



Durham E-Theses

OPTIMIZING HYBRIDISM: A CRITIQUE OF NATURALIST, NORMATIVIST AND PHENOMENOLOGICAL ACCOUNTS OF DISEASE IN THE PHILOSOPHY OF MEDICINE

TRAYKOVA, ALEKSANDRA, KRUMOVA

How to cite:

TRAYKOVA, ALEKSANDRA, KRUMOVA (2017) *OPTIMIZING HYBRIDISM: A CRITIQUE OF NATURALIST, NORMATIVIST AND PHENOMENOLOGICAL ACCOUNTS OF DISEASE IN THE PHILOSOPHY OF MEDICINE*, Durham theses, Durham University. Available at Durham E-Theses Online: <http://etheses.dur.ac.uk/12312/>

Use policy

The full-text may be used and/or reproduced, and given to third parties in any format or medium, without prior permission or charge, for personal research or study, educational, or not-for-profit purposes provided that:

- a full bibliographic reference is made to the original source
- a [link](#) is made to the metadata record in Durham E-Theses
- the full-text is not changed in any way

The full-text must not be sold in any format or medium without the formal permission of the copyright holders.

Please consult the [full Durham E-Theses policy](#) for further details.

Academic Support Office, Durham University, University Office, Old Elvet, Durham DH1 3HP
e-mail: e-theses.admin@dur.ac.uk Tel: +44 0191 334 6107
<http://etheses.dur.ac.uk>

**OPTIMIZING HYBRIDISM: A CRITIQUE OF NATURALIST,
NORMATIVIST AND PHENOMENOLOGICAL ACCOUNTS OF DISEASE
IN THE PHILOSOPHY OF MEDICINE**

ALEKSANDRA KRUMOVA TRAYKOVA (BA, MA)

A THESIS SUBMITTED AT DURHAM UNIVERSITY FOR THE DEGREE OF DOCTOR
OF PHILOSOPHY

Department of Philosophy

Durham University

January 2017

Thesis Abstract: This dissertation represents an investigative critique of the philosophical approaches to defining health and disease, going beyond pure conceptual analysis and straight into historical-philosophical analysis in an attempt to unpack the very discourse which underpins the discussion. Drawing on the notion of language as a medium of social instruction, it problematizes various specific features of the debate's intellectual format, for example pointing out that its preoccupation with linguistic precision ought to be replaced with a focus on expressing the complex multidimensional nature of disease in a relatable manner. After presenting evidence of clinical reasoning's inherent susceptibility to bias, the thesis exposes naturalism's historical roots as an ideologically driven counter-reaction to nineteenth century vitalism, thereby discrediting the ideal of neutrality. Despite this skeptical start, it rejects eliminativist positions that philosophical attempts to produce health/disease definitions are pointless and unnecessary, and argues that the debate needs to be maintained due to such discussions' important implications for medical and social identities, patient narratives, the negotiation of treatment objectives, or even the effectiveness of public health programmes (as a population's inclination to comply with state-mandated public health measures is directly influenced by the notions it holds about health and disease). This is followed by an exploration of the conceptual limitations faced by the most commonly applied strategies of defining disease, after which their advantages are re-combined in an optimized hybrid account of disease supported by a philosophical distinction between the categories of 'symptoms' and 'clinical signs'. Finally, this account is tested on a wide range of problematic cases, to ensure its capacity to deliver the promised results whilst also overcoming challenging influences such as the ones posed by bias, discursively shaped diagnostic labels, or unwarranted pathologization.

I confirm that no part of this thesis has been previously submitted for any degree in Durham University or any other university.

The copyright of this thesis rests with the author. No quotation from it should be published without the author's prior written consent and information derived from it should be acknowledged.

A. K. Traykova

Acknowledgements

I am greatly indebted to my supervisors Prof. Andreas Holger Maehle and Dr. Peter Vickers, as well as my colleagues from Durham University's Philosophy Department, who have provided me with invaluable guidance and encouragement.

I am also grateful for all the constructive criticism I have received over the years from various conference audience members, academic correspondents, and anonymous reviewers.

Last but not least, I would like to thank my family and friends for their unconditional love and support.

This thesis is dedicated to Anna, my little blue ninja princess.

TABLE OF CONTENTS

1. An Introduction: The Goals of Disease Definitions, and The Problem with Naturalism	9
1. 1. Introduction.....	9
1. 2. Between ‘neutral’ concepts, positive ideals, and negative stereotypes.....	10
1. 3. Quantifiability, objectification and the rhetoric of deviation.	12
1. 4. Language, epistemic profiles, and ‘webs of significance’ as mediums of instruction.....	13
1. 5. Health and disease as complex, multidimensional phenomena.	16
1. 6. The Moral Charge Characteristic: Phenomena which elicit emotionally and morally charged responses are much more difficult to define in neutral terms.	18
1. 7. The Multidimensionality Characteristic: Accounts of disease do not necessarily have to take the form of an undisputed fact or a scientific endeavour in order to be successful, and are even hindered by such approaches.	20
1. 8. The Dynamic Polarity Characteristic: Accounts of health/disease need to reflect the practical reality that bodies are flexible, adaptable entities which actively respond to internal and external stimuli.....	21
1. 9. Summarizing the goals of a philosophical account of disease.	24
2. The Intellectual Infirmity Threat.....	27
2. 1. Medicine’s theoretical and operative framework: specialization, objectification, orientation.	27
2. 2. ‘Intellectual infirmity’: Feinstein’s critique of clinical judgment.	32
2. 3. Biological normativity vs. scientific laws.	37
2. 4. Additional purposes of medical language.	39
2. 5. Exploring the objections to humanistic ideals about clinical practice and medical thinking....	41
2. 6. Societies as opponents or enablers of authoritative medical models.	44
2. 8. On the supposed infallibility of science.....	50
3. Quantifying abnormality then and now: 19 th century scientific theories and their ongoing influence on contemporary philosophical discussions of disease	54
3. 1. Science, values, and fetishization.....	55
3. 2. Bernardian anti-vitalism and the origins of the ‘value-free science’ myth.....	56
3. 3. From homeostasis to functionalism, and how the intellectual legacy of 19 th century reductionism led to attempts at quantifying pathology.	63
4. Why are accounts of health and disease even necessary? A refutation of eliminativist positions on the debate about health/disease definitions.....	68
4. 2. Eliminativism and the question about ‘centrality’: Ereshefsky’s critique of the health/disease definitions debate.	69
4. 3. ‘Centrality’ reframed: disarming Ereshefsky’s arguments.	70
4. 4. Breaking down Hesslow’s advice against needless ‘distractions’.	71
4. 5. Invalidating Hesslow’s position on the role of health/disease definitions.	73

4. 6. Language, intuitions, and the role of labels.	74
4. 7. From letter to life: rhetoric, social metaphors of disease and their role in shaping laypersons' experiences.	77
a) Talking about disease. Stacey on negative stereotyping.	77
b) Williams on metaphors and 'iconography of illness'	84
c) Maynard and medical identities.	89
4. 8. How notions about health and disease translate in real life: the case of public health and patient compliance.	91
4. 9. Summarizing the arguments in favour of maintaining the debate.	100
5. How do we define disease?.....	103
5. 1. The chicken or the egg? Introduction.	103
5. 2. On the importance of asking the right questions.....	104
5. 3. Boorse's idea: an overview.....	106
a) Health and values.	108
b) Are diseases the things that physicians treat?.....	112
c) Are health and statistical normality the same thing?	115
d) Disease as pain or disability.	119
5. 4. Going forward: a revised understanding of hybridism.....	132
6. What might we expect a discussion of 'signs' and 'symptoms' to add to our understanding of health and disease?.....	134
6. 1. Filling in the explanatory gaps.....	134
6. 2. Signs.....	141
6. 3. Symptoms.....	144
6. 4. Addressing the implications that the distinction between illness and disease holds for accounts of health and disease.	146
6. 5. Cementing the distinction between 'signs' and 'symptoms'.	147
6. 6. Optimizing hybridism: signs and symptoms between naturalism, normativism and phenomenology of illness.	152
7. Applications of the 'optimized' hybrid account. 'Mental illness', nosographical bias, and unwarranted pathologization – a few potential areas of reformation.....	158
7. 1. A few words on certain types of cognitive bias in disease classification.	158
7. 2. Normal vs. Abnormal.....	164
b) The related difficulty of defining the exact objectives of psychiatric treatment,.....	166
7. 3. On the troublesome 'grey area', the problem with pathologization and the nominative-categorical problem with the term 'personality disorder'.....	166
7. 5. 'Grey areas' and the case of stress: From adaptation and external stimulus to stress as a symptom.....	180

a) The 'good' and the 'bad': the difference in portrayal.....	183
b) On the categorization of medical problems. Addiction as a 'health problem' vs. addiction as a 'disease'.....	184
c) Contextualizing drug addiction within the wider framework of contemporary philosophy's accounts of disease.	184
d) Sociological dimensions of medicalization: the relationship between drug abuse and crime.	186
7. 7. The influence of sex and gender: gender norms and gender-specific discursively produced 'mental illnesses'	188
a) Hysterical males? Pathologization of natural emotional responses in males.....	188
b) Pathologizing the rebellion of the oppressed woman: The case of anorexia.....	191
7. 8. Chapter Summary.....	200
8. Conclusion.	202
Bibliography:.....	214

1. An Introduction: The Goals of Disease Definitions, and The Problem with Naturalism

'A great gulf now exists between the way we think about disease as physicians and the way we experience it as patients' ~ Richard Baron¹

1. 1. Introduction.

Of all the biologically-informed cultural concepts that influence our lives and our notions of 'normality', there is a couple which have stubbornly resisted reinterpretations and continue to pose challenges for those who attempt to define, analyze or re-model them. 'Health' and 'disease' have proved more than just a couple of terms with fuzzy boundaries – if anything, they should be regarded as the paradigm examples of such terms. The goal of this dissertation is to identify the main difficulties with which philosophers are confronted during their attempts to pin down these terms, to explain their origins via historical-philosophical analysis, and to propose solutions. This chapter will serve the purpose of listing the abovementioned difficulties (by order of degree of influence), while the latter chapters will address them separately and advise on countermeasures.

Working on topics such as health and disease, and especially engaging in conceptual analysis of these terms, has required a lot of un-learning and un-doing on my behalf: attempting to abandon stereotypes and clichés in favour of unbiased thinking, investigating whether there is such a thing as a transhistoric, transcultural concept of illness, and exploring different cultural tropes of health, just to name a few examples. Over time, I have gradually come to the conclusion that Western medical thinking's preoccupation with objectivity and quantifiability, as well as its deliberate effort to remain culturally blind, are themselves a form

¹ Baron, R. J., 'An introduction to medical phenomenology: I can't hear you while I'm listening', *Annals of Internal Medicine*, 1985, Vol. 103, p. 609

of bias and the result of a very specific cultural climate. This has made me deeply skeptical about the possibility of a value-free account of health/disease, and led me to question the very usefulness of such an account, if it were to be devised. Furthermore, it has also increased my sensitivity to the strong connections between rigid naturalist/objectivist standards of 'normality' and a wide range of undesirable social phenomena such as the exclusion and discrimination faced by ill people, the increased paternalistic control and surveillance they experience, the stigmatization and negative stereotyping to which they are sometimes subjected.

In a culture obsessed with 'fitting in', competing against one another and 'overachieving', persons whose life stories differ from those artfully structured socially acceptable narratives are often made to feel inadequate, devalued and isolated (especially when the very features which make them stand out are used as a justification of the limited opportunities these persons are given to interact with others and contribute to society). Discrimination based on health status is not a myth, but a sad reality experienced by many: a reality that could be cemented by a discourse on disease as an objectively measurable deviation or deficiency.

These issues have received insufficient attention in health/disease definition debates, where the focus lies predominantly on a proposed account's sophistication and applicability to the purposes of policy-making, rather than its potential impact on the way ill persons are treated or perceived in social situations (both in a clinical context and outside it). Therefore my first task in this chapter will be to convince my readers that the problem presented above deserves serious consideration, to explain what its underlying causes are, and to suggest an effective strategy based on the notion that language is, first and foremost, a means of instruction that we could shape and use to our advantage.

1. 2. Between 'neutral' concepts, positive ideals, and negative stereotypes.

The term 'beauty', though also notoriously hard to pin down, has been dealt with successfully as early as the 18th century when transcendental idealism decidedly rejected the very notion of 'things-in-themselves'. After Immanuel Kant declared that aesthetic judgments were

'judgments of taste' rather than cognitive judgments about objective properties², other philosophers quickly followed suit, with Friedrich Schlegel expressing skepticism regarding the possibility of unified external rules for reviewing works of art³, and early romanticist Fichte discussing the 'indeterminate character' and 'floating' form of beauty.⁴ It was elusive, arbitrary, out of reach.

While German Idealism allegedly failed in postulating subjectivity as one of philosophy's main principles, there can be little doubt that its attitudes towards aesthetics can be translated and incorporated into contemporary debates about beauty standards in order to encourage diversity and acceptance. Our criteria as to what constitutes aesthetically pleasing appearance are being re-shaped every moment, as demonstrated by the ever-increasing number of models that are plus size, past the days of their youth, have undergone unusual body modification procedures, or show visible signs of disease or disability. Western thinkers and activists have also initiated a process of revolutionizing the concepts of gender, sexuality, reproduction, and family in order to make sure that the generations to come will never have to choose between facing moral judgment or sacrificing their personal happiness in order to avoid it. One might argue that now, more than ever, we can allow ourselves to be optimistic regarding our own capabilities of conquering the double-edged sword of sociocultural concepts and subordinating its considerable power to the purpose of improving social climates. The problem lies within a certain hesitation to acknowledge and explore the hidden potential of pluralism; a certain fear to take responsibility and face the fact that there are no stereotypes or ideals beyond those which we ourselves create and attribute.

Feminist writers have worked hard to show how the members of a society can be held jointly responsible for the existence of harmful culturally perpetuated stereotypes. Books like *The Beauty Myth*⁵ have successfully argued that even seemingly unimportant individual choices

² Kant, I., *Critique of Judgment*, Simon & Schuster, New York, 1985

³ Pinkard, T., *Hegel: A Biography*, Cambridge University Press, Cambridge, 2000, p. 99

⁴ 'According to Fichte's conception of a beautiful form as "form without form", what makes [a certain] unity relevant from an aesthetic point of view is its indeterminate character, its floating (*schweben*) among many different forms', see Cecchinato, G., 'Form and Colour in Kant's and Fichte's Theory of Beauty' in Breazeale, D. and Rockmore, T. (Eds.), *Fichte, German Idealism, and Early Romanticism*, Rodopi, Amsterdam, 2010, p. 78

⁵ Wolf, N., *The Beauty Myth: How Images of Beauty are Used Against Women*, Vintage Books, London, 1991

can have permanent consequences on others by intensifying the pressure to fit into a potentially destructive collectively shaped societal ideal – like that of attractiveness. It has been proposed that instead of adapting to harmful concepts of beauty or normality, we should strive to change them from within and promote self-acceptance. As already discussed, evidence suggests that this may currently be happening, as recent developments in media and the fashion industry show a great difference between the way the ‘abnormal’ body was portrayed a decade ago versus how it is presented today. But while there appears to exist general agreement that beauty is meant to remain ‘in the eye of the beholder’, that does not seem to be the case with categories like ‘health’, where deviation from the ‘norm’ more often than not can bear negative connotations. Occasionally, the difference between ‘health’ and ‘disease’ could mean – quite literally – the difference between life and death (for instance in the context of screening, diagnosis and prognosis). In that sense, in science-centric societies (i.e. the majority of Western and industrialized societies), statistics and standards are often perceived as more reliable assessment tools than subjective experiences. They also hold the further benefit of lending credibility to the judgments they underpin; of providing them with additional dimensions like measurability, verifiability and manageability.

1. 3. Quantifiability, objectification and the rhetoric of deviation.

We have come to believe in the quantifiability of natural biological phenomena in order to gain a sense of control over them, because it is convenient to think that if something is measurable, it should also be manageable, predictable, understandable.⁶ Traditional Western philosophical ideals like autonomy and freedom mix with a sort of contemporary cult for science and fact-fetishization (as presented by Bruno Latour in his works *On the Modern Cult of the Factish Gods* and *We Have Never Been Modern*), making us epistemically dependent on certified scientific and professional authorities, yet oddly confident that we are independent thinkers and – exactly because we have unprecedented access to information – that we are free individuals in control of our own choices. However, this ideal does not appear to extend

⁶ King, L., ‘What is disease?’, *Philosophy of Science*, 1954, Vol. 21, pp. 193-203. See p. 195, which reads: ‘To understand health or disease we must have some objective measurements in addition to the introspective account. If we can weigh or measure something, then we have a little more confidence, and we feel more firmly grounded in objective reality.’

to those among us who have been marginalized as ‘invalid’ or ‘deviant’ and who, because of this, have very limited power in society.

Feminist author Jenny Morris – a disabled woman herself – has famously noted that disabled people’s self-image is dominated by the non-disabled world’s reactions to them⁷, as is every disability-related public policy in existence.⁸ Disease and disability conditions alike are locked in a fatal embrace with the rhetoric of deviation, deformity, incompleteness; the ensuing assumptions about incapacitated autonomy often serve as justifications for invading the affected person’s privacy,⁹ providing little support (if not outright limiting the available options) for their educational, professional and social development, or judging their lives as ‘not worth living’. Most importantly, this divisive rhetoric and the behaviours that result from it all contribute to the corrosion of an already strained relationship – the one between patient and practitioner. Here I will outline the inherent imbalance already present in this relationship, and examine the ways in which it is modified by the application of different conceptual frameworks, in order to show how attitudes to patients and ‘sufferers’ are subject to the influence of language, and language-borne concepts and notions. This approach reflects the simple truth that doctors do not heal body parts – they heal patients: persons, living, thinking and feeling human beings. Even when focusing on the technical aspects of diagnosis, prognosis and treatment, they still have to consider the patient as a whole – how will the treatment of one organ or body system affect other parts or the monolithic whole of the organism? How will the patient function as a result of the treatment? Will there be any undesirable side-effects of an emotional or social nature?

1. 4. Language, epistemic profiles, and ‘webs of significance’ as mediums of instruction.

The majority of meaningful social interactions in the human world rely on language as a

⁷ Morris, J., *Pride Against Prejudice: Transforming Attitudes to Disability*, The Women’s Press Ltd., London, 1991, p. 28

⁸ *Ibid*, p. 118: ‘Those who make and implement public policy, whether they be politicians, administrators or professionals, have historically worked with a set of assumptions about disabled people which makes segregation inevitable.’

⁹ *Ibid*, p. 29: ‘Our physical difference makes our bodies public property...’

medium of communication, *instruction* and shared understanding.¹⁰ Productive communication occurs through the channel of a shared language, but in the clinical context, there are two distinct types of language, which appear to address two separate social and epistemic realities. Ideally, the reality of disease would be a mutual one where practitioner and patient share similar observations and opinions over the phenomenon of disease, and express them through the same language, leaving little room for disagreement or doubt. However, due to a variety of factors – such as differences in social ‘situatedness’ and inhabited cultural ‘webs of significance’¹¹, or the epistemic rift and power imbalance inherent to the interpersonal dynamic of the professional relationship between expert and layman (physician and patient) – the languages employed by the two can sometimes differ dramatically. In his monograph *The Discourse of Medicine*¹², Elliot Mishler talks about the conflicting ‘voice of medicine’ (which acts as a normative force in debates as it is usually construed as the more formal and reliable one) and ‘voice of lifeworld’ (which is perceived as an irrelevant and even disruptive influence because of its biographical, contextual nature). In clinical judgement, there is a strict hierarchy of relevance which prioritizes the ‘voice of medicine’ as a source of ‘proper’ evidence, while the ‘voice of lifeworld’ resides at the level of mere testimony, and is considered to be lacking in terms of legitimacy. Even the events that physicians and patients address in their acts of speech seem to belong to two separate spheres of reality, as the patient visits with a complaint about ‘abdominal pain’ but is *instructed* that she has a ‘pelvic inflammatory disease’ upon examination. Some authors, like Toombs, have attributed these confusing features of patient-physician communication to a ‘fundamental disagreement about the nature of illness’¹³, and others – to a supposed double relation between

¹⁰ And this notion has not escaped the attention of some physician-philosophers, as seen by the following excerpt from Cassell’s book on the goals of medicine: ‘We are able to speak together only because of a common language for objects and events. A common language for something implies a common interpretation of the events signified by the words; the more exact our use of language, the more exact our common interpretation’, see Cassell, E. J., *The Nature of Suffering and the Goals of Medicine*, Oxford University Press, New York, 2004, p. 5

¹¹ Kirkengen, A. L., ‘Encountering Particulars: A Life in Medicine’, *The Permanente Journal*, Summer 2005, Vol. 9, No. 3, p. 19: ‘Human beings are suspended in webs of significance they themselves have spun. Every person, be s/he healthy or sick, patient or doctor, is *situated*; that is profoundly shaped and influenced by the cultural time and place s/he inhabits.’

¹² Mishler, E. G., *The Discourse of Medicine: Dialectics of Medical Interviews*, Praeger, 1985

¹³ Toombs, S. K., ‘The Meaning of Illness: A Phenomenological Approach to the Patient-Physician Relationship’, *The Journal of Medicine and Philosophy*, 1987, Vol. 12, p. 219 reads: ‘In discussing my illness with physicians, it has often seemed to me that we have been somehow talking at cross purposes, discussing different things, never quite reaching each other. This inability to communicate does not, for the most part, result from inattentiveness or insensitivity but from a fundamental disagreement about the nature of illness.’

sociocultural meaning and embodiment, suggesting that a person's body and bodily experiences at once influence and are influenced by the meaning assigned to them by that person – a meaning which provides lived bodies with a 'specific logic' and rationality. Thus acquiring a good grasp of this significance must necessarily be *instructed* by the act of 'unfolding', i.e. making explicit, the personal context of the experienced symptoms.¹⁴

Of course, symptoms often represent but a fraction of what occurs in the diseased body, and the physician's professional training understandably includes *instructions* about seeking the 'hidden' source of disruption from 'normal' functioning, and examining reliable objective signs rather than counting on patient testimony to determine it. In another chapter (Chapter 5) I intend to show how this line of thinking, which suggests that proper diagnosis is essential for optimizing cure prospects, is almost directly inherited from the legacy of nineteenth century physiologists like Bernard, for whom there was little doubt that structure defined function. Here it suffices to state that, as a result, quite often even seemingly basic concepts like 'health' and 'disease' are viewed and defined differently by practitioners and their patients, since the former continue to rely on a very 'still' and artificial¹⁵ (and arguably antiquated¹⁶) disease theory, while the latter define illness idiosyncratically, and therefore unreliably. However, while expertise, especially one supported by a solid education in the biomedical sciences and by related professional experience, is without doubt worthy of recognition, we have already seen that the first-hand knowledge of the chronically sick, frequently hospitalized in-patient, cannot be dismissed lightly. Indeed, some have suggested that practitioners' understanding of disease can be facilitated through the application of phenomenology – integrating patients' lived experiences of disease, and using them *instructively*, as an interpretive frame of reference.¹⁷

The patient relies on first-person utterances and describes unique, existentially meaningful, subjective symptoms – personal experiences of which she tries to 'make sense', and to which

¹⁴ Ibid, p. 19-20

¹⁵ Ibid, p. 9: 'Structure is an idea that has everyday utility, but is an artificial one and what pathologists discuss, not what actually happens to sick people. It's still, whereas the body is changing.'

¹⁶ Ibid, p. 7

¹⁷ Kirkengen, A. L., Op. cit., p. 21

she tries to adapt in order to prevent their overwhelming effect on her physical well-being, social functioning and emotional life.¹⁸ In order to *instruct* her physician, she employs an ‘involved’ language of concern – mostly concern about the way her life will change in relation to the diagnosis. Practitioners, on the other hand, adopt the detached, objective third person point of view during their pursuit of reliable, tangible signs, and use a professional language that may seem abstract and unclear to the layman whom it objectifies and *instructs* in a unified, general, standardized way. Preoccupied with tasks like diagnosis, detecting, observing and correcting deviant physiological functions, they are in particular subject to quantification tendencies, even framing prognosis in terms of calculation-based estimates (e.g., ‘survival chance’, ‘expected quality of life’), rather than terms borrowed from the patient’s language of pain, discomfort or everyday tasks and abilities. They are not overly concerned about the patient’s social performance or emotional state, unless it is either integral to the purposes of diagnosis and treatment (as is the case with psychiatry and clinical psychology, for example), or has very drastic effects on the patient’s overall ‘quality of life’. The ‘personal life experience’ aspect of the patient’s complaint is, more often than not, irrelevant to the physician’s essential task, and thus patient narratives and histories hold little *instructive* power over the way physicians’ conceptual resources and explanatory models are constructed. Therefore one cannot reasonably expect a significant conceptual overlap between these two distinctively separate realities, since patients and physicians do not share similar conceptualizations of illness.¹⁹ Furthermore, their conceptualizations appear to stem from their allegedly different ‘instructions’ – finding answers and solutions to a problem (patient), and providing a diagnosis and treatment for a physical condition (physician).²⁰ How, then, are we expected to construe a single unified account of health/disease that will acknowledge the multidimensionality of the phenomenon it tries to define without sounding vague?

1. 5. Health and disease as complex, multidimensional phenomena.

¹⁸ This Husserlian notion about the uniqueness of the world of immediate experience appears to be shared by most authors writing on phenomenology and its applications to the medical context, but is most explicitly stated in the works of S. Kay Toombs. [See Toombs, S. K., Op. cit., p. 221]

¹⁹ Toombs, S. K., Op. cit., p. 220

²⁰ Ibid, p. 224. Also p. 227: ‘The physician defines the “problem at hand” in light of certain goals of medicine: diagnosis, treatment and prognosis. These goals appear to be shared with the patient. However,... the patient defines the “problem at hand” in terms of different goals.’

