<sup>&</sup>lt;sup>763</sup> Browne's first critic, Sir Kenelm Digby, refers to the creation of bubbles when addressing the two first motions of particular bodies: rarefaction and condensation (Sir Kenelm Digby, *Two Treatises*, London: 1644, 148).

<sup>&</sup>lt;sup>764</sup> Browne, *Miscellaneous Writings* 422. Sir John Davies also compares men with bubbles: "...sith men to bubbles are compar'd/(then which no being's neerer kin to nought)/ why from ill thoughts do they their wills not warde/ sith they may be extinguisht with a thought?/ It is sith bubbles do but weake appear?/ So in their weaknesse men to nought are neere." (Sir John Davies, *Wittes Pilgrimage*, Other sonnets 5, London: 1605). Chandra Wisnu, an Indonesian man who currently suffers from a rare and incurable skin disease (Neurofibromatosis Type I) that causes tumors to grow all over his face and body, has been baptized by the press "the bubble man." Most likely, this is the same disease that also affected John Merrick, "the elephant man," in Victorian London.

<sup>&</sup>lt;sup>765</sup> *OED*. See also Erasmus's *Adages* (II, iii, 48): *"Homo bulla,"* which the humanist took from Varro. "Man is but a bubble. The lesson of this proverb is that there is nothing so fragile, so fleeting and so empty as the life of man."

<sup>&</sup>lt;sup>766</sup> "Ce qu'il y a de plus profonde en l'homme, c'est la peau" (Paul Valéry, L'idée fixe, 1931).

a collection of inexistent books, pictures and objects. One of the rarities he includes in the Wunderkammer of his fancy is a mummia tholosana, "or the complete head and body of father Crispin, buried long ago in the vault of the Cordeliers at Toulouse where the skins of the dead so drie and parch up without corruption that their persons may be known very long after."<sup>767</sup> But this not the only skin-related item we find in this imaginary cabinet of curiosities; among the pictures there are some that show "the exact method of flaving men alive, beginning between the shoulders, according to the description of Tommaso Minadoi in his Persian War."<sup>768</sup> In the letter on skin he sent to his son Edward as an old man, Browne also refers to Minadoi's book and to the description of this practice. The passage seems to have stayed imprinted in Edward's memory for he quoted it in one of his lectures on anatomy at the College of Physicians.<sup>769</sup> Minadoi's book includes no images that illustrate such mode of torture and execution, but the account is graphic and shocking enough to spark Browne's imagination, and inspire him to create the images in his mind that he included in his chimeric museum.<sup>770</sup> The letter to Edward also happens to include Browne's only recorded memory of his years as a student at Pembroke College, Oxford: "Above fortie yeares agoe the tanned skinne of a man was hanged up in

## <sup>769</sup> Cawley 442

<sup>&</sup>lt;sup>767</sup> Miscellaneous Writings 140

<sup>&</sup>lt;sup>768</sup> *Miscellaneous Writings* 137. As I mentioned earlier, Minadoi also wrote a treatise of skin abnormalities and another on smallpox.

<sup>&</sup>lt;sup>770</sup> Browne, *Letters* 82. In the seventh book of Minadoi's account of the wars between the Ottoman Turks and the Saffavid Persians, the author narrates how after Ebrain defeated the troops of Manogli, he commanded that their leader, be "stripped and flayed quick." Manogli's man responded defiantly, asking them to first cut off his penis (*membro*), then penetrate Ebraim's wife's "nature" (sic) with it, and then insert it into Ebraim's mouth, "for so he will be contented and satisfied with my flesh." Eventually, he was stripped and "three great slashes were made on his back where they began to flea him; and then the barbarous soldiers (...) made certain other gashes upon his breast and upon his stomach, and so drawing his skin downward they could not bring it to his navel, befote he was dead with most dolorous pains" (Minadoi 310-311). As Cawley points out, Minadoi is not discussing flaying techinques, this account is just a grisly anecdote from a brutal war (Cawley 441).

the physick schoole at Oxford." As Jeremiah Finch points out, "the 'skinne,' which hung in the first floor room on the south side of the Bodleian Quadrangle was also mentioned by visitors to Oxford in 1630 or 1631, and seems to have made a deep impression on everyone."<sup>771</sup>

Browne shared this fetishistic fascination with skin with many other early modern luminaries, and this is particularly notable in the visual arts. Pictorial renditions of the flaying of Marsyas by Apollo,<sup>772</sup> and that of the martyrdom of St. Bartholomew – flayed alive for converting Polimius, the brother of Armenian King Astyages to Christianity –<sup>773</sup> were favorites among painters throughout the sixteenth and seventeenth centuries. In Wind's classical reading of the Renaissance's obsession with the Ovidian myth of Apollo and Marsyas, the flaying of the satyr is interpreted as a Platonic mystery that allegorizes ridding oneself of bodily garments to initiate the intellectual ascent towards the divine.<sup>774</sup> Arthur Golding's morbid and hair-raising translation (1567) of the passage from book 6 of the *Metamorphoses*, however, seems to point in a much different exegetic direction:

For all his crying ore his eares quight pulled was his skin. Nought else he was than one whole wounde. The grisly bloud did spin from every part, the sinewes lay discovered to the eye, the quivering veynes without a skin lay beating nakedly. The panting bowels in

<sup>771</sup> Finch [1961] 44

<sup>&</sup>lt;sup>772</sup> Famous versions of the atrocious punishment of Marsyas include those by Titian (1575), Melchior Meier (1581), Giovanni Stradanus (ca. 1590), Dirck van Baburen (1623) and others.

<sup>&</sup>lt;sup>773</sup> Michelangelo includes Bartholomew holding the knife that will flay him in the *Last Judgment* (1536-1541). In the cathedral of Milan, a statue by Mario d'Agrate (1562) presents Bartholomew already skinned and wrapped in his own skin.

<sup>774</sup> Wind 143-4

his bulke ye might have numbered well, and in his brest the shere small strings a man might easly tell.<sup>775</sup>

More than a Neoplatonic allegory for spiritual anabasis, this fascination with the flaying of Marsyas (and St. Bartholomew) in all its atrocious goriness, seems more like a sign of a time marked by the revolution in human anatomy that systematically and methodically exposed the insides of the human body; a sign of a time when skin-disfiguring diseases infected thousands in urban carnivals and orgies of death; a sign of a time when the body and its touch, its hands, its kiss and skin were acquiring such intellectual and artistic prevalence that were shifting European though and sensibility into a radically new cultural paradigm.

<sup>775</sup> Golding 128

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