Most noteworthy attempts to define health/disease have been unsatisfactory, either because they have failed to reflect it as a truly complex, multilayered concept, or because they went too far in their attempt to achieve the latter, and resulted in vague, over-inclusive definitions (see, for example, the World Health Organization's definition, according to which health is 'a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity'²¹). These difficulties have usually been attributed, depending on the accuser's own ideological commitments, to the attacked author's allegiance to either normativism or naturalism, and thus to their conviction that values or scientific objectivity respectively can lead us to the 'correct' definition. However, by focusing exclusively on the big philosophical debate we have boiled the matter down to the level of conceptual disagreement and lost sight of the very simple, yet very important practical notion that even formal legal definitions (on which laws and policies are based, and which are presumably the ultimate goals of such debates²²) are just as preoccupied with functionality as they are with accuracy; that, unfortunately, by obsessing over the latter, we have overlooked the former.²³ As a result, most accounts are not well adapted to serve their intended purpose, as they have been rendered dysfunctional by their own ideological influences, which produce simplified one-dimensional views on what is otherwise a complex, multilayered phenomenon.

Disease is neither purely a discursively shaped value-laden concept, nor simply an objectively existing natural category; it is both and neither. Among the challenges faced by philosophy of medicine, an especially problematic one is the rather common assumption that only these two approaches (or any hybrid combinations thereof) are likely to produce plausible results. An additional difficulty arises from the pressure to 'pick a side' – an unnecessary constraint imposed on thinkers who engage with this topic, as the two sides of the debate have far too

²¹ Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (*Official Records of the World Health Organization*, No. 2, p. 100) and entered into force on 7 April 1948

²² Although some philosophers have argued that public health policy and law do not require a definition of disease in order to function, but should rather be conceived of in terms of promoting other goals – such as 'physical safety', for instance. For a relatively recent example, please see Stephen John's article 'Why "Health" is not a Central Category for Public Health Policy', *Journal of Applied Philosophy*, May 2009, Vol. 26, No. 2, pp. 129-143

²³ I am not trying to suggest that linguistic precision should not be among our priorities. Rather, I am suggesting that an optimal philosophical account of disease would also have other, more practically significant goals – such as being socially progressive. Chapter 4 will discuss this in more detail.

much in common to be rightfully posited as the radically opposing polar extremes they are made out to be. I would like to suggest that there is no real need for discussions of disease definitions to be restricted by the artificially created framework of the naturalism-normativism dispute. Before one even considers engaging in the arduous task of providing an account of disease, one would need to: 1) break away from the constraints of this intellectually misleading format, and 2) be realistic in one's expectations about what naturalism can achieve. One of the main goals of my dissertation will be to demonstrate that naturalism is not, nor should it be, value-free, and that we should give up the futile ambition of defining phenomena which have strong moral implications in a neutral, detached way. Instead, we should be aiming to frame definitions in terms which promote and cultivate the values that are fundamental to our purposes within the clinical context – and outside it. We should also bear in mind that there are certain practical characteristics of health/disease phenomena which make them impossible to interpret fully, in their entire complexity, through the lens of naturalism alone. The characteristics in question can be roughly grouped in three categories, which I will refer to as the 'moral charge' characteristic, the 'multidimensionality' characteristic, and the 'dynamic polarity' characteristic.

1. 6. The Moral Charge Characteristic: Phenomena which elicit emotionally and morally charged responses are much more difficult to define in neutral terms.

A possible objection against forced attempts at value-free discussions of the body and anything that relates to it could be derived from the body's complex status in the phenomenological life-world. The body is not simply our gate into the life-world that phenomenologists speak of; it does not serve only as a medium of experiencing. It is also the way we present ourselves to others, the way we partake into the shared moral world of meaningful social interactions.

Acting both as seats and as instruments of human rationality and will - of autonomy, freedom, moral principles, beliefs and passions - bodies have logically been granted a special moral status in Western cultures. The Western body is seen – with slight variations across cultures – as a precious 'vessel' (even 'sacred', depending on the context), or as an embodied 'soul' or 'personality'. Universally, though, its moral standing as the ultimate limit and physical

boundary between Self and Other is recognized without a shadow of doubt, and discussions about freedom, choice, autonomy and self-determination are, almost without exception, carried out within a discourse shaped by the belief that moral actions necessarily involve an aspect of physicality, i.e. that they are the physical acts of finite biological beings, which can influence other finite biological beings.

Therefore the body, with its crucial interactive role, is valued highly and perceived as something worthy of protection and care, as any physical threat to it is also an existential threat to our presence in the life-world. Consequently, states that can be interpreted as a threat to the body's 'default' state of life and health are disvalued.

While that does not mean that every physical threat disvalued by society is automatically a disease, it does mean that, no matter how we define the terms 'health' and 'disease', they are bound to elicit (and be shaped by) the same emotionally and morally charged psychological responses. The (positive and negative, respectively) connotations attached to these concepts will not vanish simply because we have replaced the terms with new ones; instead they are much more likely to 'stick' with newer terminology and resist our forced attempts to create new meanings (see, for example, Christopher M. Fairman's critique of the US debate on the 'r-word'²⁴). Most importantly, it is rather difficult to define a strongly (albeit implicitly) morally charged phenomenon such as health or disease in an entirely value-free way - though that does not mean we should not try to avoid terms with overtly negative connotations, such as Cooper's 'bad', 'unlucky thing to have'²⁵, or Megone's 'incapacitating failure'²⁶, where 'failure' is problematic due to its implication that someone or something was unsuccessful, did something wrong, or is somehow 'deficient'.

Normativist accounts of disease have a long history of associating disease with predominantly

²⁴ Fairman, C. M., 'The case against banning the word "retard"', *Washington Post*, 14 February 2010

²⁵ Cooper, R., 'Disease', *Studies in the History and Philosophy of Biology and Biomedical Sciences*, 33, 2002, pp. 263–282

²⁶ Megone, C., 'Mental Illness, Human Function, and Values', *Philosophy, Psychiatry, and Psychology*, March 2000, Vol. 7, No. 1, pp. 45-65

negative experiences, whereas new works on the philosophy of illness (such as Carel's 'Can I be Ill and Happy?'²⁷, or Kidd's 'Can Illness be Edifying?'²⁸), along with works from the related field of philosophy of disability (like Jenny Morris²⁹), attempt to resist negative stereotypes and promote ethical and political correctness. Therefore defenders of normativist accounts should still exercise a degree of caution when choosing how to express their philosophical stance, or risk creating a definition that neither patient nor physician would willingly relate to.

1. 7. The Multidimensionality Characteristic: A more 'factual' approach may fail to grasp the complexity of health and disease phenomena in real life.

Accounts of disease do not necessarily have to take the form of an undisputed fact or a scientific endeavour in order to be successful, and are even hindered by such approaches. Values are always present (whether explicitly or implicitly) in choices, and designing a unified account of health, for example, necessarily involves settling with a specific selection of characteristics universally present across all specimens who exhibit the property of health, and effectively reducing health to this selection. The process of selection will be guided by values just as much as by rational judgements based on epistemic factors.

A somewhat similar objection has already been raised in a paper written by the philosopher Kingma, in which she critiqued the most influential naturalist definition of disease – the one proposed by Christopher Boorse;³⁰ three decades before this, Reznek correctly pointed out that scientific methodology and reliance on facts can be of little use when dealing with what is essentially a non-scientific question.³¹ As already stated, philosophers of medicine ought to be striving to provide a functional and relatable account of health/disease which will be well-adapted to the purposes of social interaction, clinical practice, law and policy making.

²⁷ Carel, H., 'Can I be Ill and Happy?', *Philosophia*, 2007, Vol. 35, No. 2, pp. 95-110

²⁸ Kidd, I. J., 'Can Illness Be Edifying?', *Inquiry – Interdisciplinary Journal of Philosophy and Social Sciences*, 2013, Vol. 55, No. 5, pp. 496-520

²⁹ Morris, J., *Pride Against Prejudice: Transforming Attitudes to Disability*, The Women's Press Ltd., London, 1991; also see Morris, J., 'Impairment and Disability: Constructing an Ethics of Care That Promotes Human Rights', *Hypatia*, Autumn 2001, Vol. 16, No. 4, Part 1, pp. 1-16

³⁰ Kingma, E., 'What is it to be healthy?', *Analysis*, 2007, Vol. 67, No. 294, pp. 128-133

³¹ Reznek, L., *The Nature of Disease*, Routledge, London, 1987

A possible objection needs to be addressed here. Let us first consider that in the shared reality of social interaction, meaning is shaped by context, and an utterance can carry a wide variety of moral nuances, ranging from negative through neutral to positive connotations and anything in-between. This could present a challenge to my claim that the ideal of an objective, impartial account of disease is an unattainable one. Practically every word can be used both neutrally and with added value, though not in the same sense or theoretical framework. The success of that use, however, will necessarily depend on the goals of the project.

Arguably the primary purpose of definitions, for example, is to make a concept epistemically 'clear' and 'distinct', i.e. not only to introduce the term to those unfamiliar with it, but also to explain the underlying phenomenon in an understandable manner, thus making it epistemically accessible. There can be little doubt that even value-laden terms such as 'disability' can be used in neutral protocol sentences to make simple factual observations in a value-free manner, as in these examples:

- 1) 'Dyslexia is not disabling in cultures which do not rely on written speech.'
- 2) 'Severe nearsightedness is a disability in cultures which do not possess the means to counteract its effects, like glasses or contact lenses.'

These observations may rely on non-value-neutral terms, but they express established aspects of certain practical realities, rather than generalized personal opinions, moral judgements, or socially conditioned beliefs. Applied to their specific contexts, they would hold true in front of every person, regardless of her ideological or professional commitments. The real difficulty arises when there are attempts to make universal or near-universal generalizations with the same undisputable epistemic truth-value and to regard those as value-neutral factual observation. What works well with small-scale observation-based generalizations will not work quite as well for large-scale generalizations (such as 'All dysfunctions are necessarily harmful'), due to their lack of specificity and contextualization.

1. 8. The Dynamic Polarity Characteristic: Accounts of health/disease need to reflect the

biological truth that bodies are flexible, adaptable entities which actively respond to internal and external stimuli.

Last but not least, the majority of health/disease accounts present a static model that has little in common with the ‘biological normativity’ or ‘dynamic polarity’ (term coined by Canguilhem³²) of life. For example, Christopher Boorse’s famous naturalist definition (which will be discussed in greater detail in Chapters 3 and 5), for all its preoccupation with evolution theory, teleological explanations and causal contribution factors, conveniently ignores the evidence that ‘unhealthy’ bodies do not necessarily stay that way.

Virtually everything we know today – either from personal experience or from science-based, peer-reviewed evidence – seems to point to the fact that the diseased body is capable of devoting considerable resources and applying most amazing strategies to its own recovery, and will almost definitely do so on most occasions. Homeostasis – a term referring to the model of life originally coined by biologist Walter Cannon – has often been used to describe this continuous cycle of balance-seeking self-maintenance, during the process of which bodies actively respond to influential factors from their environment, while also regulating their own internal milieu.

For highly intelligent life forms like humans and other primates, being well attuned to one’s bodily signals may be just another part of this sophisticated self-preservation system, with clusters of symptoms representing perhaps a similar function to that of pain mechanisms in helping the organism detect, avoid or otherwise counteract potentially threatening exterior influences. Symptoms could be better described as the person’s unique reactions to the changes she experiences under the influence of disease. For example, the nausea and loss of appetite experienced by sufferers from gastroenteritis are provoked by an inflammation of the intestines due to viral or bacterial infections of the digestive tract.

Symptoms, however, have a psychosomatic component and thus are also influenced by the

³² Canguilhem, G., *The Normal and the Pathological*, Zone Books, New York, 1991

subject's unique psychological constitution, attitude, emotions and expectations about their condition. For instance, a gastroenteritis sufferer with low bacteria counts might still experience severe nausea due to stress, fear, discomfort at the thought of disease, or a low tolerance for pain and suffering, while another person with the same signs (i.e., same bacteria counts) might not experience any nausea at all. In addition, introducing the notion of symptoms as reactivity can help develop an account of disease that captures 'mental' illnesses, some of which are notorious for their difficult diagnosing and conceptualization due to the frequent lack of observable objective signs (e.g., a person suffering from a severe case of narcissistic personality disorder would have a different social experience in the 'life-world', and a lot of the time her activities and interpersonal relationships would be limited under the influence of her condition; at the same time, brain scans performed on this person may never reveal anything out of the ordinary).

An obvious problem arises when we define symptoms and reactivity in relation to homeostasis, as Boorse has already argued successfully that many life functions are not homeostatic and even upset the organism's balance rather than maintain it (perception, growth and pregnancy are examples of this), and that there is no point in 'trying to view corresponding diseases such as deafness..., dwarfism..., or sterility as homeostatic failures'.³³ Secondly, another difficulty with health-as-homeostasis accounts lies in their inflexibility, which does not allow for health in puberty – or in old age, where changes in the organism are just as abundant and frequent as they are during active growth.

Therefore I shall suggest that we look back to Canguilhem, whose theory depicts life and health as a type of reactivity, 'dynamic polarity' or 'biological normativity' in which certain things or states are avoided, while others are sought, and these all change over time in accordance with the organism's evolving needs. This phenomenon is best represented not by homeostasis, but by the similar yet more sophisticated concept of homeorhesis (originally coined by developmental biologist C. H. Waddington). The term 'homeorhesis' describes systems regulated around certain factors and 'points' which do not remain fixed, but instead

³³ Boorse, C., 'Health as a Theoretical Concept', *Philosophy of Science*, December 1977, Vol. 44, No. 4, p. 550

gradually change over time, i.e. in the natural process of aging. Diseases often appear as results of the more drastic or peculiar changes which are not a part of the organism's growth, metamorphosis or aging.

1. 9. Summarizing the goals of a philosophical account of disease.

In sum, the solution we are looking for needs to reflect a biologically, psychologically and socially complex, multi-layered phenomenon. I have demonstrated why this is more difficult to attain via value-neutral discussion. A 'hybrid'³⁴ account, which combines philosophical astuteness with a relatable 'language of pain and reactivity' (with which patients will readily associate), can present the sought-after solution. As already stated, the task of a disease account would be to 'unify' the two distinctive languages of physician and patient, and to make their separate practical realities overlap for the sake of effective communication; that would make for a fully functional definition to which the two sides can relate, and which can therefore be applied effectively for the purposes of law and policy making, without generating misunderstandings or instances of political incorrectness, and without contributing to social oppression, manipulation, or covert control.

Having made this long exposition of my objectives, I will now introduce my methodology and the manner in which I plan to deliver the intended results. Chapter 2 will show that practitioners and scientists, as well as philosophers whose methodology operates within similar theoretical frameworks (naturalists), are not the best equipped candidates for this task due to their tendency to equate biological normativity to strict natural laws; inspired by Alvan Feinstein's concept of 'intellectual infirmity' in clinical judgment, it also exposes the threat of covert bias masquerading as neutrality or 'cultural blindness' in medical thinking. The third chapter is going to develop this line of reasoning further and contextualize naturalism by linking its ideological roots to those of the broader traditions of disease objectification and quantification in medicine, both of which originated as a counter-reaction to 19th century

³⁴ I am using the term 'hybrid' rather loosely here, as I have already stated why I do not consider naturalism as a legitimately value-free approach; therefore on this particular occasion the term 'hybrid' is applied only for convenience rather than descriptively.

vitalism. These first three chapters will thus serve the additional role of caveats, ensuring a clear point of observation from which to approach the disease definition debate.

Subsequent chapters will address the conceptual difficulties encountered by each of the main approaches and attempt to propose solutions. For instance, Chapter 4 will tackle eliminativism by reframing the issue of 'centrality' in medical discussions, invalidating the argument about values and normative judgments as unnecessary 'distractions' in clinical decision-making, and demonstrating that health/disease definitions also double as labels, thus determining the moral, social and political dimensions of living as an ill person and affecting selfhood through the creation of medical identities. Chapter 5 is going to contribute to the latter interpretation through a comprehensive overview of contemporary philosophy's discussion of health and disease, with a pronounced focus on normativism and hybridism, which I criticize for failing to reflect biological normativity (and especially the dynamic aspects of disease as a phenomenon involving adaptation and compensation on behalf of the affected). Chapter 6 will deal with phenomenological approaches, suggesting that although they may be superior in that regard, they could benefit from a clear-cut distinction between the categories of 'clinical signs' and 'symptoms' to help accommodate Havi Carel's ideas about well-being in illness and the edifying potential of morbid states – two ideas which are closely aligned with my understanding about the reactive nature of disease, and which can challenge negative stereotypes about living as a sick person.

Based on this philosophical distinction and the analysis presented shortly beforehand in Chapter 5, I will construct an account of disease relying on the following criteria: 1) ... that the patient exhibit clinical signs of deviation from her own usual health parameters (as opposed to clinical signs of deviation from a statistically defined average) that cannot be explained with growth, pregnancy, or aging; 2) ... that the patient consider her symptoms as obstacles to her physical and emotional integrity and comfort, or to her participation in society. The naturalist element in this account is contained in the first condition, which operates on the assumption that clinical signs of deviation from one's usual health parameters could point to the presence of pathology, while the normativist and phenomenological elements of the account are exemplified by the second condition's focus on subjective experiences and evaluative

judgments. To the extent that the account will have incorporated all these approaches, it will be considered an example of hybridism. To the extent that it will also have met the requirements outlined in Chapters 1 and 3, it will be considered an optimized version of hybridism, designed to reflect the phenomenon of 'dynamic polarity' and 'biological normativity', bridge the communication gap between patient and practitioner, and represent disease in rhetorically neutral terms which capture its complex multidimensional nature without explicitly relying on negative stereotypes (like many of the associations that Western culture tends to make between diseased states and 'harm', 'failure', 'incapacitation', 'deficiency', or 'defects').

Finally, Chapter 7 is going to analyze the related issue of the conceptual challenges posed by psychiatric conditions' diverse aetiology and manifestations, which can make them elusive to most philosophical accounts of disease. This tension will be resolved by means of thematizing the somatic disease /*mental illness*' dichotomy as existing for purely nosographical purposes. The thesis will then close with a chapter recapping its results and proposed solutions, ultimately arguing in favour of a revised version of hybridism that incorporates phenomenological input in the form of a philosophical distinction between the categories of subjectively experienced 'symptoms' and 'clinical signs'.

2. The Intellectual Infirmary Threat

*'Physicians generally view themselves as realists who disdain all theorists and philosophers. Clinicians tend to focus on other things – the practical, or what “works”. They do not seem to believe that there is a theory for clinical practice. Unfortunately, when doctors dismiss theory, they often do things with unhappy results, because they do not really know why they are doing them.'*³⁵ ~ **E. Cassell**

*'Within the context of the universe of science, illness is rendered thematic in terms of “objective”, quantifiable data. Disease is thus reified as a distinct entity residing in, but in some way separated from, the one who is ill.'*³⁶ ~ **S. K. Toombs**

'[P]hysicians' political and social philosophy about public health only gave more far-reaching expression to what they believed to be true for the more intimate interpersonal context: that lay persons, like patients, had little to contribute to medical decision making, that fundamental inequalities between doctors and the laity created an unbridgeable chasm.' ~ **J. Katz**³⁷

2. 1. Medicine's theoretical and operative framework: specialization, objectification, orientation.

The postulates of medical thinking rely on many vehicles to get around, but the most effective one to this day remains institutionalized knowledge. The intellectual 'legacy' passed down from every generation of physicians and biomedical scientists onto the next one, while a crucial part of the learning process, can also be ripe with bias, clichés, outdated views, or flawed representations of the sociocultural reality it needs to be contextualized in. That, however, is just the first link in a very long chain.

There are many factors which can distort, impoverish, or otherwise threaten the success of scientific endeavours, clinical judgements and patient-practitioner communication, which is

³⁵ Cassell, E. J., *The Nature of Suffering and the Goals of Medicine*, Oxford University Press, New York, 2004, p. 5

³⁶ Toombs, S. K., *Op. cit.*, p. 228

³⁷ Katz, J., *The Silent World of Doctor and Patient*, Johns Hopkins University Press, 2002, p. 30

precisely why the critical thinking cultivated by philosophy needs to ensure a clearer observation point for medicine, rather than the other way around. This is the main argument in this chapter, which will approach the discussion from a position developed by the 20th century physician-philosopher Alvan Feinstein – that certain types of ‘intellectual infirmity’ are very common in medical thinking. The rest of Section 2. 1. is going to problematize complex issues such as labour division in science and clinical practice, and its implications for the theoretical frameworks of medical thinking. After that, I will move on to Sections 2. 2. and 2. 3., which will discuss examples of flawed reasoning in clinical judgement and scientific judgement, respectively.

Section 2. 4., then, will speculate whether the professional jargon developed by physicians and scientists may have exacerbated the lack of conceptual clarity in medical thinking, while Sections 2. 5. to 2. 6. Will explore how the public’s idealized notions about the physician as a seemingly endlessly empathetic and omniscient figure of authority may have contributed to the long life of certain intellectual dogmas and outdated views. Section 2. 7. will propose a solution in the guise of philosophy, which I will argue can help us detect, resist and question such views, while Section 2. 8. will suggest an appropriate target for it – namely the ideal about the infallibility of science. Section 2. 8. will thus set up the ground for the next chapter, which will discredit this myth through the use of historical-philosophical analysis. All of this will be done in order to show that the skills, methods and tools that are taught, applied and valued by philosophy are not only crucial for maintaining intellectual rigor in science and clinical practice, but also necessary for building a successful account of disease.

For all its flaws, the contemporary debate about disease definitions has led to some outstanding contributions to our understanding of health and disease, without which the profoundly human aspect of these phenomena would likely never have received the insightful philosophically underpinned examination it deserves. The term ‘intellectual infirmity’ has been borrowed from Alvan Feinstein’s 1967 book *Clinical Judgment*, where it refers to a variety of biases encountered in medical thinking and reinforced by formal medical education and training. It is a fact that physicians are interested in providing diagnosis and cure for their

patients rather than exploring and (re)defining the concepts of health and disease. Within the context of medical practice curing seems to be understood more as a matter of restoring disturbed functions back to a certain norm from which they have deviated, and not so much a matter of actively pursuing health per se. Thus within the framework of medicine the operative opposition lies between objectified, dehumanized 'normality' and deviation from the norm, and not between 'health' and 'disease'. An interesting result is that debates about the exact meaning of terms like 'health' and 'disease' have largely been left to others, for instance philosophers and scholars in the field of medical humanities. This chapter shall analyze the possible causes and suggest that instances of intellectual infirmity are just as abundant among biomedical scientists and clinical practitioners as they are among laymen, despite the strong associations between intellectual rigor, high epistemic standards and the sciences.

As I have already argued in the introduction, health and disease ought not to be treated or explained solely from the perspective of science. It is time to provide more depth to my claim by demonstrating how three of scientific and clinical medicine's most essential characteristics (namely specialization, objectification and their orientation) make them ill-equipped to provide an answer to such questions.

A) Specialization³⁸ – The development of both medical science and medical practice in the past two centuries has been marked by specialization. Roughly said, specialization is an irreversible tendency in modern science which results in scientific research breaking down into many different disciplines covering different areas of scientific enquiry. Typically a scientist or physician cannot specialize in all of these. An ophthalmologist may be well aware what a perfectly healthy eye is, and an otorhinolaryngologist may have vast knowledge about ear and throat conditions, and quite often also facial plastic and reconstructive surgery or

³⁸ Although this chapter is more concerned with the conceptual difficulties created by specialization than it is with specialization's historical roots, exploring the latter can provide further testimony to my claim that developments in science obey socioeconomic factors and 'administrative rationality' as well as epistemic values such as rigor. See George Weisz's essay on medical specialization in the 19th century which presents specialization as 'a result of the realization of two preconditions: First, a new collective desire to expand medical knowledge prompted clinical researchers to specialize; only specialization, it was believed, permitted the rigorous observation of many cases. Second, administrative rationality suggested that one could best manage large populations through proper classification...' [Weisz, G., 'The Emergence of Medical Specialization in the Nineteenth Century', *Bulletin of the History of Medicine*, Fall 2003, Vol. 77, No. 3, pp. 536-574]

head and neck oncology, but it is doubtful that they would be willing or capable of defining health or disease per se.³⁹ What physicians typically do is to detect and correct an organ or (sub)system's deviation from statistical normality: for instance, patients with ocular hypertension⁴⁰ get special treatment with pilocarpine or timolol eye drops in order to reduce the pressure and avoid optic nerve damage, etc.

B) Objectification – As already stated, the operative opposition in medicine is between statistical 'normality' and deviation from the norm, and not between health and disease. As noted by Gadamer in one of his essays on the enigma of health, 'the scientific approach is concerned with quantifiability, with weighing and measuring. What we esteem in science is that capacity for objectification which is fundamental to the acquisition of knowledge,'⁴¹ but 'the physics of our century has taught us that there are limits to what we can measure. ...This is even more the case when we are concerned not just with the quantifiability of nature but with living beings.'⁴² Hormonal levels, bone density or intraocular pressure and other biomedical parameters measured during examinations are all evidence that there is an objectively measured side of disease, but this does not mean that there is nothing more to it. In everyday human experience disease is not simply a dysfunction in an organ or body system. It could be an extremely unpleasant, debilitating or painful experience, a life-transforming event, an obstacle preventing our accomplishments and goals. In other words, disease could be a situation with complex social, economic and emotional consequences for the one affected and the people around them. With scientists, physicians and naturalist philosophers the focus is often on objective parameters and departure from the norm, and subjective experiences hold no significance in the quest for 'objective truth'. What is more, some even consider them to be needless distractions.⁴³ However, some philosophers argue that this view

³⁹ Of course, one could always argue that the jobs of general practitioners require them to have vast knowledge of multiple medical disciplines. My response would be that general practitioners do specialize – in prevention, early detection and referral to specialized care.

⁴⁰ Eye pressure higher than 22 mm Hg.

⁴¹ Gadamer, H. G., *The Enigma of Health*, Polity Press, Cambridge, 1996, p. 105

⁴² *Ibid*, p. vii

⁴³ See Lefever, R., "Decision Making" in *Medical Care: Is It a Consumer Good?*, IEA Health Unit Paper No. 8, London, The IEA Health Unit, 1990; p. 76 reads: 'It might be believed that all doctors are always interested primarily in the lives of the patients in front of us. I do not believe that to be true. I believe that more commonly our interest primarily focuses on demonstrating our own professional skill. That is the way many of us were trained and it is still reflected in many aspects of the professional medical culture.'

is not complete and that disease cannot be fully captured in a third-person perspective.⁴⁴ Even Canguilhem, himself a physician, raises the question: ‘in what sense are laboratory standardization and mensuration appropriate to serve as the norm for the living being’s functional activity considered outside the laboratory?’⁴⁵

C) Orientation (different topics and concerns) - From Aristotle’s works *Nicomachean Ethics* (Book I, Part 7) and *Eudemian Ethics* (Book II, Part 1), where we can find explanations about the functions of natural kinds⁴⁶, to the World Health Organization’s website, there have been hundreds of attempts at defining health and disease. The vast majority of them have one thing in common – they were not produced by physicians or scientists. Medicine is problem-oriented and does not ponder the meaning of things, analyze concepts, or attempt to create precise, sophisticated definitions. Its definitions are working definitions which serve the purpose of naming, localizing or classifying systems or conditions pertaining to the body. Scientific medicine, despite its advanced state, has neither explained nor defined health and disease per se. The focus appears to be on problems and solutions rather than broad generalizations about the nature of health and disease; on descriptions of specific illnesses rather than an overall account of disease. It has been suggested that ‘modern natural science... means not so much knowledge as know-how’ or, even better said, ‘a knowing mastery of nature’ and a technology.⁴⁷ Thus it looks like the purely theoretical task of defining health and disease has been left to, or is better left to, people like philosophers of medicine rather than physicians or scientists. However, it might be helpful to investigate why this is the case before one engages with the task.

⁴⁴ I am referring to the phenomenological approach to disease. More will be said on this matter in Chapter 5.

⁴⁵ Canguilhem, Op. cit., p. 83

⁴⁶ ‘The basic idea we are left with then is that human beings, like members of other natural kinds, have a function in the sense that some of their behavior, but not all, is teleologically explicable, that is, can be understood as achieving some natural goal or purpose, something that is, from some point of view, good. Such an account of the human function is necessarily evaluative, but it is also necessarily factual since it is tied to what a human being essentially is. Aristotle claims that the human function is, within this account, the life of the fully rational animal. Illness is any incapacitating failure to realize (actualize) this human function.’ See Megone, C., ‘Mental Illness, Human Function, and Values’, *Philosophy, Psychiatry and Psychology*, March 2000, Vol. 7, No. 1, pp. 45-65

⁴⁷ Gadamer, Op. Cit., p. 6

2. 2. 'Intellectual infirmity': Feinstein's critique of clinical judgment.

A possible cause has been examined in the book *Clinical Judgment*, where physician and philosopher Alvan Feinstein presents a rigorous analysis of what he calls the 'intellectual infirmity in our current state of clinical science', as well as a thorough investigation of the exact obstacles met. He introduces the latter as 'a group of hallowed beliefs, transmitted as intellectual legacies by teacher to student, and from one medical generation to the next... like an axiom ... which, though not a necessary truth, is universally accepted,'⁴⁸ which are, nonetheless, 'either inappropriate, obsolete, or mistaken.'⁴⁹ Several decades later, insightful physician-philosophers like Eric Cassell⁵⁰ and Anna Luise Kirkengen⁵¹ have expanded this criticism, revealing that in addition to its notable dogmatic tendencies, medicine may also be guilty of overemphasizing its scientific foundations and failing to integrate patient experiences of illness as an important part of clinical practice – two issues perhaps best captured by Kirkengen's and Eriksen's following observation:

'The subjective world of human life and experience has no given place in a naturalist bio-medical perspective where objectivization and standardization are key concepts. The effects of psychological, relational and sociocultural aspects on human health and morbidity have therefore remained systematically marginalized in the knowledge production of this science. Consequently, researchers as well as clinicians run the risk of helping to disregard, conceal or reject significant sources of disease.'⁵²

Indeed, medicine's constant striving for clarity and rigid rationality may have resulted in a very

⁴⁸ Feinstein, A., *Clinical Judgment*, The Williams and Wilkins Company, Baltimore, 1967, p. 54

⁴⁹ Ibid, p. 55

⁵⁰ Cassell, E., Op. cit., p. 27: 'Science cannot be the dominant force in medicine because it is in the service of something larger than itself. Science, properly understood, must be conceived as being as fully responsive to human needs as possible.'

⁵¹ Eriksen, T. E., Kirkengen, A. L. et al, 'The medically unexplained revisited', *Medicine, Health Care and Philosophy*, August 2013, Vol. 16, No. 3, p. 594: 'The established medical ways of thinking the elaborate terminology and the sophisticated, quality-controlled methodologies are perceived as sufficient for the investigation and handling of the matter [of illness].'

⁵² Ibid, p. 598

narrowly construed view of disease. While physicians like Cassell remain open to the notion that ‘social and cultural forces’ may affect health⁵³, and resist oversimplified formulations of morbidity, a significant number continue to apply the ‘axioms’ listed by Feinstein – especially the belief that there is a strict causal connection between abnormal structures and abnormal functions in illness.⁵⁴ Feinstein decidedly opposed this disease theory, noting how ‘different anatomic lesions can produce identical abnormalities in clinical function’⁵⁵ and reminding his readers that form and function (or, as he would rather refer to them, ‘clinical manifestation’ and ‘laboratory manifestation’) can often diverge,⁵⁶ producing errors in both reasoning and communication⁵⁷ in cases where ‘the diagnostic name of a disease is inadequate to distinguish the diverse functional effects that can occur in different patients who have the same pathologic lesion.’^{58 59} Without a doubt, Feinstein was highly percipient towards identification issues, like the picture presented by such ‘incomplete diagnostic phrases’ – a picture not so much deficient in accuracy as lacking in detail and insufficient as far as the patient’s personal clinical situation is concerned. His insight is further developed by authors like Kirkengen and Cassell, who have proved themselves to be just as sensitive to the multifactoriality of disease and the fragmentary, delimited nature of ‘the various medical specialties’ grasp of “the matter”.⁶⁰ Their work serves well to consolidate my first two arguments, outlined in the beginning of the chapter – the argument about specialization and the argument about objectification. However, the issue with objectification needs to be illuminated further.

The comprehensive chapter on the axioms of medical thinking in *Clinical Judgment* is a rather clear testimony that Feinstein finds medicine’s preoccupation with measurability understandable, yet problematic, as many clinical phenomena (especially the ones observed by the bedside) are irreducible to dimensional expressions. However, it is not entirely clear

⁵³ Cassell, E., Op. cit., p. 11

⁵⁴ Feinstein, Op. cit., p. 55

⁵⁵ Ibid, p. 67

⁵⁶ Ibid, p. 68

⁵⁷ Ibid, p. 69

⁵⁸ Ibid

⁵⁹ My own example would be that of kidney failure, a very widely used diagnosis which does not really say much about the specific expressions, or about the underlying cause of the condition (e.g. whether the reason behind it is a kidney stone, the intake of nephrotoxic drugs, scleroderma, or something altogether different).

⁶⁰ Eriksen, T. E., Kirkengen, A. L., Op. cit., p. 594

whether this particular difficulty should be attributed to the elusive nature of bedside phenomena or to the (still quite limited) tools available for measuring variables like levels of personal discomfort and other subjective reactions or sensations. Feinstein seemed eager enough to point out both of these flaws, yet hesitant to identify only one of them as the main culprit for the frequent discrepancies between obtained data and observed phenomena; instead he stated that ‘a clinician... could never escape his inability to find dimensional expressions for many phenomena of the bedside.’⁶¹ Yet elsewhere he underlined that the ever developing technologies have already made (and will likely continue to make) possible the quantifiability of things previously thought to be non-measurable.⁶² It is only halfway through the book that we are given a precise answer – that the methods of contemporary medicine are bound to produce such mistakes; for instance, through the very means of diagnosis, the clinician already ‘[obliterates] his patient’s distinctions by consolidating them into a short identifying phrase...’⁶³

What is more, upon deeper reflection it turns out that the risk of receiving a wrong diagnosis is higher than generally thought. Feinstein’s explanation is brilliant exactly because of the elegant simplicity with which it manages to capture and enlighten a complex problem such as the consequences of divided labour for scientific credence and reliability: ‘the clinician has transferred many of his old criteria problems to other diagnosticians – radiologists, ..., clinical pathologists, and laboratory technicians,’⁶⁴ and as a result the cognitive tasks surrounding a diagnosis are now allocated to other rational agents who may or may not be performing them correctly.⁶⁵ Another author – Marilyn Rosenthal, has also pointed out the ‘permanent uncertainty’ surrounding clinical practice due to these organizational problems, as well as other variables such as human limitations.⁶⁶ But another, more serious risk, concerns the purely theoretical aspects of clinical reasoning. Feinstein has argued that even when the

⁶¹Feinstein, Op. cit., p. 61

⁶²Ibid, p. 67

⁶³Ibid, p. 70

⁶⁴Ibid, p. 89

⁶⁵Ibid, p. 90, especially the part which mentions ‘all the potential errors of people, machines, or people using machines.’

⁶⁶ Rosenthal, M. M., *The Incompetent Doctor: Behind Closed Doors*, Open University Press, Buckingham, 1995, p. 17. Also see p. 19, which reads: ‘If there is permanent uncertainty in everyday medical practice, then there must be fallibility in what the doctor does.’

cognitive procedure itself (involving the collection, examination, interpretation, synchronization and transfer of various kinds of clinical data) has been carried out correctly, the results would still be inadequate when it comes to identifying the 'illness' of the 'host', and therefore unsatisfactory: 'within the "universe" of each "disease", there is still a diverse spectrum of illnesses and hosts to be classified, and the clinician cannot be a therapeutic scientist until he has reproducibly identified these other elements that characterize the material he treats.'⁶⁷ This pessimism regarding the adequacy of clinical medicine is also expressed by the British writer and physician Lefever: 'My belief in the homeostatic potential of the human organism is not based upon fear of antibiotics and reverence for vitamins but rather upon skepticism for the whole charade of clinical medicine. Frankly I do not believe that patients' lives are invariably improved by medical intervention. A fair amount of what I was taught in medical school has turned out to be dogma or even hogwash. ... I do not deny that there have also been dramatic clinical advances. However, my fear is that the fact that doctors *can* do something may lead to them doing it when perhaps they *should not*.'⁶⁸

Classifying the sick person's illness, as it turns out, has been disregarded in favour of classifying the host's personal features (age, race, sex, etc), the disease's features (organs, tissues, cells, cellular content, etc) or the 'agents of treatment.'⁶⁹ Thus, explains Feinstein, the clinician is found to be lacking in 'formal means of classifying clinical observations', as well as in a 'place to put the information when he communicates.'⁷⁰ In other words, the clinician simply does not seem to possess an adequate 'taxonomic'⁷¹ vocabulary to suit his needs of classifying the distinctions that make up an illness in the 'diseased host.' What makes this situation particularly ironic according to the author is the otherwise strictly organized, effective, eloquent use of language in most scientific environments which clashes with the clinician's verbal impotence (compared by Feinstein to a certain kind of aphasia): 'in the midst of the

⁶⁷Ibid, p. 124

⁶⁸ Lefever, R., "Decision Making" in Medical Care: Is It a Consumer Good?, IEA Health Unit Paper No. 8, London, The IEA Health Unit, 1990, p. 74

⁶⁹Feinstein, Op. cit., p. 126

⁷⁰Ibid

⁷¹My use of the word 'taxonomy' here is not accidental; Feinstein appears to be quite open about his fondness of this term, despite its contemporary associations with zoology and botany.

articulate science ..., the clinician is left scientifically aphasic, cacophonous, or mute... no syntax for a language in which to express his own clinical knowledge.⁷²

However, the most important consequence of these unfortunate conditions is that the speech block encountered at the level of expression translates into (or rather originates from) a mental block on the intellectual level, preventing most clinicians from truly successful unobstructed theorizing about their observations. Feinstein is rather skeptical not only regarding the adequacy of the language used by doctors, but also regarding their actual critical abilities. He appears convinced that the average clinician ‘cannot speak his clinical distinctions well, or think about them clearly.’⁷³ Several decades later, this skepticism regarding the medic’s successfulness as a thinker, truth-giver, theorist and rational moral agent continues to be echoed by physician and author Eric Cassell in his *The Nature of Suffering and the Goals of Medicine*, where he states that ‘physicians generally view themselves as realists who disdain all theorists and philosophers.’⁷⁴ Instead, they are concerned about optimizing clinical practice by virtue of ensuring it has been permeated by science. Historian Reiser has linked the twentieth century’s increasing overdependence on medical technology to the latter’s presumed capacity to deliver accurate evidence, which was perceived as a solution to the unreliability of human judgement at the time: ‘[the] attachment to machine-produced evidence during the twentieth century originated in part from the contemporary faith in science and technology, and a belief that a scientific spirit entered clinical practice through technology’.⁷⁵ It is, then, the false hopes produced by our own dependence on science and technology that we have to blame for most instances of ‘intellectual infirmity’ – or bias – in medical thinking. In the remaining sections of this chapter, I will identify and discuss those of types of bias or inclinations that tend to affect the way scientists, practitioners, and naturalist philosophers perceive and conceptualize the phenomenon of disease. For instance, the next section will deal with the tendency to focus only on those aspects of biological normativity which can be explained via scientific laws; I will then move on to the intentional use of obscure

⁷²Feinstein, Op. cit., p. 126

⁷³Ibid

⁷⁴ Cassell, E. J., *The Nature of Suffering and the Goals of Medicine*, Oxford University Press, New York, 2004, p. 5

⁷⁵ Reiser, S. J., *Medicine and the Reign of Technology*, Cambridge University Press, Cambridge, 1990, p. 161

language, the desire to impose a complete separation between facts and values, and the unquestioning attitude towards institutionalized knowledge.

2. 3. Biological normativity vs. scientific laws.

The idealized notion of scientific medicine as an enterprise concerned solely with discovering and applying the strict laws of phenomena has helped forge a particular brand of open determinism where correction is welcome only insofar as it comes from a related discipline sharing a similar methodology. Canguilhem has noted that collaborations between disciplines like physiology and pathology, for example, are perceived by most scientists as welcome potentially rectifying influences on physiological concepts – a position very much in line with that of philosophers like Whitehead, who has suggested that most sciences assume or presuppose other sciences and their results.⁷⁶ But what if biological normativity and laws are not the same thing? What if life operates in ways that cannot all be reduced to the confirmable that scientists are trying to establish through their investigations? Cartwright has already rejected the ‘facticity’ of natural laws in physics (i.e. the notion that natural laws reflect the literal truth about facts without exception), arguing that laws have an explanatory task and must therefore be ‘given a metaphorical reading’.⁷⁷

Whether or not we may be placing too much epistemic trust on the hard sciences is an issue which falls beyond the scope of this chapter. A question that does need to be asked, however, is whether the same thought patterns that take place behind the compositions of ‘laws’ and scientific theories ought to be seen as the only appropriate intellectual resources for explaining important aspects of human existence. Yet this approach seems so well supported: from the dawn of contemporary physiology and biochemistry in the late nineteenth century to now, theories have obeyed determinist assumptions about the presence of fixed input-output causal connections in all biological phenomena. In his book *The Normal and the Pathological*, Canguilhem briefly turns his attention to Claude Bernard’s determinist

⁷⁶ Canguilhem, *The Normal and the Pathological*, p. 109

⁷⁷ Cartwright, N., ‘Do the Laws of Physics state the Facts’, *Pacific Philosophical Quarterly*, 1980, Vol. 61, p. 77 and p. 78

philosophy of science, critiquing his ‘reduction of quality to quantity which is implied by the essential identity of physiology and pathology’, and expressing disbelief that one would reduce the difference between healthy persons and diabetics ‘to a quantitative difference of the amount of glucose within the body.’⁷⁸ What is especially perplexing about this line of reasoning is that it both presupposes an ‘essential identity of physiology and pathology’ in the living organism (allowing for quantitative, but not qualitative variations) and, at the very same time, separates the results of their respective scientific disciplines, insisting that the development of physiology and pathology progresses in a form of isolation where neither of them can inform or correct the other (i.e. adopting the meta-scientific position of ‘closed’ determinism).⁷⁹

This contradiction, coming from Bernard’s otherwise tremendously well-informed and philosophically inclined mind, is by no means an isolated case in medical thinking. It is not the claim about the ‘essential identity of physiology and pathology’ that we should be surprised by, as the notion that quality is reducible to quantity has been around for centuries now and can be detected in various philosophical disciplines such as ethics, political theory, and philosophy of science. Indeed, when Canguilhem examines Bernard’s version of it, he recalls Hegel’s idea that quantity changes into quality by growth or diminution – a notion that has been successfully applied in the explanatory strategies of science, which manage to theoretically reduce the complex phenomenon of colour to a quantitative difference of wavelengths.⁸⁰ The problem, therefore, does not lie in this lack of acknowledgement for the ontological distinction between the categories of quantity and quality. It lies within the lack of awareness that this position is accompanied by other theoretical commitments that seem to clash with Bernard’s (and his colleagues’ or followers’) purpose to explain physiological phenomena and pathological phenomena, as the implicit argumentative structure inevitably leads to the conclusion that ‘normal and pathological have no meaning on a scale where the biological object is reduced to colloidal equilibria and ionized solutions’.⁸¹

⁷⁸ Canguilhem, *Op. cit.*, p. 106-110

⁷⁹ *Ibid*

⁸⁰ *Ibid*

⁸¹ *Ibid*

As seen in the above example, despite having been shaped by some of the brightest minds in the history of mankind, theoretical medicine and physiology have never lacked examples of logical fallacies, bias, errors, vague language, poor phrasing and unsystematic thinking. Feinstein, Canguilhem and Cassell have all attempted to demonstrate this from an insider's perspective, and if their observations are correct, one ought to wonder about the reasons behind the inarticulacy and inconsistency they describe. Could the confusion be due, perhaps, to medicine's peculiar multidimensionality, to its simultaneous existence as theory, practice, science and art all at once? Or could it be simply that the medical language is inadequate for theorizing and communication as it was developed more out of need for a 'vehicle of professional recognition'⁸² rather than a means of conversation? It is very likely that both factors have contributed in their own way to the inaccessibility of physician speech, but here I will turn my attention the latter, underexplored one.

2. 4. Additional purposes of medical language.

On one hand there are the opinions that medicine is characterized by inherently unsystematic thinking, like the kind typically attributed to the arts, humanities and 'soft sciences'. For instance, in one of his works Swiss psychiatrist Eugen Bleuler develops an interesting theory regarding the peculiar style of interaction typical for some medics. According to Bleuler 'autism is by no means limited to schizophrenia, but ... characterized the anthropocentric thinking of man throughout history in his drive for knowledge, his theories as to the creation of the world, causes for inexplicable phenomena, thousands of theories lacking any basis in reality, and the manifold attempts to change fate by magic and prayer. Autistic thinking has been extensively applied to explain disease, and unfortunately is fostered by the physician as he attempts to delude the patient and himself...' ⁸³

⁸²Quotation from Cardwell, D. S. L., *The organization of science in England*, London, 1972, as quoted by Lawrence, C. 'Incommunicable Knowledge: Science, Technology and the Clinical Art in Britain 1850-1914' in *Journal of Contemporary History*, Vol. 20, No. 4, October 1985, p. 504

⁸³Garfield Tourney, 'Eugen Bleuler. Autistic undisciplined thinking in medicine and how to overcome it', *Journal of the History of the Behavioral Sciences*, 1973, Vol. 9, No. 4, pp. 414-416

On the other hand, there are the opinions which explain the obscure language and thought pathways of medics with theories about intentional segregation, achieved through the adoption of specifically produced codes of conduct. Social historians confirm that during the nineteenth century the public's attitude towards medicine and the rising medical profession changed from suspicion to acceptance,⁸⁴ and in the process, physicians' main focus as an occupational group shifted away from securing their profession a respectable position in society, and onto addressing the problem of competition against other practitioners of the trade.⁸⁵ According to Lawrence, for example, for a long time the professional authority of medical practitioners largely depended not only on their ability to advertise their skills, but also on their rhetorical practices – more specifically, on the way they 'brought to public notice the cultured practitioner of arcane skills' and protected the clinician's interests 'against competition.'⁸⁶

For instance, the sophisticated language used by gentlemen medics in the nineteenth century was to ensure that their community would not be reduced to a mere group of professionals, but rather come to be presented as a very élite and special society whose word meant more than that of regular practitioners.⁸⁷ It was considered a demonstration not only of their authority as doctors, but also of their superior qualities as people; of their more refined and delicate nature. Physicians were almost comparable to 'secular priests'⁸⁸; figures whose unique influence just kept getting underscored further and further during the final stages of medicine's transformation from art to science, and 'whose authority and expertise

⁸⁴Larson, M. S., *The Rise of Professionalism: A Sociological Analysis*, University of California Press, 1979

⁸⁵ Of course, there have also been opinions that their common goals served to unite rather than divide all groups of medical practitioners; that the struggle for authority was essentially a struggle to break free from lay control, and to establish domination over the lay populace itself. See Katz, J., *The Silent World of Doctor and Patient*, Johns Hopkins University Press, 2002, p. 33: 'The early and close ties among the "educated" groups created a small but powerful elite that had the ear of kings, and, later, of Parliament, city councils, and other legislative bodies. United in the common pursuit of authority and power over ordinary citizens, these groups tended to support one another, particularly in relation to the wide world of patients, clients, lay healers and lay advisors whom, like the rest of mankind, they considered uneducated and of little consequence.'

⁸⁶Lawrence, Op. cit., p. 504

⁸⁷Ibid

⁸⁸ Williams, S. J., and Calnan, M., 'Modern Medicine and the Lay Populace: theoretical perspectives and methodological issues' in Williams, S. J. and Calnan, M. (Eds.) *Modern medicine: lay perspectives and experiences*, UCL Press, London, 1996, pp. 1-31

encompassed not only bodily ailments but also prescriptions on a “good, virtuous and healthy life.”⁸⁹ Sharma has remarked on physicians’ various and sometimes conflicting roles as diagnosticians and technicians, but also as advice givers and counsellors; as persuaders and negotiators.⁹⁰

This portrayal of the trade, with its overstated focus on prestige and high esteem of personal characteristics, seems to be rejected by the contemporary tendencies set by evidence-based medicine. EBM ‘places a lower value on authority than the traditional paradigm of medical practice,’ says an article from the year 2000 prepared for the Evidence-Based Medicine Working Group,⁹¹ because it accentuates the importance of systematic approaches to evidence examination and of formal sets of rules within clinical decision making. On the other hand, it is also obvious that to this day non-clinical skills are still greatly valued in doctors and medical staff. Communication, social skills, listening skills, compassion, ‘sensitive understanding of the patient’ and many other similar qualities deemed important in the process of obtaining patient history are still regarded as crucial for those among us who aspire to achieve a successful career in medicine,⁹² as also confirmed by Calnan and Williams.⁹³

2. 5. Exploring the objections to humanistic ideals about clinical practice and medical thinking.

It would have been convenient to regard humanistic approaches to medicine as a solution to the ‘intellectual infirmity’ threat described by Feinstein, if not for the fact that these approaches carry their own brand of risk. Authors like Jane Macnaughton and R. S. Downie remind us that while it is ‘recognized that the doctor must acknowledge the patient’s humanity ... through the adoption of the attitude of beneficence or compassion without losing any of

⁸⁹ Gabe, J. et al, Introduction to *Challenging Medicine*, Routledge, London, 1994, p. xii

⁹⁰ Sharma, U., *Complementary Medicine Today: Practitioners and Patients*, Routledge, 1991, p. 169

⁹¹ Guyatt, G. H. et al., ‘Evidence-Based Medicine: Principles for Applying the User’s Guides to Patient Care’, *Journal of the American Medical Association*, 13 September 2000, Vol. 284, No. 10, pp. 1290-1295, quote is from p. 1291

⁹² *Ibid*, p. 1293

⁹³ See the first chapter in Williams, S. J. and Calnan, M. (Eds.) *Modern medicine: lay perspectives and experiences*, UCL Press, London, 1996. Page 17 reads, as follows: ‘... it is... clear that, beyond their technical competence, the personal qualities and communication skills of the doctor are the attributes that are valued most highly among the lay populace.’

the essential technical elements in the doctor's attitude'⁹⁴, quite often this is not only an overly demanding task for the busy medic, but also a hidden threat to the patient's autonomy, as it facilitates paternalistic attitudes in this setting of 'deep caring.'⁹⁵ Nevertheless, Macnaughton and Downie admit that clinical judgement should be a unity of both technical and humane judgement⁹⁶, and that it is irreplaceable despite the 'secure foundation' provided for clinical decisions by the development of evidence-based medicine.⁹⁷ Thus it appears that the big issue presenting itself in front of clinicians is neither a lack of humane judgement nor an incapacitated technical (or even theoretical) thinking per se, it is the difficulty to combine those two elements in fruitful ways that do not:

- 1) ... rob the medic of precious time for work with patients by introducing too many social and ethical rituals or stages within the doctor-patient relationship;
- 2) ... place too much moral burden on the medic by requiring her to establish deep human interaction with the patient;
- 3) ... impair the delicate epistemic balance of the medical investigation by focusing either only on technical aspects like diagnosis and aetiology or only on the human aspect (communication, exploring the patient's own history, characteristics and personality traits, etc.).

Such dire conditions could present psychological obstacles in front of clinicians, both in clinical judgement and on higher levels of judgement, such as theorizing about the broader or more philosophical aspects of medicine. The responsibilities and demands faced by clinicians on a daily basis could easily render any rational agent unwilling to spend any more time than is absolutely necessary on reflections; they could also leave said rational agent confused, frustrated or reluctant to accept any more additions to her already extensive list of professional duties – especially if those newer additions do not concern the technical, but only the ethical aspects of the job. Therefore it is not too hard to understand why representatives

⁹⁴Downie, R. S. and Macnaughton, J., *Clinical Judgement: Evidence in Practice*, Oxford University Press, Oxford, 2000, p. 83

⁹⁵Ibid

⁹⁶Downie and Macnaughton, Op. cit., p. 104

⁹⁷Ibid, p. ix

of clinical medicine, with its very practical orientation and its focus on effective treatment rather than deep compassionate care, might see little use in exploring or creating meta-theories about medical thinking. In his paper on clinical decision making, London general practitioner Robert Lefever provides a simple explanation why physicians prefer to follow the safety of routines in their day-to-day work: 'Indeed, it is very much in the patient's interest that I *should* follow a disciplined routine; it is only by following my routines that I remember what I should do, regardless of whether I am bright or tired, happy or sad, busy or slack and so on. The safety of routines is that they remove an important variable: me. That is not to say that I become a robot. Far from it, it means that I am wide awake when something does not fit the standard pattern.'⁹⁸

Naturally, whatever the psychological reasons behind this tendency that Feinstein chooses to call 'inarticulacy', it is clear that they are but part of the problem. There have been claims that medical professionals could benefit greatly from adopting a so-called 'humane attitude', the cultivation of which depends on education just as much as on moral virtue, or even entirely relies on education to provide the necessary basis for developing virtues. However, Williams and Calnan's study on lay evaluative criteria⁹⁹ suggests that there may simply be too much conceptual distance between patients and physicians in terms of what is to be considered as a 'good' or 'bad' treatment option. While the majority of ideas about what is 'good' may conceivably overlap with those of physicians ('life-saving', 'quality of life enhancing', 'necessary', 'restores independence', etc), some patient ideas about what is 'bad' can leave a lot of room for disagreement with doctors who may perceive them as irrelevant and either too trivial or too abstract (a 'bad' treatment was associated with qualities such as being 'unnatural', 'immoral', 'unnecessary', 'promoting addiction or dependence', or a 'waste of money'). In addition, it has also been suggested that in most cases the programmes designed by contemporary medical school systems are too narrowly framed and only provide a basic

⁹⁸ Lefever, R., "Decision Making" in *Medical Care: Is It a Consumer Good?*, IEA Health Unit Paper No. 8, London, The IEA Health Unit, 1990, p. 69

⁹⁹ Calnan, M. and Williams, S., 'Images of Scientific Medicine' in *Sociology of Health and Illness*, 1992, Vol. 14, pp. 233-254

technical training instead of the broader education needed for building a truly wide and flexible cognitive outlook.¹⁰⁰

2. 6. Societies as opponents or enablers of authoritative medical models.

This idea that there might be a fault in the institution of medical education can be rather challenging for those of us brought up in an atmosphere of complete epistemic reliance upon health care professionals. In a traditional East European society, where the majority of people still have comparatively little exposure to internet, computers and other sources of quick unlimited information, it seems almost perfidious and cruel to suggest that the doctor – a widely recognized figure of epistemic trust and respect – could be lacking in perspective or education, fallible, requiring further improvement or skill development.

Meanwhile, in the West more and more patients each day independently browse information on their conditions by surfing the web or researching specialized literature; they make decisions and demand specific treatments, seek out second opinions, refuse to follow their practitioner's advice if they disagree with it, and even sue doctors for refusing to provide them a particular treatment that they require for themselves. Strong, for example, claims that the general public is becoming 'increasingly skeptical about the value of modern medicine', and more ambivalent towards doctors.¹⁰¹ In other words, the Western patient has broken free from the immobilizing, silencing role of a passive receiver of care and advice, and has come to regard herself as almost equal with the doctor in terms of cognitive credibility and active decision making.

Due to their old historical roots, the causes underlying this turn in the evolution of social epistemology are more subtle than their obvious effects on hierarchy and ethics, and could easily go unnoticed by most. But if one chooses to venture into the history of Western medicine, the reasons reveal themselves in a long series of crucial events spread throughout

¹⁰⁰Downie and Macnaughton, Op. cit., p. 174, p. 180

¹⁰¹ Strong, P., 'Sociological imperialism and the medical profession: a critical examination of the thesis of medical imperialism', *Social Science and Medicine*, 1979, Vol. 13 A, No. 2, pp. 199-216

the recent past (especially the 20th century), which might have helped lead to a decrease in the public's overall trust in the (epistemic) infallibility of medics.¹⁰² As observed by Giddens, late modernity is an information-based era, and its society is a society of clever people who prefer to keep track of events by taking full advantage of whatever sources have been made available to them.¹⁰³ Thanks to global media development during the past century, Western societies have been able to keep track of medical disasters in the making – such as the indiscriminate practice of lobotomy in both children and adult psychiatric patients in the USA which had left the brains of over 40000 people ‘irreparably vandalized by doctors’¹⁰⁴ by the year 1955, or the wide use of dubious treatments like electroconvulsive therapy for schizophrenia and other psychiatric conditions up until the late 1950’s.¹⁰⁵

While so-called ‘bad medicine’ (a term for which I choose to credit Youngston and Schott) has undoubtedly existed since the dawn of time, it is in this age of free access to information and, coincidentally, of an ever-increasing importance of patient rights and freedom of choice, that we are more aware and less accepting of it than ever. The same social, ethical and political factors are shaping both the moral code of contemporary clinical practice and society’s expectations of practitioners; they represent the growing demand that practitioners be as trustworthy and reliable as possible, on an epistemic as well as an ethical level. They are the reason why more and more people, including many medics, have started to ask themselves why, about which things and to what extent doctors are to be trusted – not only with regards to clinical and moral judgment, but also as thinkers and theorists. But how to answer these questions?

2. 7. Historical-philosophical analysis as a weapon against ‘intellectual infirmity’.

¹⁰²This paragraph does not commit me to any positions regarding the public's trust in representatives of scientific medicine, it concerns mainly my own observations on public attitudes towards clinicians. In fact, further in the thesis I mention my personal impression that there are apparent discrepancies between the credibility levels attributed by the public to representatives of scientific medicine on one hand and to clinical practitioners on the other. The former generally tend to be regarded as more reliable truth-givers of a higher order, while the latter seem to be given a comparatively lower degree of epistemic credibility.

¹⁰³ Giddens, A., *Beyond Left and Right*, Polity, Cambridge, 1994

¹⁰⁴ Youngston, R. and Schott, I., *Bad Medicine: True stories of weird medicine and dangerous doctors*, Robinson, London, 2012, p. 254

¹⁰⁵ *Ibid*, p. 321

The critical thinking cultivated by disciplines like philosophy could help us escape the influence of the particular brands of prejudice pertaining to science and science-permeated disciplines such as clinical practice. Those of us looking for the answers to questions like ‘What is disease?’ struggle with a lot of conceptual difficulties, although philosophical debates have been successful in shedding some light on them. Negative definitions of disease such as ‘an absence of health and well-being’ raise further questions, like ‘What are health and well-being?’, and functional definitions which explain health and disease through the (in)ability to cope with life and to perform everyday tasks fail to capture the distinction between healthy people and ill people who are independent and well adapted to their conditions. Defining health through well-being is also problematic as it implies that well-being could be present only in healthy individuals, while authors such as Carel¹⁰⁶ and Lindsey¹⁰⁷ have argued that well-being is possible and quite common even among the sick. Definitions of health/disease should avoid reinforcing negative stereotypes and misunderstandings. One way to achieve this is through abandoning the deficit perspective. Disease does not necessarily equal disability, discomfort and lack of health or well-being in all cases: one could test positive for HIV and still be healthy in the sense that one is free of other infections; one could be affected by a slight case of myopia and still have healthy eyes in the sense that she does not need contact lenses and her optic nerves have not been damaged by conditions like severe glaucoma. In addition, the sense of comfort and well-being could be absent in healthy individuals due to trauma, injury, stress, or even perfectly ‘normal’ but unpleasant states and processes like teething, menstruation, pregnancy, childbirth, or ageing.¹⁰⁸

¹⁰⁶ Carel, H., ‘Can I Be Ill and Happy?’, *Philosophia*, 2007, Vol. 35, pp. 95-110

¹⁰⁷ Lindsey is responsible for an innovative study of health experiences in illness and disability, which was conducted among eight chronically ill participants. The results revealed that these subjects felt they were capable of ‘celebrating life’, establishing social connections and pursuing life opportunities, transcending their own selves and the illness, et cetera. Based on the study, Lindsey concludes that the so-called ‘deficit perspective’, which construes chronically ill and disabled people as somehow deficient or defective, does not produce an accurate portrayal of their experiences. See Lindsey, E., ‘Health within illness: Experiences of chronically ill/disabled people’, *Journal of Advanced Nursing*, Vol. 24, pp. 465–472

¹⁰⁸ I am aware that a recent paper by Christopher Boorse argues that ageing is pathological (see Boorse, C., ‘A Second Rebuttal on Health’, *The Journal of Medicine and Philosophy*, December 2014, Vol. 39, No. 6, pp. 683-724). The main reason I do not accept this argument is that it relies on making ‘young adults the standard for all adults’ and ‘[counting] age as irrelevant after adulthood’ – a strategy which is not likely to deliver reliable results, since the threshold of adulthood is itself an arbitrary category, and since human beings tend to develop and age at very different rates.

An additional benefit of philosophical approaches to health/disease definitions is their openness to exploring different models of body perception in health and disease. A powerful example is Barbara Duden's paper 'History of the Body', which begins with an outline of Foucault's idea about the epistemological break in the history of the Western body between the 18th and 19th centuries. Duden shows that, in accordance with that period's new and different 'cognitive style', the body turned into an object of scrutiny and professional, scientific definitions. It came to be viewed in new ways as a new, solid, 'organ-specific' body model replaced the older, humoral, fluid one. This process was accompanied by changes in language. Until then, with the exception of highly educated patients (who often shared similar educational backgrounds with that of the medic, for instance good knowledge of Latin), medics usually had to deal with complaints made in the patient's own language¹⁰⁹, often influenced by her daily work and surroundings.¹¹⁰ Little by little the language used to describe the body and its parts or conditions underwent an evolution of its own as 'the experiences are shaped and expressed according to medical diagnostic terminology, "humoral" body is replaced by a body with "dismembered, isolated, fixed" organs; symptoms have to be "organically localized."' ¹¹¹ However, centuries ago, the body was both experienced (by laypeople) and thought of (by medics) as an arena of hidden, unseen processes and activities. An explanation of these processes was available only to the relatively low number of educated practitioners who were learning through Vesalius's anatomical illustrations. In the present age, this is no longer the case, and the body is often viewed as an object available to the scrutinizing eye of the professional; disease is perceived as an objective condition, and symptoms are localized with much greater precision than the one shown in Albrecht Dürer's prototype of a pain map, for example.¹¹²

¹⁰⁹ Which was, as pointed out by Duden in her introduction to *The woman beneath the skin*, often 'fantastic' and abundant of 'improbable details'.

¹¹⁰ Duden, B., 'Medicine and the History of the Body' in (Eds.) Lachmund, J. and Stollberg, G., *The Social Construction of Illness*, Franz Steiner Verlag, Stuttgart, 1992, p. 46

¹¹¹ Ibid

¹¹² I am referring to Albrecht Dürer's (1471-1528) small self portrait known today as *The Sick Dürer* on which he wrote, 'Do wo der gelb fleck is und mit dem finger drawff dewt do is mir we' ('There, where the yellow spot is located, and where I point my finger, there it hurts') before sending it to his physician for consultation. Because of its resemblance to the pain charts produced by Palmer, the inventor of modern pain mapping, this work of art

What the work of authors like Barbara Duden shows is that for every key epoch in history, accounts of health and disease are closely related to a predominant model of body perception of that epoch. That is why I place such high importance on the cultural and historical exploration of medical thinking's stages of development, as the awareness of older notions and definitions could provide us with deeper insight, and help us build a basis for comparison between the thinking models of different historical periods. This comparison, in turn, can help us distinguish between the important persisting elements (which I sometimes refer to as 'constants') and the more irrelevant variables – such as the influences of social-political and moral factors, or even aesthetic ideals.

For instance in 19th century tuberculosis, which we now know as a deadly bacterial infection of the lungs, was believed to be a hereditary constitutional trait. Despite the fact that it affected people from all walks of life and killed an estimated one quarter of the adult population in 19th century Europe, it somehow became known as the disease of artists and poets¹¹³, and was associated with spiritual purity, creativity and fragility. Instead of potential threats to the health of the public, the sufferers were seen as noble, delicate, sensitive and brilliant, which is why their condition was glorified. The physical characteristics associated with it – like pale skin, restless shining eyes, thinness, and gaunt faces with hollow cheeks (as observed in all portraits depicting the Polish composer and pianist Chopin, a famous phthitic symbol of attractiveness during Romanticism) – came to be romanticized and considered beautiful.¹¹⁴ This was all guided by the tastes of an era ruled by melancholy and ideals about tragic beauty, during which 'consumption' was often 'used' by its sufferers as a fashionable accessory because of everything it had come to symbolize.

has been called by physicians 'the Renaissance prototype of pain maps'. For more information see the article by Schott, G. D., 'The Sick Dürer – a Renaissance prototype pain map' at:

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC535996/>, last accessed on 15 April 2013 at 17:36 h

¹¹³ Anne Bronte, Emily Bronte, Walter Scott, Frederic Chopin and many other prominent figures in the field of music, art and literature are known to have died from what was then known as 'consumption'.

¹¹⁴ Of course, with the exception of George Sand who was fascinated by the 'infinite grace' with which her lover Chopin coughed (see Howe, M. J., *George Sand: The Search for Love*, Kessinger Publishing LLC, Whitefish, 2005 for exact quotations of letters between Sand and Madame d'Agoult), most people simply disregarded some of the more unpleasant traits of the disease, such as hemorrhaging, sweating, hacking and so on, and focused on the beauty of flushed cheeks and shining eyes.

A similar case of ideals shaping the understanding about health and disease can be observed in the 17th century. The example I have chosen is Rubens's painting 'The Three Graces' which presents the viewer with an image of three beautiful full-figured young women surrounded by flowers and trees.

At the time it was painted, the three women were considered a depiction not only of the predominant beauty ideals, but also of youth, vitality, fertility and good health. However, in a relatively recent paper Bonafini and Pozzilli argue that, when analyzed medically, these young women show signs of disease 'that inevitably affect our reading of the image' including, but not limited to, a 'presence of overweight close to obesity with a calculated BMI between 26 and 29, associated with an increased risk of cardiovascular disease.'¹¹⁵ Whereas a 17th century physician would have seen nothing but robust, strong bodies when inspecting the painting, his contemporary colleague would inevitably detect the alarming signs of obesity, as well as the threat of numerous conditions like diabetes, high blood pressure, osteoarthritis, cancer and many others which are now associated with being overweight. We are taught about the benefits of maintaining a low body mass index and weight, but centuries ago fuller body types meant health and wealth, because they were associated with good nutrition, and thin bodies symbolized hardships, poverty, deprivation, and disease. Two things that have remained unchanged over the past few centuries are: a) that, with the obvious exception of romantic ideals about the tragic beauty of consumption, we usually link attractiveness and good health, and b) that today we still believe in the importance of proper nutrition as a way of preventing or treating disease. Studies confirm that nutritional alterations affect all aspects of the endocrine glands' functioning,¹¹⁶ and that they can be used to control a variety of conditions, including sex hormone disorders.

The two examples presented above show convincingly that research – including cultural

¹¹⁵ Bonafini B, Pozzilli P., 'The Three Graces: Canons of Beauty or Disease Repulsion', *International Journal of Cardiology*, 2013 Feb 22, pp. 234-239

¹¹⁶ Hari Kumar K., Baruah M. M., 'Nutritional Endocrine Disorders', *Journal of Medical Nutrition and Nutraceuticals*, 2012, 1, pp. 5-8

studies – on the history of causal explanations of disease could be of great use, as a historical-philosophical interpretation of the major paradigm shifts in disease theory could reveal fundamental conceptual misunderstandings in health/disease definition debates, as well as in the philosophy of medicine more broadly construed. Since we live ‘in an environment which has been increasingly transformed by science and ... in a society which has itself been wholly shaped by the scientific culture of modernity’¹¹⁷, we have this idealized picture of medicine as a result of unhindered scientific progress which marked history with numerous great discoveries that saved lives, improved the quality of life and educated us on the mysteries of the human body. But is that all there is to it? Philosophy, along with the ‘relatively neglected area of medical history’¹¹⁸ has much in store for us that could, if examined in detail, bring about significant changes in the way we think of medicine, health and disease.

2. 8. On the supposed infallibility of science.

As noted in the previous section, science is not infallible. Its history is filled with examples of mistakes, misunderstandings, failed experiments and rejected theories which it has to correct in order to move forward. And just like the development of science is maintained by its own continual self-correction,¹¹⁹ our knowledge of this development could be improved by historical examination and interpretation of this continual self-correction and its circumstances. This, in turn, could help us build a better understanding of health and disease as objects of philosophical investigation. An example of this is the shift from the theory that diseases have multiple constitutional causes to ‘germ theory’ as described by K. Codell Carter.¹²⁰ Carter attributes this shift to the rapid development of bacteriology, but it has also been shown by historical research to stem from certain processes dating as far back as the middle ages or the early modern age. The imbalance of temperaments (also known as humours) and other causes typically used for explaining diseases at that time were largely abandoned after the appearance of untreatable at the time epidemic ‘diseases as syphilis and plague, which were new, devastating, and often appeared contagious, and for which cures did

¹¹⁷ Gadamer, Op. cit., p. 104

¹¹⁸ Thomas McKeown, *The Origins of Human Disease*, Basil Blackwell, Cambridge, 1988, p. IV

¹¹⁹ Gadamer, Op. cit., p. 3

¹²⁰ Carter, K. C., *The Rise of Causal Concepts of Disease: Case Histories*, Routledge, New York, 2003

not easily come to hand, stimulated a search for causes other than the imbalance of temperament.¹²¹ For instance, physicians Da Monte and Fracastoro were convinced that syphilis was spread through contact; the former believed that this happened by the emanation of poison, and the latter – that there were ‘seeds’ which caused the disease within a receptive environment.¹²² This dramatic change from the previous (Galenic) line of thought which considered all diseases to be the result of imbalance in elements or humours, is a clear demonstration of the fact that ideas and concepts in science could also be subject to change and interpretation. In fact, historical interpretation of the relation between health and conditions of life can help us do away with misunderstandings about the nature of disease: it could present us with a clearer picture of the behavioural or environmental origins of disease while at the same time removing any attempts to explain disease through, or attribute disease to, factors like ‘intrinsic inferiority’ or ‘weakness’ of the affected organism. Some scientists hold that we are not genetically well equipped for the contemporary way of life. Human genetic constitution has remained basically the same over the past 100 000 years. The contemporary businessman sitting in his office chair for hours on end has the same constitution as his hunter gatherer ancestors, though he is exposed to completely different life conditions and, at least according to some, faces much greater, man-made dangers to health (such as environmental pollution, smoking, alcohol, junk food and isolated, sedentary lifestyles far removed from the active life that our genes have prepared us for).¹²³ It has been argued that health is a condition based, among other things, on the quality of the relationship between the body’s genetic constitution and its environment. That might sound plausible, but according to some theories disease cannot be eradicated just by correcting the socioeconomic or environmental context of its origin, because ‘we simply substitute one form of disease for another’ and ‘other forms of illness seem to fill any vacuum produced by corrections in harmful environments’.¹²⁴ Aetiology, then, should not feature in accounts of disease, if we are

¹²¹ Wear, A., ‘Medicine in Early Modern Europe 1500-1700’ in Lawrence I. C. et al, *The Western Medical Tradition 800 BC to AD 1800*, CUP, 1995, p. 261

¹²² Ibid, p. 263

¹²³ Of course, despite all these hazards, birth rate has increased, mortality has declined, and health has improved. All this can be attributed to our increased knowledge of disease mechanisms.

¹²⁴ Bean, William B., ‘Changing Patterns of Ideas about Disease’ in Rotschild, Henry R. (Ed.), *Biocultural Aspects of Disease*, Academic Press, Orlando, 1981, p. 46

to avoid dangerous distractions and further complications to an already ambitious philosophical task.

Clearly attempts to 'outsmart' and subordinate the powerful dynamic of health and disease to the needs of mankind ought to take priority over conceptual disagreements about the meaning of a term. This observation has been used to justify eliminativist positions regarding health/disease definitions – i.e. positions according to which these definitions are irrelevant or even harmful distractions from more important discussions. Canguilhem asserts that it is 'understandable ... that physicians are not interested in a concept which seems to them to be too vulgar or too metaphysical', since that which truly interests them is diagnosis and cure understood as 'restoring a function or an organism to the norm from which they have deviated.'¹²⁵ The next three chapters will deal with the following problematic implications of this notion:

- 1) ...that conditions which cannot be cured are not diseases (more on this objection in Chapter 5);
- 2) ... that debates about the exact meaning of health and disease are pointless and, most importantly, useless (a position also known as eliminativism in the philosophy of medicine, which I shall critique in Chapter 4);
- 3) ...that health should be regarded as a measurable characteristic.

The latter position's historical and theoretical roots shall be explored in the next chapter (Chapter 3), but a proper critique of it will be developed in greater philosophical detail in Chapter 5, after we have dealt successfully with the arguments for eliminativism in the health/disease definitions debate (Chapter 4). Among many other questions, Chapter 5 will ask:

¹²⁵ Canguilhem, *Op. cit.*, p. 122

a) If disease is a measurable property, as some physicians and scientists seem to believe, then does that not mean that health is too?

b) If health is the same thing as normality and normality is a standard based on the average of a measurable characteristic, then health would be measurable too, but how are we supposed to account for the fact that health is not something which has an upper limit (as pointed out by Boorse)?

Chapter 3, however, will not raise these questions just yet. Instead, it shall introduce us to the historical and sociocultural influences which produced the very discourse of naturalist views on biology, physiology, medicine and the corporeal aspects of human life. The purpose is to demonstrate that naturalism, rather than being a paragon of scientific objectivity, is itself a historically situated intellectual movement, and thus no less prone to various forms of socioculturally conditioned bias.

3. Quantifying abnormality then and now: 19th century scientific theories and their ongoing influence on contemporary philosophical discussions of disease

'The age of science in medicine – the radical transformation of medicine that began in mid-nineteenth century and continues today – coincided with the age of medical monopoly. While scientific thinking in medicine existed at least as early as the seventeenth century, the decisive change in the mid-nineteenth century was the startling rapidity of medical advances which changed the profession. ... The magical promise of science to wipe out disease contributed to the public's willingness to turn away from other healers and allow allopaths... to take charge.' ~ Jay Katz¹²⁶

'The journey deep into human flesh initiated by dissection is what has made Western medicine unique. It has sustained the fruitful conviction that in ever-more-minute investigation of the flesh lies the key to health and disease, even if that has also encouraged a tendency to myopic reductionism, to miss the whole by concentrating exclusively upon the parts.' ~ Roy Porter¹²⁷

The above quote from Roy Porter refers to the role played by 16th and 17th century anatomical discoveries in the subsequent development of scientific biomedicine's and clinical practice's theoretical apparatus. Indeed, the history of anatomy presents fruitful ground for research for anyone interested in the connection between reductionism and the rise of the 'medical gaze' (which coincided with the elevated status of observation in post-Vesalian anatomy). In his book *Blood and Guts: A Short History of Medicine*, Porter identifies advances in anatomy as the main factors behind the shift from humoral to organic theories of disease: '... in due course the familiarity which followed from dissection drove investigators to rethink the body and its disorders – indeed, the very nature of disease. Traditional humoral theories had viewed health and disease in terms of systemic fluid balance. This model was gradually supplanted by a new

¹²⁶ Katz, J., *The Silent World of Doctor and Patient*, Johns Hopkins University Press, 2002, p. 40

¹²⁷ Porter, R., *Blood and Guts: A Short History of Medicine*, W. W. Norton & Company, New York, 2004, p. 54-55

concern with local anatomical structures and mechanisms – the “solids”. The “black box” of the body was being exposed to the medical gaze.’¹²⁸ In that sense, anatomy in the 16th and 17th centuries precedes 19th century physiology and biochemistry as the driving force behind disease objectification and reductionism. However, it lacks their pronounced influence on the general public’s medical culture. For the social and economic reasons outlined by Jay Katz, namely the intimate ties between medical monopoly and scientific advances in the nineteenth century, scientific medicine and physiology have been able to gain influence over the postmodern masses with a large, sweeping motion, and to keep this influence, thus reshaping the way everyone – laypersons included – thought about medicine, health and disease. Here I will argue that many of the features and opinions attributed to contemporary science and, by association, to clinical practice and medical thinking, are in fact value-laden and culture-specific, rather than representative of undisputed objective truths.

3. 1. Science, values, and fetishization.

The new ideal of science is one which depicts a humane and human-oriented science, which does not abandon societal values during its relentless search for truth, but rather manages to incorporate them in its pursuits – usually in the form of focusing on current socially significant issues and their potential solutions. This is not the early twentieth century ideal from which we have inherited our predominantly naturalist approaches to medical and biological phenomena – the ideal about the distant, unconcerned, solitary endeavour,¹²⁹ focusing on issues far removed from the lifeworld and more engaged with objectivity than with practicality. In the biomedical field, preoccupation with objectivity is linked with a fetishization of acontextual, universally valid, quantifiable evidence as a sign of accuracy and reliability – a trend originating in nineteenth century Western physiology and biochemistry in opposition to intellectual movements like vitalism, as will be shown in this chapter. While it may have served the purpose of eradicating these movements with a remarkable success, its contributions to patient-practitioner relationships remain dubious. Far from facilitating a fully functional interpersonal dynamic between these groups, the obsession with objectivity may even have

¹²⁸ Ibid, p. 59

¹²⁹ Jewson, N. D., ‘The disappearance of the sick-man from medical cosmology’, *International Journal of Epidemiology*, 11 May 2009, Vol. 38, pp. 622-633

turned into an obstacle to the practice of a more humane and personalized medicine. Here I will briefly outline the particular historical and cultural context where it formed in order to explain its original role. I will then use the results of this comparative historical-philosophical analysis to argue that such extreme fetishization of science can no longer serve the current purposes of medical thinking and medical ethos, nor the challenges faced by practitioners in the present.

Some have felt that through scientific medicine, physiology and biochemistry, clinical practice has been permeated by a scientific spirit resulting in a glorification of quantifiable, 'precisely expressed evidence'¹³⁰, as well as an excessive faith in science and technology's abilities to deliver certainty via strict, reliable methods. The roots of naturalist approaches to health and disease definitions (and to medical thinking in general) can be discovered there as early as the nineteenth century. I will trace them back to just one particular source not only for the purpose of brevity, but also because of its high degree of saliency, which makes it an excellent illustration of the intellectual trends I have set out to explain. Indeed, the cult status acquired by the French scientist and philosopher Claude Bernard in the history of physiology has allowed Bernardian anti-vitalism to continue spreading its enormous influence onto medical thinking up until the middle of the twentieth century.

3. 2. Bernardian anti-vitalism and the origins of the 'value-free science' myth.

The biostatistical theory developed by contemporary philosopher of medicine Christopher Boorse suggests that disease could be understood as an individual organism's deviation from a biological species' statistically typical organ functioning. This objectified view of abnormality as a quantifiable biological parameter was anticipated over a hundred years beforehand by Bernard. The 19th century physiologist – equally famous for his medical discoveries and his prolific work on scientific methodology – came up with a theory which heavily implied that physiology and pathology were merely quantitative variations of the same state, and viewed abnormality as a measurable property rather than a value-laden term for an undesirable

¹³⁰ Reiser, Op. cit., p. 162

physical trait. This section will present brief outlines of the two theories and draw parallels between them. After that the results of this comparison will be combined with an analysis of 19th century science's constructions of the abnormal in order to demonstrate how the latter have influenced the way we think about health, disease and disability today. The goal will be to show that the ongoing influence of 19th century science's construction of abnormality has not only paved the way for naturalistic accounts of disease in contemporary philosophy of medicine, but also may have contributed to the medical breakthroughs associated with this historical period through significant changes in the patterns of medical thinking.

As already mentioned in an example from the previous chapter, during the early the 19th century tuberculosis was construed as an inherited constitutional trait rather than an acute illness. The overall position was that sickness was caused by a hereditary weak constitution, and that both physiological normality and pathology were largely predetermined by hereditary factors. Thanks to the celebrated bacteriologist Robert Koch, we already know that tuberculosis is an infectious disease caused by bacteria, but that is not the only change humanity has witnessed since then. Historians of medicine and philosophy have argued that both our scientific and our everyday notions of disease and abnormality have undergone a massive epistemic shift, leading to a standardized practice of medicine where what Foucault would have called the 'gaze' objectifies and monitors the subject in order to measure any potential deviations.¹³¹

Once again, I would like to call the reader's attention to Gadamer's characterization of the scientific approach as an approach 'concerned with quantifiability, with weighing and measuring. What we esteem in science is that capacity for objectification which is fundamental to the acquisition of knowledge.'¹³² Hormonal levels, bone density or intraocular pressure and other biomedical parameters measured during examinations seem to point that there is an objectively measured side of normality. I intend to show how this idea originated, among other sources, in the writings of 19th century French scientist Claude Bernard, and that

¹³¹ Foucault, M., *The Birth of the Clinic: An archaeology of medical perception*, Routledge, London, 2003, especially p. 137-139

¹³² Gadamer, H. G., *The Enigma of Health*, Polity Press, Cambridge, 1996, p. 105

there is a palpable connection between his works on theoretical physiology and the abovementioned intellectual tendencies. I also suggest that naturalist accounts of health and disease in contemporary philosophy of medicine (in this case the account proposed by Boorse) draw on Bernard's concept of *milieu intérieur* (internal environment).

Without doubt, in this age the predominant approach in medical thinking is one which relies heavily on objectification, teleological explanations and dehumanized objective parameters. This tendency has predictably influenced the philosophy of medicine, where it informs one of the sides in the debate about the definitions of health and disease – naturalism. In an article from 1977 that was widely regarded as the prime example of this philosophy, Christopher Boorse attempted to provide a value-free account of disease based on the notion of biological function as a contribution to an organism's goals.

Today the paper 'Health as a Theoretical Concept' continues to be recognized as the most sophisticated one of its kind. There also appears to be general agreement that Boorse has been successful at creating a definition of (ab)normal functioning as a phenomenon that can be determined by empirical facts alone – which was clearly his goal, judging by the conclusion of the paper: 'in any vocabulary, we must avoid confusing empirical questions with deep normative issues about the goals of human life.'¹³³

On Boorse's account, health equals statistical normality, or statistically typical functions with at least statistically typical efficiency in contributing to the organism's survival and reproduction. By 'typical' here we mean typical for the corresponding reference class to which the organism belongs – i.e. an age group of a sex of a species. Correspondingly, a disease would be any condition which departs from this typical performance, in other words, any dysfunction of an organ or (sub)system: 'Health in a member of the reference class is normal functional ability: the readiness of each internal part to perform all its normal functions on typical occasions with at least typical efficiency. A disease is a type of internal state which

¹³³ Boorse, C., 'Health as a Theoretical Concept', *Philosophy of Science*, Vol. 44, No. 4, December 1977, p. 572

impairs health, i.e. reduces one or more functional abilities below typical efficiency.¹³⁴ That is why the biostatistical theory (BST) developed by Boorse is characterized by its heavy reliance on biomarkers for diagnosis and classification: an approach which is typically associated with 20th century thinkers, but which reaches as far back as the 19th century, where it originated as a quasi-ideology. Over the next few paragraphs I will show that the seminal works of physiologist and philosopher of science Claude Bernard anticipated this objectification and quantification of physiological (ab)normality which appear to have become characteristic for both contemporary science and philosophy of medicine.

In the year 1836 Claude Bernard¹³⁵ (b. 12 July 1813 in the French village of Saint-Julien), who had been exposed to the pharmaceutical sciences while working as an apprentice at a chemist's shop during his college years, decided to pursue internship in one of the oldest hospitals in Paris [Hôtel-Dieu de Paris]. While there, he met the physician François Magendie, who also happened to be a famous professor in physiology at the Collège de France. Just a few years later, Bernard became a lab assistant at the same university in 1841, and six years after that he was assigned the duties of deputy-professor for his patron and friend. Eventually he would become a full professor, as well as a member of the Académie française and the Royal Swedish Academy of Sciences. Although his contemporaries tended to underestimate the importance of his area of research, Bernard quickly became famous for multiple scientific discoveries: for instance the digestive function of the pancreas, the glycogenic role of the liver, the processes taking place behind body temperature regulation, etc. He was able to make these discoveries through animal vivisection – a practice which was being met with serious disapproval at the time (and even led to the scientist's divorce with wife Marie Françoise, who later went on to set up an anti-vivisection society). In addition to his scientific contributions, Bernard left behind a philosophical legacy, which turned out to be overabundant with influential ideas.

¹³⁴ Ibid, p. 555

¹³⁵ Many thanks to Dr Peter Wise, as the biographical elements contained in the present chapter are based almost exclusively on information from his webpage about Bernard's life and work. [Please see <http://www.claude-bernard.co.uk/>, last accessed on 14 December 2016, 12:16 h.]

As a college student, young Claude had been exposed to philosophy, for which he developed a deep passion that never quite left him. He was profoundly influenced, for example, by the writings of the French mathematician and philosopher René Descartes, and drew on these ideas throughout his entire life and career. Cartesian doubt provided the basis of Bernard's approach to science, and inspired his own theoretical works on scientific methodology. 'True science teaches us to doubt, and in ignoring, to refrain', he noted in his magnum opus *An Introduction to the Study of Experimental Medicine*, before proceeding to explain that 'our feelings lead us at first to believe that absolute truth must lie within our realm; but study takes from us, little by little, these chimerical conceits.'¹³⁶

Apart from this famous book, he also left other works such as *Le Cahier Rouge [The Red Notebook]*, *Pensées: Notes Detachées [Thoughts: Various Notes]*, and a series of manuscripts kept at Collège de France, all of which contain philosophical reflections based on methodological skepticism. Bernard provided the initial boost for contemporary experimental medicine's theoretical framework by forging his own brand of determinism: asserting that there needed to be established principles in experimentation, and opposing his colleagues' reliance on chance, repetition, and coincidence. This was the kind of reasoning behind the introduction of standardization for experimental procedures, as well as the introduction of parameters for medical monitoring.

Bernard was also firmly opposed to vitalism – the then-predominant doctrine which postulated a core difference between the principles governing living and non-living entities: 'vitalists have always insisted on the impossibility to explain the phenomena of life in physical or mechanical terms; their adversaries have always responded by reducing the manifestations of life to well demonstrated physical-chemical explanations.'¹³⁷

¹³⁶ Bernard, C., *An introduction to the study of experimental medicine*, translated by H. C. Greene, digitized by the Internet Archive in 2014, available online at https://archive.org/stream/b21270557/b21270557_djvu.txt, last accessed on 12 December 2016, 04:39 h.

¹³⁷ My translation, original paragraph reads: 'les vitalistes se sont toujours retranchés dans l'impossibilité d'expliquer physiquement ou mécaniquement tous les phénomènes de la vie; leurs adversaires ont toujours

In his book *La Science Expérimentale*, Bernard famously expressed his frustration with authors who still clung to metaphysical explanations of will and intellect: ‘people find it conceivable that one can derive digestion, respiration, locomotion etc from mechanical phenomena; yet they do not admit that thought, intelligence, and will all submit to similar explanations.’¹³⁸ The scientist even compared living organisms to wonderful machines – complex and delicate, yet amenable to scientific analysis and modification: ‘the living organism is nothing more than a wonderful machine gifted with the most marvelous properties, driven to action by the most complex and delicate mechanisms.’¹³⁹ To illustrate his claims about the thin line between life and non-life, and about all natural entities obeying the same set of physical-chemical laws, he used the rather gruesome yet convincing example of a decapitated dog whose body would continue to perform its typical physiological functions whenever injected with oxygenated blood.¹⁴⁰ Here we can observe the roots of physico-chemical and psychophysical reductionism in medical thinking, which has been fueling the contemporary desire for quantification of biological phenomena.

Last but not least, in the late 1860’s Bernard’s idea about blood as an ‘organic environment, an intermediary between the external environment and the (internal) living molecules’¹⁴¹ finally crystallized into the concept of *milieu intérieur*, for which he is so widely known today, and which revolutionized medicine in its own way. Back then, Bernard described this concept’s role in his theoretical works as a facilitating one, and suggested that it could be a useful intellectual tool for scientists who strive for precision in their studies of physiological

répondu en réduisant un plus grand nombre de manifestations vitales à des explications physico-chimiques bien démontrées’, see p. 204 of Bernard’s *La Science Expérimentale*

¹³⁸ My translation, original paragraph reads: ‘on conçoit que l’on puisse ramener la digestion, la respiration, la locomotion, etc., à des phénomènes de mécanique, de physique et de chimie; mais on n’admet pas que la pensée, l’intelligence, la volonté se soumettent à de semblables explications’, *ibid*, p. 370

¹³⁹ My translation, original paragraph reads: ‘[...] l’organisme vivant n’est qu’une machine admirable douée des propriétés les plus merveilleuses, mise en action à l’aide des mécanismes les plus complexes et les plus délicats. C’est une machine dont [le physiologiste et le médecin] doivent analyser et déterminer le mécanisme, afin de pouvoir le modifier [...]’, *ibid*, p. 54

¹⁴⁰ *Ibid*, p. 123-124

¹⁴¹ Translated by Dr Peter Wise for his personal project on the life and works of Claude Bernard. The original version of the paragraph can be found in Bernard, C., *Introduction à l’étude de la médecine expérimentale*, Baillière, Paris, 1865, p. 398. The translated quote can be found at <http://www.claude-bernard.co.uk/page10.htm>, last accessed on 14 December 2016, 12:16 h.

functions: 'experimental or scientific medicine should be based mostly on knowledge of the properties of the intra-organic environment... When we are under the influence of medication, it is not exactly our stomach that it affects, but only our intra-organic environment, after it has gained access to our bloodstream and entered into contact with our organized particles. This idea of the internal environment which directs my studies in physiology has served me to determine in a more precise manner the effect of toxic substances on the various elements of our body.'¹⁴²

However, the concept of milieu intérieur ended up serving more than just an auxiliary purpose – to the contrary, it became the foundation of the homeostatic explanatory model of disease, which continues to dominate orthodox medical thinking to this day. Bernard postulated homeostasis, or the stability of the organism's internal environment (*milieu intérieur*), as a necessary condition for life – a notion which left a deep trail in 20th century medicine and philosophy. He described the homeostasis of the body's *milieu intérieur* as a state maintained by complex processes of compensation and equilibration of 'external variations', a process in which all of the organism's systems are involved, i.e. the body regulates itself, ensuring its own life and normal functioning.¹⁴³ Within this theoretical framework, any change was regarded as a possible source of disturbance: '[To him,] disease is an alteration in the normal functioning of the anatomical element, an alteration which is due either to [the element] itself, or to the composition of the blood or internal environment, or to the mode of distribution of the internal environment.'¹⁴⁴ In other words, abnormality was a deviation from the organism's self-sustained state of internal balance.

¹⁴² My translation, original paragraph reads: 'La médecine expérimentale ou scientifique sera surtout fondée sur la connaissance des propriétés du milieu intra-organique. ... Quand un médicament exerce sur nous son action, ce n'est point dans notre estomac qu'il agit, mais seulement dans notre milieu intra-organique, après avoir pénétré dans notre sang et s'être mis en contact avec nos particules organisées. Cette idée du milieu intérieur, dirigeant mes études en physiologie, m'a servi à déterminer d'une manière plus précise l'action des substances toxiques sur les divers éléments de notre corps [...]' *ibid*, p. 51-52

¹⁴³ Renan, E., Bert, P., Moreau, A., *L'oeuvre de Claude Bernard*, J. B. Baillière et fils, Paris, 1881, p. 68, p. 71-73

¹⁴⁴ My translation. For the original text see Renan, E. et al, *Op. cit.*, p. 74: 'Pour lui, la maladie n'est qu'une altération dans le fonctionnement régulier de l'élément anatomique, altération due soit à lui-même, soit à la composition du sang, du milieu intérieur, soit au mode de distribution de ce milieu.'

3. 3. From homeostasis to functionalism, and how the intellectual legacy of 19th century reductionism led to attempts at quantifying pathology.

Of course, the 19th and 20th century worked with slightly different theoretical formulations of balance, with 20th century science defining it not so much in terms of physical stability, but rather as a type of relationship or interaction between internal and external forces; between what was inside the organism and what was out there, in the environment. It is clear, however, that 20th century ideas about adaptation are deeply rooted in 19th century physiology's advancements, and draw heavily on their homeostatic implications. As a demonstration, let us consider the following developments.

At first, towards the end of the 19th century life for Bernard meant survival by means of regulation and compensation of external influences – a theory which was further developed by biology professor Lawrence Henderson in his book *The Fitness of the Environment* (published in 1913), which earned him a place among the world's leading biologists during those days.¹⁴⁵ Around the same time, a similar notion of stability or equilibrium was also picked up and 'mobilized' by Freud and analysts, as well as social theorists and economists as a key feature in numerous theories during the first decade of the 20th century.¹⁴⁶ In 1923 the English surgeon and microbiologist Crookshank used virtually the same notion of life to base his theory about health as 'the functional unity of the organism that continues when, following repeated response to stimulus, there is successful adaptation ... to environment.'¹⁴⁷ Disease was understood, correspondingly, as 'no objective entity but a dissociation of functional unity, or, mal-adjustment due to failure or incompleteness of adaptive response.'¹⁴⁸ The world famous endocrinologist Hans Selye also appeared committed to the concept of self-regulation, with all of his works published between 1951 and 1971 maintaining the claim that every case

¹⁴⁵ Henderson, however, introduced a slight variation by making the point that biological stability was not to be understood as 'absolute constancy', but rather as something 'cyclical' and 'adaptive'. See Jackson, M., *The Age of Stress: Science and The Search for Stability*, Oxford University Press, Oxford, 2013, p. 67

¹⁴⁶ Ibid

¹⁴⁷ 'Science and health' in Marvin, F. S. (Ed.), *Science and Civilization*, Oxford University Press, London, 1923, pp. 247-278, at p. 247

¹⁴⁸ Ibid

of disease is essentially a failure to adapt to environmental stresses: ¹⁴⁹ ‘there is an element of adaptation in every disease’¹⁵⁰; ‘many of the most common maladies of man are “diseases of adaptation”, that is to say, the by-products of abnormal adaptive reactions to [external stressors].’¹⁵¹

This growing tendency signified a major epistemic shift within medicine’s foundations, similar in its magnitude to the one which had occurred during bacteriology’s first years. It also meant that a new stage had begun in our understanding of (ab)normal physiological functioning, the terms in which it was to be described and examined, and the conditions under which it was to be regarded as needing rectification. These changes needed to be reflected by medicine’s scientific method; therefore, quite predictably, the very concept of self-regulation quickly led to attempts at quantification and standardization of the human body’s physiological functions and anatomical characteristics. Medical metrology flourished in response to the increased needs for reliable testing and measurement, which eventually led to the appearance of the so-called ‘biomarker’ indicators used today.

Of course, there have been objections to some of the main principles in Bernard’s theory. For instance, Canguilhem has argued that the pathological state cannot be understood simply as a quantitative variation of a normal mechanism or process. There is something more to it, a quality which is acquired during the process of contextualization – namely, quantity acquires quality within the context of clinical practice where norms and standards are created: ‘For example, the hydration of tissues is a fact which can be expressed in terms of more and less; so is the percentage of calcium in blood. These quantitatively different results would have no quality, no value in a laboratory, if the laboratory had no relationship with a hospital or clinic where the results take on the value or not of uremia, the value or not of tetanus.’ ¹⁵² A ‘more’

¹⁴⁹ This expression is not a mistake on my behalf; in fact, Selye’s earlier work receives warranted criticism from Jackson for his inconsistent and indiscriminate use of the terms ‘stresses’ and ‘stressors’, often using them interchangeably in his earlier writings – i.e. taking ‘stress’ to mean both the reaction of the organism and the triggering factor from the environment.

¹⁵⁰ Selye, H., *The Stress of Life*, McGraw-Hill, New York, 1956, p. 127

¹⁵¹ Selye, H., ‘Stress and The General Adaptation Syndrome’, *British Medical Journal*, 17 June 1950, Vol. 1 (4667), pp. 1383–1392

¹⁵² Canguilhem, *The Normal and the Pathological*, p. 111

or 'less', as we are reminded by Canguilhem, could only exist with relation to a specified standard. It is in relation to a fixed norm that a certain quantity can be translated as 'too much' or 'too little', become a value, acquire the quality of a 'deviation from a norm'. Values, however, had no place in the discussions of scientific communities in post-Enlightenment France, who were too caught up in their struggle to discredit vitalism and popularize the knowledge of natural laws.

To go back and summarize, Bernard believed that not only the difference between living and non-living entities, but also the one between normally and abnormally functioning physiological mechanisms of living entities, could be summed up by quantitative variations which obeyed the same kinds of physical and chemical laws. The 'pathological' phenomenon was therefore a quantitative variation of the 'normal' phenomenon, and the difference between a diseased and a healthy state could be best described in units for objectively measurable parameters. For instance, a healthy organism would produce total bilirubin levels between 5 and 17 micromoles per litre, and anything above that would raise suspicions for Gilbert's syndrome (relatively common genetic metabolism disorder), hepatitis or other conditions.

In other words, just as Boorse, Bernard appears committed to eradicating values, as well as all other ethical and metaphysical concepts, from scientific accounts of life, health, disease and (ab)normality in physiological functioning. Of course, there also exist a number of obvious distinctions between their two conceptions of normality, though none of them appear significant enough to cause a fundamental contradiction.

Boorse, for instance, has openly expressed the view that many life functions – such as perception, growth and pregnancy – are not homeostatic and even tend to upset the organism's balance rather than maintain it; hence his opinion that there is no point in 'trying to view corresponding diseases such as deafness..., dwarfism..., or sterility as homeostatic failures'. However, rejection of the homeostatic model of normal health *per se* does not necessarily entail a rejection of the *milieu intérieur* doctrine, of which it is but an element. In

fact, Boorse acknowledges that ‘certainly many aspects of normal and abnormal physiology fit this model,’¹⁵³ and even that ‘various equilibria are crucial to life’¹⁵⁴; his skepticism was reserved merely for the idea about internal equilibrium as the ultimate goal of all physiological functions. It should be indicative of something important that the most sophisticated currently available account of disease is underpinned by the same theoretical assumptions that underlie one of the most influential disease theories in 19th century Western Europe. In this chapter I have shown that this is not coincidental, but the result of complex historically situated sociocultural factors, such as the dynamic opposition between the competing theories of vitalism and mechanism – a clash, the echoes of which resemble those of Cartesian dualism in terms of composition, audibility, and endurance.

The idealized notion about value-free science conjured by the 19th century supporters of physico-chemical reductionism is one of the most powerful influences still permeating postmodern Western and industrialized societies, but it is rarely recognized as a culture-specific phenomenon, since its historical roots rarely receive sufficient critical attention. Instead, it masquerades as an accurate representation of science and a necessary condition for the production of reliable, empirically useful knowledge.

That, in itself, does not make reductionist and naturalist accounts of health/disease problematic. A more important issue results from the associated attempts to objectify, quantify and measure qualities or features that reside on an abstract level (‘normality’, ‘well-being’), or to define non-scientific categories (‘health’, ‘disease’) in scientific terms. Such attempts are made to look somewhat misguided by the knowledge that science could never be a value-free enterprise which disobeys the dictate of sociocultural forces. That, however, in no way means that defining health and disease is itself a pointless task – it simply means that certain approaches are better equipped for the task than others, as I intend to show in my critique of eliminativism in Chapter 4. In Chapter 5 I will outline some further resemblances between Bernardian anti-vitalism and Boorsian naturalism, analyze competing

¹⁵³ Boorse, C., ‘Health as a Theoretical Concept’, *Philosophy of Science*, Vol. 44, No. 4, December 1977, p. 549

¹⁵⁴ *Ibid.*

theories, and investigate which among them could be augmented, combined, and put to use in the manner outlined in Chapter 1:

- 1) ...to provide a functional and relatable account of health/disease which will be well-adapted to the purposes of law and policy making without generating misunderstandings or instances of political incorrectness (e.g. by contributing to negative stereotypes, stigmatization, social exclusion and disempowerment of specific groups);
- 2) ...to account for our bodies' ability to actively respond to influential factors from their environment whilst also regulating their own internal milieu;
- 3) ...to depict disease as a biologically, psychologically and socially complex, multi-layered phenomenon;
- 4) ... to combine philosophical astuteness with a relatable 'language of pain and reactivity' (with which patients will readily associate);
- 5) ...to 'unify' the two distinctive languages of physician and patient, and to make their separate practical realities overlap for the sake of effective communication.

Before that, though, I shall engage in a critique of eliminativist claims that a disease account is not currently needed by either practitioners or health care policy makers. The next chapter (Chapter 4) will present two such positions and falsify their arguments, thereby showing that there is indeed a need for health/disease accounts, and allocating their place both within the cosmology of clinical practice and outside it. For now I will conclude that, in addition to bearing serious internal contradictions and unrealistic pretensions about the kind of knowledge they can offer, approaches which rely on objectification and quantification to define dynamic and existentially meaningful phenomena such as health and disease only serve to constrain the debate further. They also limit its potential to make positive socially significant changes to the way health and disease are conceptualized and perceived.

4. Why are accounts of health and disease even necessary? A refutation of eliminativist positions on the debate about health/disease definitions.

*'People do not merely have health beliefs, as they might have eggs carried in a shopping basket. They also construct their state of health as part of their ongoing identity in relation to others, as something vital to the conduct of everyday life. This means that the accounts that are given of health and illness are more than a disclosing of a supposed internal attitude. In offering views, people are also making claims about themselves as worthy individuals, as more or less "fit" participants in the activities of the social world.'*¹⁵⁵ ~Radley and Billig

4. 1. Eliminativism in the context of the health/disease definitions debate.

As previously mentioned, the debate about disease definitions has more than two sides. While normativists and naturalists argue whether disease is a label reserved for any disvalued physical states or there are objective criteria that need to be met, hybridists attempt to combine the two approaches in order to eliminate their weaknesses and play up their strengths. However, there are also philosophers who have expressed profound skepticism regarding the very need for such discussions. Ereshefsky, Hesslow, and John have supported eliminativist positions on health/disease definitions, arguing that such definitions are required neither for the purposes of clinical practice nor for those of health care policy making. Ereshefsky has theorized that state descriptions might suffice with regards to clinical decisions, and Hesslow has expressed concerns that the debate on health definitions is a needless distraction from more important matters – such as whether or not the patient feels that she needs a medical intervention. John, on the other hand, has argued that health care policies should rely on the concept of 'personal safety' rather than that of health.¹⁵⁶ However, for the purpose of brevity, I will leave John's discussion of 'personal safety' out of my analysis, and only focus on Ereshefsky and Hesslow's positions, which exemplify eliminativist critique of health/disease definitions' more general status in medical thinking. I will outline and

¹⁵⁵ Radley, A., and Billig, M., 'Accounts of health and illness: Dilemmas and representations', *Sociology of Health and Illness*, March 1996, Vol. 18, No. 2, p. 221

¹⁵⁶ John, S., 'Why "Health" is not a Central Category for Public Health Policy', *Journal of Applied Philosophy*, April 2009, Vol. 26, No. 2, pp. 129-143

address each one of their positions separately in order to show that, although they are without doubt a valuable contribution to the philosophy of medicine, they cannot be taken as a compelling proof that the health/disease definition debate is pointless. Ereshefsky's and Hesslow's critique targets the importance of health/disease definitions in the context of clinical practice and health care policy making, leaving out the possibility that those definitions may serve other, less obvious practical purposes – such as helping ill people reclaim disease labels and re-conceptualize them in a way that would validate their experiences and identities, or enabling physicians to gain better understanding of said experiences and integrate them in clinical practice. Ereshefsky and Hesslow also disregard the inherently normative character of medicine and of the relationship between health and moral well-being, which has been pointed out by philosophers like Hamilton.¹⁵⁷ Finally, Ereshefsky's and Hesslow's positions do not reflect the larger cultural and societal issues at hand – for instance that shutting down the health/disease definitions debate could signal problematic messages about the importance of disease's existential aspects in human life, or that different interpretations of health and disease could shape lifestyle choices, compliance with public health measures, social expectations as to how ill or disabled people are meant to act, and ethical norms for interaction with those who are ill. However, before I address all of these issues in the present chapter, I will attempt to invalidate the positions which dismiss them so lightly.

4. 2. Eliminativism and the question about 'centrality': Ereshefsky's critique of the health/disease definitions debate.

In a famous article from 2009, Ereshefsky states that normativism, naturalism and hybrid theories – the three most popular approaches to defining 'health' and 'disease', are all problematic and unsuccessful.¹⁵⁸ He proposes an alternative approach which consists in a focus on distinguishing between the considerations currently considered to be 'central in medical discussions': state descriptions and normative claims. The former refer to descriptions

¹⁵⁷ '[T]he question of the relationship between physical health and moral well-being is an ancient one. The Greeks noticed that morality and medicine seemed inextricably entwined...', see p. 323 in Hamilton, R. P., 'The concept of health: beyond normativism and naturalism', *Journal of Evaluation in Clinical Practice*, 2010, Vol. 16., No. 2, pp. 323-329

¹⁵⁸ Ereshefsky, M., 'Defining "health" and "disease"', *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, September 2009, Vol. 40, No. 3, pp. 221-227

of physiological and psychological states, while the latter refer to claims about what we value or do not value. State descriptions should be free of normative elements (such as the use of expressions like ‘normal’ or ‘natural’ which Ereshefsky sees as burdened by ‘implicit normative assumptions’¹⁵⁹). Normative claims are explicit value judgments – for instance, that HPV infections should be avoided and/or treated if possible. Ereshefsky attributes the usefulness of the distinction between state descriptions and normative claims to its capacity of highlighting the points of disagreement between disputants, instead of just lumping together the two aspects of the debate under the heading ‘disease’. For example, both sides of the dispute might agree that there is a condition/state which involves having a cervical ulcer, a pap-test result categorized as ‘group III’, and an infection with the HPV virus, but they might disagree on whether it should be treated and avoided. This way medical discussions could supposedly be carried out more effectively and without the needless distraction of arguments about the correct definitions of ‘health’ and ‘disease’. After framing the discussion in terms of state descriptions and normative claims we get to what is really important and then, claims Ereshefsky, ‘the terms of “health” and “disease” become superfluous’.¹⁶⁰ He admits that many state descriptions rely on implicit normative components, and that they could never be completely value-neutral. However, he appears confident that as long as all talk of value is highlighted as a normative claim, normative concepts would not ‘get disguised as descriptive ones’.¹⁶¹ Bias in science cannot be eradicated completely, but according to Ereshefsky the threat it poses could be eliminated if its presence is highlighted and made more explicit. This is achieved by virtue of switching to talk of state descriptions versus normative claims, which deliberately overemphasizes the distinction between the two, and separates their goals and outcomes.

4. 3. ‘Centrality’ reframed: disarming Ereshefsky’s arguments.

By thematizing normative thinking in medicine as a potential trap in ‘disguise’, Ereshefsky misrepresents clinical practice – which is essentially a social enterprise on every level, from individual encounters between patient and practitioner to the way clinics are administrated –

¹⁵⁹ Ibid, p. 225

¹⁶⁰ Ibid, p. 226

¹⁶¹ Ibid, p. 227

and paints it as a neutral, disinterested goal-oriented trade which reduces patients to their health conditions, and health conditions to problems that need quick, morally uninvolved solutions. In the introduction, Ereshefsky's paper promises to deliver a method that would facilitate explicit talk about 'the considerations that are central in medical discussions', and capture 'what matters in medical discussions', but issues such as patient well-being, care, comfort, autonomy, adaptability and self-determination are never mentioned. However, others have argued that patients' needs as such far surpass the simple necessity to receive diagnosis and treatment. Toombs emphasizes the centrality of care by noting that 'the patient needs support in his efforts to establish the integrity of a newly defined self'¹⁶² brought about by illness. The idea about the importance of patients' psychological integrity is also supported by physician-writer Cassell, who points out that patients construe medicine as 'suffering-oriented', but that patient suffering is rarely 'confined to physical symptoms,' instead including additional experiences such as loss of autonomy, or an overwhelming sense of 'impending destruction' of the Self.¹⁶³ Svenaeus supplements this multi-layered portrayal of suffering by remarking upon the feelings of meaninglessness, helplessness, alienation and shame which are sometimes present in some of the more severe cases,¹⁶⁴ although his proposed strategy for dealing with these obstacles relies entirely on patients' own transformative potential and desire for a change in 'core life values', whereas Cassell assigns a major part of the responsibility for patient mental well-being to the practitioner. Both approaches, however, recognize that values play a crucial role in the treatment process, and acknowledge that medicine – just as its targets disease and suffering – is without doubt complex and multidimensional. Furthermore, they both stress the importance of thematizing patient complaints as more than secondary sources of information, and physical signs of disease – as separate aspects of a specific case which have yet to be situated within its full context, rather than exhaustive accounts of said case.

4. 4. Breaking down Hesslow's advice against needless 'distractions'.

¹⁶² Toombs, S. K., Op. cit., p. 230

¹⁶³ Cassell, E., Op. cit., p. 30, p. 31

¹⁶⁴ Svenaeus, F., 'The phenomenology of suffering in medicine and bioethics', *Theoretical Medicine and Bioethics*, December 2014, Vol. 35, pp. 407-420

A similar line of critical reasoning may be extended over to earlier works, for instance the ones written by Germund Hesslow¹⁶⁵, who compared health/disease definition debates to an argument whether or not a car is defective just because it does not accelerate just as quickly as another car from the 'same make and model'. According to Hesslow, the discussion in this example is both unnecessary and distracting, when what actually matters is whether the owner of the car wants to have the car's acceleration increased or not. An analogical attitude applies just as well to diseases, in Hesslow's opinion. Indeed, the idea might seem very appealing at first – what could possibly go wrong if we choose to regard the state of requiring treatment as a concept with negotiable, arbitrary boundaries which depend on the personal preferences of individual patients? Since the standards for well-being vary between persons and across cultures, that would seem like a reasonable and even necessary measure – one that has already been reflected by European law under the European Convention on Human Rights (ECHR), which draws on moral principles like autonomy and self-determination.¹⁶⁶ But Hesslow's claims concern the practical realities of decision-making within clinical medicine, and not the legal aspects of patienthood; his argument about the aimlessness of the health/disease definition debate is developed via a set of entirely different premises that have very little to do with moral considerations. These premises are, as follows:

- 1) ... that somehow philosophers have been 'misled' into believing that 'health' and 'disease' are important in clinical thinking and decision making,

- 2) ... that the health/disease distinction is actually completely irrelevant in the aforementioned contexts as it does not produce any important consequences, and

- 3) ... that 'we never really need to know whether someone has a disease or not'.¹⁶⁷

¹⁶⁵ Hesslow, G., 'Do we need a concept of disease?', *Theoretical Medicine*, 1993, Vol. 14, pp. 1–14

¹⁶⁶ Wicks, E., 'The Right to Refuse Medical Treatment under the European Convention on Human Rights', *Medical Law Review*, Spring 2001, Vol. 9, pp. 17-40

¹⁶⁷ Hesslow, Op. cit., p. 2

The latter claim clashes with Hesslow's position that medical discussions ought to be centered around treatment, due to treatment's obvious dependence on diagnosis and prognosis. It is incredibly difficult to conceive of a physician who would proceed to treatment without first establishing a condition's nature, aetiology, and likely course.

4. 5. Invalidating Hesslow's position on the role of health/disease definitions.

Based on these claims, Hesslow suggests that what little role our definitions of disease do play in clinical practice should be reduced even further. But here I will argue that his conclusion is rendered invalid by his own analysis of the functions served by disease concepts, which I find to be somehow impoverished in several ways. Firstly, he makes the claim that clinicians' supposed lack of interest in discussing concepts of health and disease indicates the irrelevance of said concepts – a claim which he does not defend, and which rests on an unwarranted assumption about clinicians.¹⁶⁸ Secondly, he appears to be convinced that clear-cut definitions are needed only for those terms in science which facilitate the understanding of scientific theories: 'certain concepts have such a central role in scientific theories, that they are indispensable for the derivation of those empirical and applied statements (lower-level laws, individual statements, etc.) which the theory is supposed to cover.'¹⁶⁹ While there can be little doubt that every science requires a fundamental set of clearly defined terms in order to develop and operate successfully, Hesslow has not succeeded in providing solid evidence to support his unconvincing claim that the absence of terms like 'health' and 'disease' from the academic jargon of the biomedical sciences is a sign that they are equally superfluous in clinical settings; in other words, he has committed a non-sequitur. Thirdly – and this is related to my previous objection – he fails to pick up and acknowledge the fact that medicine (as it is practiced in clinical settings) integrates, rather than draws solely and entirely upon, scientific medicine. In his everyday work of treating living persons with complaints, the medical professional is at once a scientist, a healer, a skilled 'tradesman', a patron and an advisor. His 'trade' unifies scientifically derived knowledge (which he has been taught during his years of

¹⁶⁸ In Chapter 2 I have discussed in more detail the works of physician-philosophers who engage with the topic. These authors present a clear example of the importance attached to concepts of health and disease by some mindful physicians, and thus a refutation of the somewhat careless assumption made by Hesslow.

¹⁶⁹ Hesslow, *Op. cit.*, p. 4

training) with empirical observations (which he has acquired in his professional experience) and culturally situated knowledge about human behaviour (which he has inferred from the community which relies on his services). Last, but not least, he relies on his delicate intuition as a social creature – a human being, like any other. The physician Robert Lefever has summarized these influences in the following manner: ‘My examples [are] from real patients and I have a clear picture of the individuals involved: they are not identical to any other patients, nor are their situations identical to others. They are unique. Equally, I am unique. The patients and problems that I encounter are similar to those of other doctors, but my perception of any situation may be different from theirs. Each of us interprets what we see according to our own clinical and social perspectives. My decisions reflect me and my practice (and the geographical area in which I work) even more than they do any clinical medical absolutes.’¹⁷⁰ In this mixed environment, different types of concepts co-exist in a predominantly productive, albeit sometimes confusing way: scientific terms are applied alongside colloquialisms, folk concepts and everyday language with the intention of bridging the ‘gap’ between patient and physician.

4. 6. Language, intuitions, and the role of labels.

Everyday language, which operates on tacit general agreement about shared meanings and values, provides the majority of concepts which remain without clear-cut definitions – like ‘health’, ‘disease’, ‘illness’, ‘suffering’, and others derived from human experience. Among these, a good deal are seldom, if ever, problematized; their meaning appears to spread over language users inexplicitly, as if driven by a collective social intuition. What does it mean to suffer, or to be diseased? Neither patient nor doctor can respond with a well-formulated definition when put on the spot, but both can tell that, as far as physical symptoms are concerned, the woman in labour who has just been admitted to the maternity ward is suffering far more than the one who is visiting her dermatologist for a toenail fungal infection; both doctor and patient have an intuitive understanding that the states of being down with a

¹⁷⁰ Lefever, R., “‘Decision Making’ in Medical Care: Is It a Consumer Good?”, *IEA Health Unit Paper No. 8*, London, The IEA Health Unit, 1990, p. 68

flu or having cancer are diseases, while the states of having oily skin, a broken arm, or a bad burn after a cooking accident, are not, despite being treatable by physicians.

All of the abovementioned notions are excellent examples of intuitions that have been elevated to the status of 'common sense' – a status which allows them to spread intra-collectively and take hold of innumerable minds. Once there, they usually remain undisputed until either a major epistemic shift (such as a scientific discovery or an eye-opening life experience) forces them out, or the host herself begins to question them. The same is true for social labels, whose potential to produce and modify public discourse is often underestimated.

A label is like a court sentence in the sense that, even if it is baseless or unfairly attributed, it still has the power to shape the defendant's destiny, or the public's opinions of her. Very often the ways in which we categorize a person or refer to her can impact others' perceptions of her, the way that the person herself thinks about her standing in the community, and even the way the person performs academically, professionally, or socially. This phenomenon, which psychologists have dubbed 'the self-fulfilling prophecy'¹⁷¹, reflects a simple truth about humankind: we tend to internalize most things we hear about ourselves or others, as long as the message is reinforced often enough. This is especially obvious in cases where the label attached carries strong negative connotations, or entails a disadvantaged social role – such as that of an 'incapacitated' person.

A quick glance at the language traditionally used to describe those with different bodily capabilities should be sufficient to confirm my claim about negative stereotyping: '*dis-ease*', '*poor health*', '*health problems*', '*health concerns*', '*health troubles*', '*health worries*', '*disability*', and '*morbidity*', just to name a few examples. The seriously chronically 'ill' or 'disabled' person is not believed to be in an enviable position. She is generally thought to have poor prospects for success, happiness and self-realization, as well as a diminished capacity to participate fully in society. This same society, by operating on the aforementioned pessimistic

¹⁷¹ Watzlawick, P., 'Self-fulfilling Prophecies' in O'Brien, J. (Ed.), *The Production of Reality: Essays and Readings on Social Interaction*, Sage Publications Ltd., London, 2011, pp. 392-408

assumptions, fails to take all measures necessary to integrate the differently abled successfully and to provide a more welcoming environment for them, thereby diminishing the affected persons' quality of life and chance to succeed (an observation which has served as the foundation for the so-called 'social model of disability'¹⁷²). Because of this, at first glance an eliminativist position arguing that disease definitions could aggravate this situation further by reinforcing negative stereotypes about ill people might actually appear quite reasonable to many. Indeed, what would happen if, say, instead of generously applying labels to people, we applied them solely to environments and situations? There are palpable consequences of saying that somebody is caught up in a 'non-inclusive work situation' or a 'disabling milieu' instead of saying that they are a 'disabled person'. The responsibility, instead of being relayed to the person herself, is immediately shifted onto those who, unlike her, participate fully in society and thereby share the joint obligation to modify those aspects of it which can challenge or threaten equal access to opportunity. Clearly rhetoric and labels hold more than just symbolic power where social roles and interactions are concerned, and their impact could thus be exploited to further social goals¹⁷³ (or, if left in the wrong hands – to hamper them). The rest of this chapter will show how this principle applies in the context of health/disease definitions, explore their transformative potential, and argue that it needs to be put to 'good use' – contrary to eliminativist claims about its uselessness and disadvantages.

As already stated, a definition of disease which is centered around the concept of deficit, incapacitation, deffectiveness or dysfunction could have strong repercussions on a number of aspects of ill people's lives. Firstly and most importantly, it can lead to dismissive attitudes

¹⁷² Oliver, M., 'The social model of disability: thirty years on', *Disability and Society*, 2013, Vol. 28, No. 7, pp. 1024-1026

¹⁷³ One might argue that furthering social goals does not fit within the job descriptions of physicians. However, I will raise two objections to this: firstly, as I intend to show, health/disease definitions and labels in general are issues which expand beyond the scope of clinical medicine and are thus everyone's concern; secondly, physicians have been known to support and contribute to social goals for as long as medicine has existed. It is not a coincidence that Pseudo-Albertus Magnus's medical treatise *De Secretis Mulierum (The Secrets of Women)* from the late thirteenth century, for example, contains advice on treatments which could help women lead modest lives. For a more thorough analysis of that matter, please refer to Cadden, J., *Meaning of Sex Difference in the Middle Ages: Medicine, Science and Culture*, Cambridge University Press, Cambridge, 1993, p. 263: 'By providing the means to support social norms, physicians demonstrated their willingness to participate in and advance social goals. In addition to testing for virginity, they offered other means of guaranteeing legitimacy as well, such as recipes for preventing a woman from committing adultery.'

towards ill people's rights to autonomy and self-determination; it can serve as a justification of medical paternalism, increased surveillance and unacceptable interference with their lives. Secondly, and perhaps less obviously, framing disease definitions in terms of deficiency and dysfunction can carry subconscious associations with weakness and/or moral infirmity. The former issue is somewhat self-explanatory, but the latter one requires careful unpacking, which I will attempt to provide in the following section of this chapter in order to cement my conclusion that health/disease definitions, rather than serving a very limited or even redundant role in health care policy making or clinical practice (as claimed by eliminativists), actually underpin the moral, social and political dimensions of living as an ill person. In the next section of this chapter I will examine these dimensions through the lens of Kent Maynard's discussion of the fluid, dynamic categories of selfhood, personhood and medical identity, as well as Jackie Stacey's analysis of social expectations of people living with serious disease, and Ian Williams's theory about the 'iconography of illness'. I intend to show that, just like experiences of self and personhood,¹⁷⁴ identities in what N. D. Jewson once referred to as 'medical cosmology'¹⁷⁵ can also vary cross-culturally; furthermore, they can also undergo structural shifts, and these structural shifts usually depend on social factors such as public opinions, stereotypes, visual cues, and rhetoric. This demonstration is going to serve three purposes: a) to illustrate the powerful impact of definitions and labels; b) to offer practical examples which indicate just how far-reaching the effects of people's differing notions of disease can be; c) to establish the need of a functional and relatable account of disease, and thus refute eliminativism. I will begin my demonstration with an analysis of the impact produced by social metaphors of disease.

4. 7. From letter to life: rhetoric, social metaphors of disease and their role in shaping laypersons' experiences.

a) Talking about disease. Stacey on negative stereotyping.

¹⁷⁴ Shweder, R. A., and Bourne, E. J., 'Does the concept of person vary cross-culturally?' in Shweder, R. A. and LeVine, R. A. (Eds.) *Culture Theory: Essays on Mind, Self, and Emotion*, Cambridge University Press, Cambridge, 1984, p. 193-4

¹⁷⁵ Jewson, N. D., 'The disappearance of the sick-man from medical cosmology', *International Journal of Epidemiology*, 11 May 2009, Vol. 38, pp. 622-633

Other than contributing to their feelings of isolation, inadequacy or worthlessness, the labels we attach to others could also impact our own attitudes. The same holds true for certain common social metaphors of disease which regularly appear throughout the media, literature, and everyday language. One such example is the metaphor which represents illness as an enemy who needs to be fought, disarmed, and defeated:

- 1) 'Person V is *fighting* a deadly infection.'
- 2) 'Person W was able to *defeat* malaria.'
- 3) 'Person X *succumbed* to cancer after a long and brave *battle*.'
- 4) 'Person Y is a *victim* of polio.'
- 5) 'Person Z is a stroke *survivor*.'

One might argue that expressions such as those shown above have resulted naturally by way of association after the existence and function of the immune system became common knowledge among laypersons. However, my concern has little to do with the associations themselves or their origin – it is all about how they translate into normative implications about how the ill person should or should not act. In other words, I am going to address social expectations of ill people – a topic which has received insufficient philosophical attention, especially from eliminativists who tend to focus on the more obvious applications of disease definitions (such as health care policies or clinical decision-making). Social expectations are a powerful force that can 'make or break' one's experience within her community. The more pronounced the physical aspect of the experience, the stricter the rules and prescribed ways of acting – hence the taboos surrounding topics such as sexual intimacy, childbirth, venereal infections, pregnancy termination, illness, and death. Poor health comes with an additional burden – its associated narrative about the 'fight' for survival. Disease is not just any enemy – within most of Western culture, it is usually construed as the ultimate reminder of our own mortality; as an unpredictable nemesis who can find, outrun, outlast and defeat nearly every one of us, unless bravely confronted with the help of modern medicine. While physicians' and scientists' socially assigned roles as gatekeepers of health and all knowledge relating to it are seldom questioned, there exists another cultural trope which introduces an additional

requirement for defeating disease: the patient's own will power and desire to live. Thus moral qualities such as courage, will power, and a positive outlook on life are postulated as essential weapons when confronting the harsh realities of dangerous illnesses, e.g. cancer. However, this product of crowd wisdom is also characterized by a serious downside: its power to foster negative explanatory tropes about the aetiology of disease and its relation to moral character ('Person X probably became ill because she was overly focused on her career'; 'Person Y probably became ill because she was not eating properly and getting enough exercise'; 'Person Z probably became ill because she was not a very positive person', etc). This tendency has been described by Sharma as '...the modern moralistic concern with the perfectibility of the body, and the individual's responsibility for its imperfections.'¹⁷⁶ Contrary to what logic might have dictated, instead of finding support and encouragement during a difficult time, ill people are sometimes met with hostility and judgment, or held accountable for their conditions, whatever their true causes. The so-called 'blame the victim' mentality¹⁷⁷ is not just a myth for those among us who are living with disease.

In a relatively recent cultural study on cancer, ovarian cancer survivor and cultural studies professor Jackie Stacey addresses some of the existing negative behaviours towards, or stereotypes about, ill people. Her book *Teratologies* reveals how disease often gains a much deeper significance in the process of interpretation where it is seen as a manifestation of its own aetiology, or as a 'metaphor' of the choices which presumably led to it: 'cancer is... constructed as a monstrous physical manifestation of other problems: these may be problems of modernity (pollution, workaholism, chemicals and so on); or they may be problems of a repressive and repressed culture which cannot deal with emotional life and prefers instead to be governed by rationality and intellect.'¹⁷⁸

Indeed, one of the major problems Western and industrialized societies have with sickness,

¹⁷⁶Sharma, U., 'Using complementary therapies: a challenge to orthodox medicine?' in Williams, S. J. and Calnan, M. (Eds.) *Modern medicine: lay perspectives and experiences*, UCL Press, London, 1996, p. 251

¹⁷⁷ Zur, O., 'Rethinking "Don't Blame the Victim": Psychology of Victimhood', *Journal of Couple Therapy*, Vol. 4, pp. 15-36

¹⁷⁸ Stacey, J., *Teratologies: A Cultural Study of Cancer*, Routledge, London, 1997, p. 12

especially cancer, is the way it puts all plans on hold for an indefinite amount of time; the way it disrupts careers, academic progress, and family life. By making us face our own 'temporal expectations', it forces us to confront the threat of imminent death, and thus leads us to question the very ideals we have been brought up to believe in – for instance that we will all get our own chances to achieve important life milestones and build our lives as 'coherent stories of success, progress and movement.'¹⁷⁹ Interruption of one's progress in life is construed as a crisis – as crisis is any interruption of a preferred line of movement, a stop, an abrupt and unexpected end. Due to this unexpectedness, it demands a moment for re-evaluation of the sick person's priorities and plans for the future (or 'what is left of it'); it demands rethinking the physical and economic strain placed on the sick person and her family by the long and expensive yet risky treatments, by the fear of death, the helplessness.

Suffering and helplessness are already disvalued states in Western culture, because they translate as weakness, loss of control, and failure – all qualities which the West does not tolerate; eliminativists' insistence upon separating clinical decisions and state descriptions from their moral and existential aspects only reinforces the taboo placed upon them. It also reveals an insensitivity to the issues of stigmatization surrounding diseases like cancer, the mechanisms of which are so poorly understood by the general public. However, the widely distributed false beliefs about cancer testify to the presence and seriousness of these issues: many are convinced that cancer is always related to self-destructive behaviour or 'negative thinking'. This observation is also shared by another author – the Canadian sociology professor Arthur W. Frank, whose reflections on his own experience with cancer have led him to describe the social metaphor of the so-called 'cancer personality'. According to Frank, this type of stigmatization operates in the following manner: '[people] want to believe that they control their health and that they have earned it. Those who have cancer must have done something wrong, which the healthy can then avoid. The sick person must have participated in sickness by choosing to have a cancer personality, otherwise illness is an intolerable reminder of how risky life is.'¹⁸⁰

¹⁷⁹ Ibid, p. 9

¹⁸⁰ Frank, A. W., *At the Will of the Body: Reflections on Illness*, Houghton Mifflin Company, Boston, 1991, p. 111

Due in part to these beliefs, and in part to cancer's capacity to provoke extreme reactions such as uneasiness, anxiety, disgust, or horror, it has become a cultural taboo in its own right.¹⁸¹ Because of this taboo, few speak up and try to break free from the labels and negative stereotypes – from the new identities that have been forced upon them along with their diseases. An additional silencing factor, such as eliminativists' conviction that state descriptions need to remain bland and neutral, may guarantee that this silence will not be broken often. It may be the case that most eliminativism supporters' commitments extend only over a particular strain or locus of the health/disease definitions debate, i.e. that they believe that only the philosophical strain of the debate is pointless, or that the debate has no place within the context of clinical encounters, which should be striving to provide a neutral intellectual space and foster value-free clinical judgements.

However, this debate cannot and should not have to operate under such constraints, seeing as it forms part of the broader and very important discourse on the sociocultural dimensions of life as a diseased person. A human profound desire to ponder the existential meaning of disease has naturally led to philosophical attempts to define it; the debate was not simply forced into existence by bored intellectuals who felt that the topics of love, life and happiness were becoming too tiresome. Philosophical discussions of health and disease concepts cannot be artificially separated from the discourse which produced them, and should instead be used to provide insight into it, raise awareness of its implications for the lives of diseased people, and give a voice to those who feel discouraged to speak.¹⁸² That is why I believe that appeals to shut down the debate on health/disease definitions, or to expel it from the locus of the clinic, can send out the wrong message – a negative message – about the way disease ought to be perceived by society.

¹⁸¹ Stacey, Op. cit., p. 25

¹⁸² A parallel can be drawn between the present topic and the fields of gender, race and social studies. It is not a coincidence that Sally Haslanger's work on social kinds, for example, argues in favour of politically useful 'ameliorative projects', e.g. ones 'raising normative questions about how we should understand race, not only how we currently do' (see Haslanger, S. and Saul, J., 'Philosophical Analysis and Social Kinds', *Proceedings of the Aristotelian Society, Supplementary Volumes*, 2006, Vol. 80, especially p. 95 and p. 96)

Philosophical work on health/disease definitions is very central to how a culture regards disease in general – it both reflects and shapes the predominant trends in the relevant discourse. The way we express ourselves, the debates we choose to fuel or discourage, the terms we speak with, they have everything to do with how we treat each other – indeed, they already constitute a way of treating one another. Eliminating all talk about the meaning of disease from spheres where it really matters a lot, like medicine and philosophy, is akin to silencing those among us who would benefit the most from such discussions, and who have an interest in listening and participating – the sick. Additionally, it would deprive us of important phenomenologically-padded insights into disease symptomatology, which could serve as a useful boost to bedside medicine and the clinical practice perspective in general.

Stacey's articulation of the importance of perspective is by no means an isolated theory. In a paper dedicated to patient perspectives on pain relief, G. A. Bendelow engages in an analysis of 'interpretive sociological perspectives'¹⁸³, such as Bury's 'biographical disruption'¹⁸⁴, Williams's 'narrative reconstruction'¹⁸⁵, and Herzlich's¹⁸⁶ and Radley's¹⁸⁷ 'styles of adjustment'. Albeit focused on the experiences of people living with chronic pain, Bendelow's conclusions also apply to those living with disease: '...lack of social support, especially for those living alone, appeared to be [a] contributory [factor] to the desperation and hopelessness of [these people].'¹⁸⁸ Isolation and negativity can cause profound damage to the individual diseased person's capacity to adjust, reconstruct her disrupted biographical narrative, or

¹⁸³ Bendelow, G., 'A "failure" of modern medicine? Lay perspectives on a pain relief clinic', in Williams, S. J. and Calnan, M. (Eds.) *Modern medicine: lay perspectives and experiences*, UCL Press, London, 1996, pp. 167-205, see p. 168

¹⁸⁴ Bury, M., 'Chronic illness as a biographical disruption' in *Sociology of Health and Illness*, Vol. 4, 1991, pp. 167-182

¹⁸⁵ Williams, G., 'The genesis of chronic illness: narrative reconstruction' in *Sociology of Health and Illness*, Vol. 6, No. 2, 1984, pp. 175-200

¹⁸⁶ Herzlich, C., *Health and illness: a social psychological approach*, Academic Press, New York, 1973

¹⁸⁷ Radley, A. and Green, R., 'Illness as adjustment: a methodology and conceptual framework', *Sociology of Health and Illness*, Vol. 9, No. 2, 1987, pp. 179-207

¹⁸⁸ Bendelow, Op. cit., p. 177

make sense of her experiences. On a larger scale, this could lead to a serious problem with the successful integration of diseased or disabled people in society and the work force, where they feel unwelcome and restrained – especially if their situations have already been complicated by factors such as poverty or lack of adequate support networks. Reconstruction of one’s lost or disrupted narrative is a good place to start re-building one’s sense of direction in life, but is unlikely to happen in the conditions of a public discourse on disease which refuses to acknowledge its tremendous existential importance, and even attempts to shut down all philosophical debates of its meaning, or at least to prevent professionals from contributing – and thus lending legitimacy – to said debates.

It is not a coincidence that wealthier patients talk about ‘managing’ their conditions, while patients of a lower socioeconomic status are ‘coping with disease’¹⁸⁹; that people with different lifestyles, social standing and educational backgrounds may have a different sense of agency in illness, or different needs when confronted with illness. Indeed, some have even been able to detect gender differences in beliefs about which factors were the most helpful when struggling with illness: ‘When asked what helped the most, aside from medical treatment ..., there also appeared to be gender differences. For men, occupational status and material advantages, particularly the ability to maintain their income level, were seen as the most important factors, with the subsequent implications of “failure” when these were lost. In contrast, whereas these aspects were also important for women ..., social support was perceived to be of equal importance.’¹⁹⁰ It is not a mere coincidence that many patients place such high importance on support – in all its forms, from loving personal relationships and accepting social networks at one’s job or neighbourhood, to institutionalized social support services. Since illness can have a debilitating and even incapacitating effect on one’s emotional and physical well-being, it is not uncommon for health care systems to operate in conjunction with other spheres of services, such as counselling. It is also not at all unusual for physicians to take professional occupations, lifestyles or social status into account when weighing treatment options during the clinical decision-making process. For example: diabetic patients with more physically demanding jobs and exercise routines get less intense treatment plans;

¹⁸⁹ Ibid, p. 183

¹⁹⁰ Ibid, p. 177

athletes with severe Crohn's disease are less likely to be recommended getting an ostomy that may interfere with their professional lives; poorer patients in countries without universal health care can be prescribed the more affordable drug, etc.

Considerations about the social and normative implications of diagnosis, prognosis and treatment are clearly important elements of clinical practice. Simply put, it would be neither necessary nor productive to eradicate them, as they are needed in order to contextualize and guide the decision-making process. After all, humans are not cars. The question whether we want our car to accelerate as quickly as other cars is a simple matter of preference. The question whether I want the growth in my right breast operated upon is not – it would very much depend on whether or not I am ill, what the potential consequences of failing to take any action are, the amount of funds available to me at that precise moment, whether I feel that my femininity would be threatened by the scarring and asymmetric appearance of my breasts, etc. An interesting conflict arises upon realizing that, while these important considerations guiding myself and my physicians may be dismissed by eliminativism as forms of 'needless distraction', to me they represent crucial dimensions of my existence. The reason behind this phenomenon is that, as a social actor, the patient creates a specific narrative about her own life and how she functions in her community, but this narrative does not form in a state of existential vacuum – it is influenced and restrained by external, usually social, influences on her perception of self. These influences can include, although they are by no means limited to, linguistic and visual cues about others' expectations. Here I have dealt with linguistic cues such as labels, while sub-section b) will deal with visual cues.

b) Williams on metaphors and 'iconography of illness'.

Ian Williams may not be the first philosophically inclined practitioner who has dared to question why in Western culture the most common reactions to disease and those living with it are ones of pity and disgust. However, his analysis of this taboo topic provides both a refreshingly unique perspective and an uncommonly insightful explanation. By combining his professional medical experience, his academic background in art, and his deep knowledge of web comic culture, he sheds light on one of the most under-researched issues in the field of

medical humanities – that of the mechanisms behind the social construction of categories like ‘disease’. Williams unpacks the roles of labels, codification, and visual representation or visual cues, which he refers to as the ‘iconography’ of illness.¹⁹¹

The reactions of pity and disgust, he says, are our respective reactions to impotence and ugliness¹⁹²; referring to Sontag’s *Illness as Metaphor*, he speculates that the reason most of us fear cancer, leprosy and syphilis, for example, resides within our fears of losing control and witnessing our bodies transform ‘into something alienating’.¹⁹³ This thought is, of course, anticipated in Erving Goffman’s work on stigma – the book *Stigma: Notes on the Management of Spoiled Identity*,¹⁹⁴ which Williams credits as a main source of the notion that disease-related stigma functions on a visual level by tying together the concepts of ‘expressing disease’ and ‘embodying disease’. Or, as formulated by Williams, the diseased individual becomes a ‘... a vessel holding disease and, therefore, an extension of the disease.’¹⁹⁵ Disabling the debate on disease definitions would not neutralize this reality – it would cement it. That is why eliminativism poses a hidden threat to our collective efforts to comprehend and accommodate those among us who live with illness.

While the diseased persons may perceive themselves as ‘diseased-but-normal’ selves trying to have a ‘viable way of living in the world’ (which Williams argues can also be done symbolically, e.g. by finding meaning or a meaningful narrative, since many people experience disease as a chaotic interruption of their life-story), the rest of us can test or altogether abolish their determination with our negative stereotypes – as also explained by Stacey. In order to confront our prejudice, deal with stigma or counteract negative stereotypes, we need to acknowledge that they are present – that they have permeated both folk psychology and medical thinking. While the pathway to challenging our own assumptions is open, it is made

¹⁹¹ Ian Williams, ‘Comics and the Iconography of Illness’ in Williams, I. et al, *Graphic Medicine Manifesto*, Penn State University Press, 2015, p. 123

¹⁹² Ibid, p. 121

¹⁹³ Sontag, S., *Illness as Metaphor*, Farrar Straus & Giroux, New York, 1988, p. 131

¹⁹⁴ Goffman, E., *Stigma: Notes on the Management of Spoiled Identity*, Touchstone, New York, 1986

¹⁹⁵ Williams, Op. cit., p. 122

unusually difficult by the distracting influence of institutionalized ‘knowledge’, which we regard as undisputed fact. Physicians are the first link in this chain of interactions:

‘Images help structure the schemata of illness within the mind of the clinician who builds a mental catalogue of clinical signs and presentations against which the presenting appearances can be judged. Atlases of clinical signs serve as diagnostic aids, and modern imaging techniques offer the chance to visualize the interior of the body as well as the surface, further objectifying the body and enhancing the idea that the “truth” about the body can be obtained through technology and digital representation.’¹⁹⁶

This reiterates some of the issues I have already discussed in chapters 1 and 3, where I highlighted the problematic aspects of medicine and medical thinking’s preoccupation with objectification and measurability. However, it approaches them from an altogether different angle – one that exposes the ways in which ‘iconography of illness’ borrows images, stereotypes and tropes from ‘the bank of available images that inform our collective conceptions of illness and health care’¹⁹⁷, all the while maintaining the pretense that it draws on objective knowledge rather than highly culture-specific tropes – a pretense that lends it apparent legitimacy. Rather than solving this problem, eliminativism can only aggravate it through denial. The very serious issue here is that of stereotyping diseased people and their experiences by forcibly locking them inside a *sui generis* ‘lexicon of visual cues’ embraced by both science and media:

‘There is a tradition within figurative art of showing various stages of psychological distress, and over the centuries a lexicon of visual cues has been developed and remains powerful today. We know the classic pose of melancholia when we see it, because we recognize it from images we have internalized or observations of depressed people: slumped shoulders, the chin resting on the hand, the other in the lap, the expressionless face. Is this pose some sort

¹⁹⁶ Ibid, p. 117

¹⁹⁷ Ibid, p. 115

of “natural” posture to adopt when one is feeling melancholic, or is our behaviour informed by the media we consume?’¹⁹⁸

The same line of questioning can be applied to all states which are depicted in stereotypical manners by the media: do all sociopaths have violent tempers which eventually turn them into axe-swinging murderers? Are all drug addicts impulsive and prone to criminal activity? Did all lung cancer patients cause their own condition through poor lifestyle choices? Do all cases of the same disease look the same? The obvious answer is that, while individual cases may differ vastly in their manifestations, ‘iconography of illness’, much like nosography itself, relies on de-individualized or even de-humanized generalizations, and does so in order to constitute and reinforce the official languages and postulates of clinical practice. But these questions will still need to be asked, even if eliminativists were to successfully impose the notion that definitions of disease are ultimately pointless, because practice needs to be guided by rules and postulates; by convention and shared language – by *instruction* (as discussed in Chapter 1). In the absence of discussion and debate, *instruction* is often delivered via textbook wisdom and iconography. That is why ‘iconography of illness’ has a special place in medical education, where it makes up a significant part of textbooks:

‘Textbooks, guidelines, and verbal discussion among healthcare professionals could be seen as constituting the “official” language of healthcare: sanctioned by authority, peer reviewed, and packed with “objective” and “evidence based” propositions. It is through these avenues of approved knowledge that the discourse exerts its power. The visual aspects of the discourse are mediated through an analogous official iconography that shows how sick people should look and helps distinguish the “normal” from the “abnormal”. The marks of disease on the body are appropriated by medical photographers or illustrators; positioned in “neutral” anatomically “correct” positions and in the “correct” light; and captured in photographs or drawings. Any sense of the individual is removed by cropping off the head, isolating the body part, or blacking out the eyes.’¹⁹⁹

¹⁹⁸ Ibid, p. 125

¹⁹⁹ Ibid, p. 133

In the above-described act of appropriation, not only the individual is deprived of a name and a face – taxonomizing disease in visual terms downplays individual differences and eradicates the importance of what lies ‘underneath’ or ‘within’ physical signs. In that sense, ‘typical’ representations of disease are produced in an intellectual environment which erodes not only the specificity of disease manifestations, but also the ‘deep-seated culturally accrued attitudes within the observer that may also be unacknowledged or unconscious.’²⁰⁰ Thus these attitudes remain obscured, but active, and their activity is all the more powerful because they operate silently. Eliminativists like Ereshefsky maintain that such attitudes need to be ‘highlighted’ in order to be prevented from masquerading as neutral, but does not prescribe any specific strategies for acting neutrally – that is, to prevent normative thinking from influencing our decisions; Hesslow does not present a solution either, other than transferring all responsibility onto the patient. That, in itself, is enough to raise suspicions about the productivity of their proposal that we ignore all value-laden aspects of clinical encounters and shut down all philosophical discussions about the concept of disease. Furthermore, physicians who insist that they are disconnected from sociocultural influences often do not realize that they end up imposing the very norms and standards they claim not to acknowledge; that they reinforce the very stereotypes to which their professional objectivity has supposedly left them ‘culturally blind’. They achieve this effect by practicing the art of diagnosis, which relies, among other things, on visual cues and superficial sensory information, which is often filtered indiscriminately. Similarly, diagnostic labels are attached without much consideration of the potential psychological or social effects to be experienced by the patient, but can have powerful transformative effects on the patient’s identity. Thus the combined influences of ‘iconography of illness’, public discourse, and medical authority can translate diagnostic labels and ordinary folk language of illness into social roles. In the next section I argue that this power, rather than feared or dismissed (as suggested by eliminativists), ought to be embraced, turned around, and used productively. Ignoring this knowledge instead of incorporating it in clinical practice would mean that optimal efforts are

²⁰⁰ Ibid, p. 133

not being made to guarantee the best possible outcome for patients as *persons* (as opposed to patients as asocial, purely biological, bodies).

The message of Williams's research paper is clear: rather than simply reflecting what is already out there, images have the power to generate, shape, or destroy our social world. If not used wisely, they can oversimplify and trivialize important issues, create false generalizations, or, in the case of medicine, decrease the range of 'real life' appearances and variations of normality. The same applies to words, which, when wed with images, create the labels and stereotypes underpinning social identities.

c) Maynard and medical identities.

Kent Maynard defines identity as 'one of those concepts that simultaneously face in two directions – towards the individual and towards the group – at once opening on to an exterior world of sociality (and even the cosmos), yet equally personal.'²⁰¹ He begins the introduction to *Medical Identities*²⁰² with a curious nod to Marxist theory – namely by locating the identity and consciousness of Self within the individual's bodily existence, work and sphere of activity.²⁰³ As members, it turns out, we both 'constitute' and 'embody' our social groups, by means of participating in their specific 'emotional, social and cognitive lives' in the manner intended by the group. Thus, by definition, social identities are cultural identities and therefore performative, i. e. related to performing in accordance with certain cultural norms (such as specific practices or bodily manifestations, etc). As there is no person who has not received 'a cultural upbringing', all existing identities have culturally shaped symbolic parameters, argues Maynard. However, scientific biomedicine and clinical practice both aspire to be objective and thereby culturally blind to the reality that, 'if both our "human nature" and our social identities are entwined with daily activities, then semi-specialities or occupations involved in medicine have a way of defining their practitioners.'²⁰⁴ While this does

²⁰¹ Maynard, K., 'Working at Therapeutic Personhood', introduction to Maynard, K. (Ed.), *Medical Identities: Healing, Well-Being and Personhood*, Berghahn Books, 2007, pp. 1-13

²⁰² Ibid

²⁰³ Ibid, p. 3

²⁰⁴ Ibid, p. 4

not necessarily mean that sufferers and chronically ill people differ fundamentally from the rest of us, it still raises questions about the cultural dispositions of doctors, e.g. are they disposed to reflect upon the cultural realities they reject or not. However, there can be little doubt that, like most professions, medicine is culturally nuanced work, regardless of one's dispositions. Similarly, medical thinking is necessarily culture-specific, and always subject to the influence of the thinker's cultural upbringing.

If even relatively basic and trivial human phenomena, such as satisfying our need of food, clothing and shelter, obey such different rules of performance across different cultures, it would not be unreasonable to conclude that the same applies to health care and medical thinking, which far surpass them in complexity (because of the additional dimensions of 'care' and 'thinking', which elevate health care and medical thinking beyond the status of basic material needs). Therefore, to reiterate one of my main arguments from Chapter 2 but borrowing Maynard's elegant prose, '... there is nothing natural, nothing inevitable about how physicians think about themselves, or what we assume about them. [Their] identity is both an historical construction and cross-culturally variable.'²⁰⁵ Because, as noted by Maynard, '...[all medical identities] are shaped fundamentally by larger structural and institutional factors, both internal and external to medicine.'²⁰⁶ It is therefore impossible to approach medical issues from a completely neutral standpoint (as I have also shown in Chapter 3). If anything, the results of such attempts are bound to be counter-productive because of the very nature of contemporary health care as a dynamic social enterprise involving multiple agents with different beliefs and purposes. In the next section I will lend further support to this claim through a selection of examples, which demonstrate that the effectiveness of health care and public health depends on facilitating discussion rather than shutting it down; on becoming more aware of the existence of a multitude of notions about health, disease and health care, which are often crucial parts of patients' personalities and lifestyles and thus inextricably linked to the process of medical decision-making.

²⁰⁵ Maynard, *Op. cit.*, p. 8

²⁰⁶ *Ibid*, p. 10

4. 8. How notions about health and disease translate in real life: the case of public health and patient compliance.

In Chapter 2 I have already managed to show that the blatant disregard that medical and public health professionals sometimes express towards alternative notions about health stems from an inability to appreciate the important part played by values and sociocultural powers in the development of medicine and public health. This inability appears to be shared by eliminativists, whose claims about the uselessness of health/disease definition debates show a lack of appreciation for sociocultural reality and historical truth. From the introduction of quarantines during 14th century Black Death epidemics to contemporary vaccination schedules, humankind has a long history of organized attempts to promote physical well-being by preventing disease or reducing infection transmission rates among populations, and virtually every one of these attempts have been accompanied by underlying concerns of a moral nature. The initiatives now referred to as ‘public health programmes’ are designed in accordance with relevant science-based, peer-reviewed evidence, but their intellectual foundations ultimately draw on philosophical ideas. Due to their intricate connections to issues such as justice, fair resource distribution, (dis)advantage and poverty, public health programmes present a social and ethical challenge in the sense that they require active commitment to maximizing general welfare. However, because of the involvement of epistemically authoritative figures (scientists, medical professionals, public health officers, and politicians, among others), any occasions in which the interventions fail to achieve their proclaimed end are often critically regarded as the result of inefficient policy-making, careless planning, or unsuccessful campaigns. This narrow view downplays the impact that factors like values, epistemic virtues (or the lack thereof), rational self-interest, lifestyle and personal views on health could have on the general health of the population. In reality, all these factors have the potential to produce, fuel and disseminate health trends – alternative, user-driven forms of health-related group knowledge. Natural living movement supporters, vaccination opponents, and therapeutic nihilists are all examples of alternative perspectives on healthy living, which can have a profound influence on the effectiveness of government-imposed public health interventions and campaigns, or even shape the disease profiles of entire populations. Contrary to what eliminativists might believe about the superfluousness of terms like ‘health’ and ‘disease’, the clash between different interpretations of these concepts can

affect public health practices. A closer inspection of the social dynamic involved in producing medical knowledge and communicating it to the public reveals that without a trace of doubt.

Medicine and its social environment do not develop in isolation from each other – in fact, historians of medicine generally agree that there has always been an intimate two-way connection of dependence between medicine and sociocultural forces, economic circumstances, or ideological influences. History shows that the major epistemic shifts in medicine can be accompanied by social re-structuring and political changes. For example, during the early nineteenth century humoral and miasmatic theories – the explanatory models of disease that had been used since Antiquity – gave way to Germ theory, leading to an increased focus on hygiene, and producing the idea that the state had an obligation to protect its citizens from the spread of infectious diseases. The notion that diseases were communicable also meant a growing public desire to learn more about pathogens and the ways to keep them at bay. This ambition reflects a re-discovered sense of responsibility for one's own health – a sense which was already present in Western European societies, but which continued to flourish in spite of the rapid development of reliable health services. Sales of personal and domestic hygiene products spiked, while the so-called 'sanitation science' manuals or pamphlets became a must-have for all responsible citizens, clearly indicating that medical knowledge is bound to have repercussions on our shared social world, our lifestyles and our value systems – and vice versa.²⁰⁷

However, it was also during this historical period that a significant social and epistemic gap began to form between those who consumed health services or health information, and those who provided them. The professionalization of medicine and public health was a major contributing factor, assigning physicians and public health officers to an inherently superior position, whilst their clients were expected to play an obedient, silent and passive role that had very little in common with their pro-active attitudes or their vivid interest in health-

²⁰⁷ Porter, R., *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present*, Fontana Press, London, 1997, p. 641

related matters (hence the use of the term 'patients'). N. D. Jewson has famously referred to these social developments as an 'eradication of the sick-man from medical cosmology'²⁰⁸ and suggested that they have had an ongoing effect on the relationship between medical investigators and those whose interests they are meant to serve. The exclusion of patients from the production of medical knowledge coincided with a shift from a person-oriented to an object-oriented medical cosmology, where the patient presenting herself in front of the medical gaze gradually came to be viewed as a 'collection of synchronized organs' with no voice of her own, a 'material thing to be analyzed'²⁰⁹ and subordinated to a paternalistically inclined professional expert. This process has occurred as a result of two major tendencies in medical thinking: the tendency towards objectification and quantification (which I have discussed in Chapter 3), and the tendency to refrain from reflections on the existential and normative dimensions of medicine and disease (which I have addressed in Chapter 2). Eliminativism may be seen as a product of these developments, and interacts with paternalistic attitudes towards patients in the most curious way: obscuring those aspects of the physician-patient dialogue which most resemble a philosophical exchange of outlooks and ideas is tantamount to silencing, and silencing is tantamount to disempowerment.

Despite the recent focus on ethical issues such as patient autonomy and informed consent, there continues to be insufficient regard for the patient's role as an epistemic agent in the context of clinical practice or public health. This has led to palpable tension between public health authorities and certain groups which resist their efforts or hold different opinions on health-related matters. After briefly outlining the historical reasons behind these social developments, I will discuss these views' underexplored potential to shape the disease profiles of entire populations, as well as their proponents' capacity to produce or disseminate group knowledge in ways that make it attractive to the public (for instance in the form of 'health trends'). I would like to suggest that, due to certain historical and cultural influences particular

²⁰⁸ Jewson, N. D., 'The disappearance of the sick-man from medical cosmology', *International Journal of Epistemology*, 11 May 2009, Vol. 38, pp. 622-633

²⁰⁹ *Ibid*, p. 238

to Western Europe, these alternative forms of knowledge production are systematically underestimated.

Currently, not all of the segments of society that are engaged in active contribution to the production of medical knowledge receive recognition for their efforts. As the involvement of laypersons has undergone a gradual devaluation over the course of the past two centuries, public participation in the development of all science and technology has been severely limited,²¹⁰ and medicine makes no exception. While there may have been a time when medicine vaguely resembled a jointly created and maintained enterprise, this ceased to be the case after the institutionalization and professionalization of medicine – a process which began during the early 19th century.²¹¹ A series of legislative measures were taken, such as the Medical Act of 1858, which were designed to create serious disincentives for laypersons who wanted to practice the profession in England.²¹²

However, historians tend to agree that during the centuries leading up to that moment, medicine resembled a ‘marketplace’ full of diverse services, trades and professional opinions.²¹³ It has also been noted that even after medicine began to flourish as an academic discipline, the majority of important discoveries continued taking place outside the context of universities and academia for quite a while – usually on the battlefield or in the hands of barber-surgeons like Ambroise Paré.²¹⁴ Of course, medicine as we know it today in the Western world and the majority of industrialized countries – I will refer to it as ‘orthodox biomedicine’ – seems to make a point to distinguish and distance itself from other forms of medical knowledge and practice. The very fact that such forms of knowledge or practice are even referred to as ‘alternative’ testifies to its success in that regard. However, one of the

²¹⁰ Bakuwa, J., ‘The Role of Laypeople in the Governance of Science and Technology’, *International Journal of Humanities and Social Science*, March 2014, Vol. 4, No. 5 (1), pp. 144-150

²¹¹ Porter, *The Greatest Benefit to Mankind*, p. 287

²¹² Waddington, I., *The Medical Profession in the Industrial Revolution*, Gill & Macmillan, Dublin, 1984, p. 138-143, p. 147-152

²¹³ Fissell, M. E., ‘The Marketplace of Print’ in Mark Jenner and Pat Wallis (Eds.) *Rethinking the Medical Marketplace*, London: Palgrave, 2007, pp. 108-132

²¹⁴ Paget, S., *Ambroise Paré and his times, 1510-1590*, G. P. Putnam’s Sons, New York, 1897

uncomfortable results is that a large number of the health professionals influenced by this doctrine may be working with somewhat culturally impoverished notions²¹⁵ of health, disease, healthy living and the optimal strategies for educating the public on these crucial matters. Orthodox biomedicine, which has been a stepping stone for public health since the latter's beginnings in the late 17th century, has been criticized by some socially conscious authors for its elitism and exclusivity, as well as its implicit racism, which is precisely why the appropriate reaction to eliminativist ideals about objective state descriptions ought to be one of skepticism. Medicine's long history of prejudice and bias can hardly make it a likely candidate for producing value-free, detached descriptions – a position that has also been shared by insiders.

In the early 1990's the Sri Lankan born British psychiatrist Suman Fernando, a former member of the Mental Health Act Commission and chair of its National Standing Committee on Race and Culture, published *Mental Health, Race and Culture* – an influential work analyzing what Fernando refers to as the 'cultural blindness' of orthodox medicine, and noting how its belief systems have been informed entirely by 'concepts based on Western culture', which means that certain people have always been, and will likely continue to be, disadvantaged by its biases.²¹⁶ According to Fernando, this negative effect is especially obvious in the case of psychiatry, which he finds to be 'inherently prejudiced', but some of his conclusions could easily be extended over other fields, for example public health. Certain groups of people, who subscribe to certain unconventional beliefs about medicine and health, are routinely critiqued, dismissed, or regarded as less epistemically reliable than people of comparable educational backgrounds or social positions who hold beliefs that comply with the orthodox medical paradigm. One might argue that these people are facing a type of epistemic oppression: their knowledge is dismissed as irrelevant, inaccurate, useless, or somehow inferior to that produced by orthodox biomedicine. This practice is made all the more problematic when we follow the eliminativist prescription to prioritize objectivity over values. But what even is objectivity, when our epistemic output is so contingent upon the input of values and cultural

²¹⁵ Smedley, B. D. et al, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, The National Academies Press, Washington, 2003, p. 180-198

²¹⁶ Fernando, S., *Mental Health, Race and Culture*, The MacMillan Press, London, 1991

influences?²¹⁷ Opinions are anything but insignificant; evidence clearly suggests that even very small groups of like-minded individuals still have the potential to re-shape an entire country's disease profile – all just by acting on their values and beliefs.

Simple medical decisions which are often regarded as a personal choice – such as whether or not to vaccinate oneself or one's children – can have massive repercussions for an entire community, as shown by the large, multi-state measles outbreak faced by the US in 2014-2015²¹⁸, which affected a total of nearly 860 people across 27 states. In the United Kingdom, measles was declared endemic to the population in the year 2008, having reached this status again within the decade following the MMR vaccine controversy created by Andrew Wakefield in 1998, which led to a sharp drop in vaccination rates and a decrease in herd immunity.²¹⁹ However, the recent outbreaks in some other Western European countries appear to be linked to particular philosophies about health and medicine, rather than produced by vaccine scares. The 1999-2000 outbreak in the Netherlands²²⁰ and the 2015 outbreak in Germany²²¹, for example, have some things in common: the affected were mostly children (nearly 80%), and mostly from families that held anthroposophist, homeopathic, naturopathic or other alternative views on medicine. This information is just as medically relevant as anything an 'objective description' of the patient's state could tell us, but would be left out if it were up to the eliminativist because of unconvincing claims about its uselessness.

While the philosophies of alternative medicine movements may differ significantly, their supporters typically share a cluster of common notions about healthy living and healing, as well as a common skepticism regarding evidence-based medicine's methods and

²¹⁷ Also see Engelhardt, H. Tr., 'The disease of masturbation: values and the concept of disease', *Bulletin of the History of Medicine*, Summer 1974, Vol. 48, pp. 234-248

²¹⁸ 'Measles Cases and Outbreaks', report by the Centers for Disease Control and Prevention, available online at <https://www.cdc.gov/measles/cases-outbreaks.html>, last accessed on 12 June 2017, 12:44 h.

²¹⁹ Sathyanarayana Rao, T. S. and Andrade, Ch., 'The MMR vaccine and autism: Sensation, refutation, retraction, and fraud', *Indian Journal of Psychiatry*, April-June 2011, Vol. 53, No. 2, pp. 95-96

²²⁰ van den Hof, S. et al, 'Measles outbreak in a community with very low vaccine coverage, the Netherlands', *Emerging Infectious Diseases*, 2001, Vol. 7, No. 3, pp. 593-597

²²¹ Sherwin, E. H., 'Measles in Germany: Past, Present, and Future of Outbreaks and Vaccination', *University of Tennessee Honors Thesis Projects*, 2016

achievements. Self-diagnosis and self-healing can be common, as can be the opposition to many artificially produced means of treatment, such as synthetic medication or surgical treatment. These could be replaced by lifestyle and dietary changes (for naturopaths), and sometimes by art therapy, rhythmic massages or counselling (for anthroposophists). Health is usually understood as an innate order or balance best preserved when adhering to what is 'natural', while diseases are perceived as products of the stress or demands associated with unnatural lifestyles.²²²

In contrast, orthodox medicine, which draws on the scientific methods of biomedicine, tends to construe the healthy and the diseased state as processes,²²³ and is more preoccupied with pragmatic assessments such as the effectiveness of interventions than it is with the largely ethical question whether or not to intervene,²²⁴ i.e. to interrupt a process. The treatment itself is seen as little more than a means to an end, an instrument of extrinsic value, whereas in alternative medicine the treatment itself appears to be assigned significant value²²⁵ or reflect the value system of patient and healer. Moreover, it often plays the additional role of signifying the patient or healer's social engagements, her political views, and the epistemic position from which she confronts the phenomena of health, disease, and health care.

Today, in addition to the extensive range of treatment options for the ill body, there is also a multitude of resources available to the inquisitive mind, which increase the exposure – and thereby the popularity and scope of influence – of alternative medicine.²²⁶ This ongoing process has occurred along the same timeline as three other important changes – an introduction of compulsory education, a change in the goals and purposes of public health care, and a move towards globalization.

²²² McKeown, T., *The Origins of Human Disease*, Wiley-Blackwell, Oxford, 1991, p. 118

²²³ Simon, J. R., 'Medical Ontology' in Fred Gifford (Ed.) *Philosophy of Medicine*, New Holland, Oxford, 2011, p. 69

²²⁴ Cassell, J., 'Against medical ethics: opening the can of worms', *Journal of Medical Ethics*, 1998, Vol. 24, p. 10

²²⁵ Tyreman, S., 'Values in complementary and alternative medicine', *Medicine, Health Care and Philosophy*, May 2011, Vol. 12, No. 2, pp. 209-217

²²⁶ Bean, S. J., 'Emerging and continuing trends in vaccine opposition website content', *Vaccine*, 29, 2011, p. 1875

Compulsory education has produced populations that are better equipped to seek out and understand information about the treatment options available to them. It has also helped cultivate more socially engaged, pro-active, independent, and outspoken attitudes, some of which are essential aspects of critical thinking.

It has been noted that people today are more likely to exhibit independence in terms of their health choices, to question physician decisions or even challenge them legally,²²⁷ and to mistrust scientific authority – especially in the context of research-supported evidence or scientific theories which go against their beliefs. However, this independence has produced certain radical forms of skepticism, a few of which have been of questionable benefit to the public. The rejection of commonly applied public health measures such as vaccination, or the emergence of controversial conspiracy theories (for instance that there is no reliable evidence suggesting a causal connection between HIV and AIDS, or that the existence of the HIV virus itself is a myth) both stem from a profound skepticism regarding scientific medicine and health care institutions.

Despite vicious smear campaigns in the media which portray anti-vaccinators as backwards or scientifically illiterate, sociologists of medicine have pointed out that the main issues which prevent successful dialogue with them go deeper than their supposed ‘ignorance’.²²⁸ When discussing these issues, it is worth keeping in mind that a significant number of vaccine opponents demonstrate decent levels of health literacy; perhaps even more interestingly, there are more than a few medical professionals among them. As shown by the research of authors such as Anna Kata, stubborn resistance to certain public health measures, or skepticism regarding the very need for such measures, are phenomena which can be observed across all levels of education, in all occupations or segments of society, which should be sufficient evidence that these behaviours do not always result from ignorance, but rather from

²²⁷ Coggon, J., and Miola, J., ‘Autonomy, Liberty, and Medical Decision-Making’, *The Cambridge Law Journal*, November 2011, Vol. 70, No. 3, pp. 523-547

²²⁸ Kata, A., ‘A postmodern Pandora’s box: Anti-vaccination misinformation on the Internet’, *Vaccine*, 28, 2010, p. 1715

alternative understandings of health or – in the case of child vaccination, for example – from differing interpretations of parental responsibilities.²²⁹ In a more recent paper, Goldenberg also contests the notion that public resistance is produced by a misunderstanding of science, and points out that vaccine hesitancy is more likely to stem from a ‘mistrust of scientific experts and institutions’.²³⁰

One might argue very successfully that the overall negative and condescending attitude towards vaccination opponents is representative of how the experts and institutions in question are accustomed to dealing with public controversies. Instead of increasing their efforts to maintain a productive dialogue with their dissenters, scientists and public health authorities attempt to invalidate their rights to question the benefits of certain policies or practices. Gross accusations of ill-intentioned conspiracy are not rare, and neither are ridicule, bullying and epistemic oppression. But health care and public health interventions are not just about technical knowledge – they are also about knowing what is ‘good’ and how to secure public ‘goods’ for a specific society in a fair and just manner.

To sum up, the same principle holds true for all societies: in order to protect the health of a specific population, one needs to acknowledge that its members’ beliefs about health and disease are bound to affect any and all measures taken against disease. The success of one and the same educational campaign against a sexually transmitted infection, for example, will vary largely across different communities, based on a combination of epistemic and ethical factors, the most obviously relevant among which are: level of education, previously held beliefs about the disease in question (i. e. beliefs about whom it affects, or how likely it is that one will acquire it based on one’s current lifestyle), level of epistemic trust in the organization providing the educational campaign, and personal values (for instance how high the individual ranks the category of health among her priorities, or how she feels about the possibility of

²²⁹ Kata, Op. cit. Also see Kata, A., ‘Anti-vaccine activists, Web 2.0, and the postmodern paradigm – An overview of tactics and tropes used online by the anti-vaccination movement’, *Vaccine*, 30, 2012, pp. 3778-3789

²³⁰ Goldenberg, M. J., ‘Public Misunderstanding of Science? Reframing the Problem of Vaccine Hesitancy’, *Perspectives on Science*, 2016, Vol. 24, No. 5, pp. 552-581

contracting the disease). A less obviously relevant cluster of factors, which is nonetheless just as important, contains notions about health and how one can maintain the state of health whilst avoiding disease, as well as the openness to participate in discussions of the abovementioned topics. All of these factors ought to be taken into account during attempts to come up with successful public health interventions.

4. 9. Summarizing the arguments in favour of maintaining the debate.

Chapter 4 introduced the subject of eliminativism – the position that the debate on health/disease definitions is pointless, as such definitions are not necessary for the purposes of medicine, clinical reasoning and health care policies (Section 4. 1.). I have presented convincing objections to this position, which I have derived from my research across a multitude of disciplines and theories that challenge such assumptions about the practical implications (or lack thereof) of definitions, labels and identities.

First I have examined Ereshefsky's idea that neutral state descriptions ought to be kept separate from normative claims (Section 4. 2.), before showing that this step needlessly overemphasizes the distinction between the two types of considerations, and artificially separates their goals and outcomes (Section 4. 3.). Then, I have addressed Hesslow's opinion that evaluative judgements and normative reasoning are a type of needless 'distraction' (Section 4. 4.) – a claim which I invalidated based on medicine's integrative, multidimensional character, which combines scientifically derived knowledge and methodology with socioculturally derived knowledge of the world and human behaviour (Section 4. 5.). The importance of the latter kind of knowledge does not receive sufficient recognition due to idealized notions about medicine as a value-neutral, objective, and 'culturally blind' enterprise (a myth which I have exposed and rejected with the help of Chapters 2 and 3).

However, inspired by label theory, in Section 4. 6. I spell out my observation that language and rhetoric are among the main driving forces behind the production of social expectations; behind the production of the social *instructions*, which I have discussed in Chapter 1, and on

which we rely when performing the social roles that we have been assigned – medical identities included.

I have developed this idea further in Section 4. 7., where I have described in detail how rhetoric and social metaphors can be expected to influence the ways in which laypersons perceive disease phenomena, or experience life with disease. Drawing on Jackie Stacey’s analysis of the negative stereotyping associated with cancer, in the first sub-section of Section 4. 7. I have shown that evaluative judgements form a crucial part of how laypersons and physicians alike tend to contextualize disease; they also provide the basis for patients’ narratives of their own disease, as well as the basis of their interpretation of the medical identity or social role assigned to them.

Then, in the following sub-section, I have relied on Ian Williams's theory about the ‘iconography of illness’ to help me demonstrate how highly dependent we are on visual and linguistic cues (e. g. labels) from others to guide us in this process of *instruction*: rather than merely reflecting attitudes and notions that are already present in our sociocultural environment, these cues can create or re-shape them, thereby exercising a powerful influence on our social dynamic (which includes science, medicine, public institutions, and more).

As indicated in the final sub-section of Section 4. 7., medical identities obey the same principles – K. Maynard’s work on the influence of sociocultural context on medical thinking testifies that issues relating to medicine and disease could never be approached from a neutral standpoint, but instead depend on one’s cultural upbringing. This idea has prepared the ground for my last argument, which has been delivered in the form of evidence that, in order to protect the health of a specific population, one needs to take into account its members’ notions of health and disease, which determine the inclination (or lack thereof) towards compliance with state-regulated public health measures (Section 4. 8.). I have shown that, in order to be successful, campaigns need to be informed by an accurate understanding of the values and beliefs that the target population maintains about health, disease, and medicine – an understanding which would be impossible to acquire unless the right social and epistemic

climate is maintained, e. g. by creating a public space where philosophical debates such as the one on health/disease definitions are encouraged, instead of shut down as unnecessary and redundant. This illustration of the practical importance of maintaining dialogue has added the final and most compelling detail of my argumentative structure.

5. How do we define disease?

'...do diseases really exist as entities, like demons or frogs or leaves or rocks? If so, what are their characteristics and how do they differ from their opposites – healths?' ~ C. R. Burns²³¹

'Cancer is not some entity separate from yourself.' ~ A. W. Frank²³²

5. 1. The chicken or the egg? Introduction.

What is the difference between Munchausen syndrome and malingering? Are eccentric personalities synonymous with psychiatric illness? Are paedophiles ill-intentioned deviants or unfortunate, sick people? Does the state of people with drug addictions deserve critique or pity? There are no easy answers here. Separating facts from values is impossible in the social domain that is the shared lifeworld of human beings. A definition of disease would likely have facilitated our reflections on the above questions. But how do we define a term that has always been so value-laden, and therefore so difficult to pin down? The most intuitive solution would be to research its roots. But which came first? The chicken or the egg? Medicine or the notion that human beings could suffer from 'disease'?

Post-structuralists would have us believe that illness (especially mental illness) is a social construct regulated by whatever values are currently held by a society; that there is no such thing as disease in nature, because a disease is an artificially created category attributed to disvalued states; that medicine greedily reaches out to capture innocent victims whom to pathologize without good cause. Coincidentally, the Western world may indeed be experiencing the occasional wave of over-eagerness to 'medicalize' conditions and processes which are ordinary parts of life (overdiagnosing naughty, energetic children with ADHD comes to mind, and so does overdiagnosing exhausted, stressed out adults with anxiety or depression). But any claims that our intuitions about what constitutes a disease are shaped by

²³¹ Burns, C. R., 'Diseases vs. Healths: some legacies in the philosophies of Modern Medical Science' in Engelhardt, H. Tr., and Spicker, S. F. (Eds.), *Evaluation and Explanation in the Biomedical Sciences*, D. Reidel Publishing Company, Dordrecht, 1975, p. 29

²³² Frank, A. W., *At the Will of the Body: Reflections on Illness*, Houghton Mifflin Company, Boston, 1991, p. 84

societal values need to be supported by a convincing explanation about the social and institutionalized powers which drive the process of devaluation. The simplest answer here is that the label is justified via the practice of diagnosis, which in turn is underpinned by the institution of scientific medicine – an authoritative source which apparently not only construes deviant states (by means of creating arbitrary standards of ‘normality’), but also confirms the need of their rectification. But while claims that medicine pushes for the creation of new diagnostic labels may not be entirely unfounded, they are unlikely to serve as proof that the concept of ‘disease’ itself did not, in fact, precede the industry based around its existence by a long time rather than arise alongside it. It is not the case that disease is ‘coined’, ‘made up’, or ‘construed’; it is not the carefully crafted fantasy of a writer or the marketing trick of a salesperson. The concept of ‘disease’ provides the basis for medicine, rather than the other way around. Medicine developed – first as a trade, then as a science – because of the strong presence of disease, and the desire to combat that presence by any means possible.

While the ever-increasing body of professional knowledge about disease aetiology today is more advanced than anything our ancestors could have conceived of, lay intuitions as to what does or does not constitute disease have remained remarkably stable over time. The language of symptoms has evolved, explanatory models of illness experiences or body perception have changed, ideals about health and beauty have shifted, but to this day people generally tend to agree that a sore throat, a congested nose or obstructed, coughing lungs are ‘diseased’. It makes no difference whether or not the condition is milder or more serious, non-contagious or highly infective, acute or chronic: a disease is a disease, and even when we cannot put our finger on the exact quality which makes it such, it still is what it is. This chapter is meant to introduce the reader to some of the most influential attempts to understand this phenomenon, as well as the context in which I am examining them – recent philosophical discussions of health, disease and the various approaches used to define them.

5. 2. On the importance of asking the right questions.

In Chapter 1 I argued that the facts-values opposition in terms of which we are accustomed to perceiving the debate on disease definitions, is not a legitimate portrayal of this debate,

because it ignores their conceptual similarities and shared historical-cultural origins, which were exposed in Chapters 2 and 3. Chapter 2 showed medicine's susceptibility to bias, whereas Chapter 3 revealed reductionist and naturalist theories' ideological roots. Based on these demonstrations, I have reached the conclusion that perceiving or framing the health/disease definitions debate in terms of a competition between two fundamentally different camps is intellectually misleading, and not the most productive way of systematizing the established approaches to defining disease. A more useful strategy in that regard, especially considering the need to evaluate and compare different solutions, would be to group them based on what they deem to be the most central features of disease in real life experiences, rather than based on the author's subscription to a particular school of thought. Although in this case philosophical commitments are certain to influence an author's perception of what are – or what are not – central features of disease phenomena, we need to ensure that these commitments do not receive more attention than the notions they have produced. Having established that the two intellectual traditions share common grounds, we are now less likely to overemphasize the imaginary chasm between them, and more likely to resist the pressure to pledge allegiance to either. Rather than pitting different brands of philosophy against each other and making broad generalizations about them, this chapter is going to engage in an analysis of the different strategies they have produced, exploring how the specific focal points vary between definitions, and comparing them. I will attempt this by recreating the structure of Boorse's paper 'Health as a Theoretical Concept', which grouped different approaches to health/disease definitions in terms of focal points rather than philosophical commitments. However, my critique will be informed by different considerations, and my conclusions will not match Boorse's.

Firstly let us start out by giving credit where credit is due: 'Health as a theoretical concept' has turned out to be remarkably insightful in terms of identifying certain persistent intellectual biases, misconceptions and trends plaguing the debate on disease definitions. It is not a coincidence that this ground-breaking paper begins by presenting common approaches which Boorse deemed problematic based on the features they regarded as paradigmatic to disease phenomena: a) diseases as disvalued states; b) diseases as the states treated by physicians; c) disease as statistical abnormality; d) health as adaptivity and disease as maladaptivity. This

classification will be more convenient due to the following reasons: 1) it would allow us to see where and how different methods can overlap conceptually (for instance, both eliminativism and specific brands of normativism could conceive of diseases as ‘those things that are treated by physicians’, and both phenomenologists and naturalists may agree that disease is a disruption of homeostasis, even though they might construe homeostasis in different terms); 2) it would allow us to focus on exploring, comparing, defining or rejecting particular strategies rather than the broader ideological and philosophical contexts within which they are proposed (which we have already seen share more similarities than differences). The goal is to examine the most widely used means for defining disease and see where they go wrong – knowing what to avoid is a good place to start.

Throughout this chapter, a certain name will be appearing nearly as much as Boorse’s. Georges Canguilhem – a prominent figure in the area of medical humanities and author of *The Normal and the Pathological* – has anticipated, and helped shed light on, some of the toughest problems faced by philosophy of medicine when it comes to defining health and disease. His successful explanation of the difference between anomaly and pathology, coupled with his convincing theory about biological normativity, presents an insightful criticism of the works of authors like Leriche, the 19th century physiologist Claude Bernard, and multiple others. According to Canguilhem’s intuition, while far from an empty concept, health is a concept of the normative kind, in the sense that in the world there is no object which corresponds to the label ‘health’, but rather a characteristic called ‘health’ which we attribute to objects (in this case, to organisms) possessing certain qualities: we are the ones who determine which those qualities are; we create and edit the criteria list according to our own understanding and the various factors which influence it. Let us now turn to Boorse for a brief overview of what these criteria tend to look like, versus what they ought to look like.

5. 3. Boorse’s idea: an overview.

Boorse’s view on health bears little resemblance to views in the classical medical tradition where accounts of health are based on the idea of a natural state allowing human beings to

lead a good life and to preserve the human kind by reproducing. There is superficial similarity in the sense that Boorse, too, views the body's cells, tissues, organs and (sub)systems teleologically, i.e. as organized in a complex hierarchy which exhibits goal-oriented activity on every level²³³, just like in Aristotelian biology body parts and systems were believed to be subjugated to the goals of 'flourishing'. Aristotle insisted that species have their own 'nature': a functional design that empirical data show to be typical for said species. Similarly, Boorse refers in his writings to a 'nature' or functional design, which he calls a 'species design'. The notion of a uniform, standard functional 'species design' serves as a starting point in 'Health as a Theoretical Concept', where Boorse aims to provide a value-free account of disease based on the notion of biological function as a contribution to an organism's goals. He takes biological function statements to be completely value-free statements of biological facts which serve to describe species or population characteristics. Polymorphic functional traits (like eye colour, blood type and other variables) can be included disjunctively in it – for instance, we can say that human irises are blue or green or brown, and human blood can be of the type A, or B, or AB, or O in order to avoid classifying less common genetic traits such as red hair or a rare blood type as diseased states. Since functional design also happens to show variations with sex and age, Boorse embraces the use of reference classes smaller than species. A reference class would be an age group of a sex of a species, for example '12 year old human girls' or 'newborn human males'. Thus functions which are statistically typical with respect to one's corresponding reference class, and which exhibit statistically typical efficiency in contributing to the organism's individual survival and reproduction, make for a healthy organism on Boorse's account; there is a disease when there is a noticeable inability to perform certain function(s) on the typical occasions with at least typical efficiency - an inability which, according to Boorse, remains a disease even if the occasion to perform it never arises (as in the case of hemophiliacs who are still diseased even when they are reliably protected from all kinds of injury). The central role of functions in Boorse's account reflects what he deems to be the key biological feature of the structure of living organisms, i.e. their 'means-to-end hierarchy with goal-directedness on every level' – for example, by manufacturing certain compounds cells contribute higher-level goals like muscle contractions, which in turn make behaviour like nest-building or prey-catching possible, which in turn contributes to the

²³³ Boorse, C., 'Health as a Theoretical Concept', *Philosophy of Science*, December 1977, Vol. 44, No. 4, p. 556

goals of survival and reproduction, taken by Boorse to be the ultimate goals of every organism. Boorse distinguishes between accidental contributions and causal contributions (giving the famous example of the squirrel which catches its tail in a crack en route to being hit by a car – just because in this case the tail made an accidental contribution to the squirrel’s survival, it does not follow that the function of the tail is to protect the squirrel from cars²³⁴). Having summed up this incredibly detailed account, let us turn our attention to the explanatory models it was meant to replace, and the criteria they rely on.

a) Health and values.

Unsurprisingly, the first method Boorse addresses is the reliance on normative judgments, and he starts by noting how while it is undesirable to be below any valuable physical quality, we do not consider conditions like a short stature, unattractiveness or less than perfect coordination to be diseases. Next comes the revelation that certain circumstances might make diseases desirable – a point Boorse illustrates with the example of myopia, which could arguably be of advantage to someone who is trying to avoid infantry. That relying on value judgments alone would not provide sufficient ground for developing a plausible account of disease becomes even more apparent when one considers how often normativist definitions seem to avoid the question, rather than try to answer it. Peter Sedgwick, for instance, has claimed that in the natural world the harmful condition of an organism has ‘no more significance than the snapping of an autumn leaf from its twig’, and that ‘the invasion of a human organism by cholera germs carries with it no more the stamp of “illness” than does the souring of the milk by other forms of bacteria’²³⁵. In his view we can talk about a disease if a body (or a part of it) has been disvalued in some way, in other words, if there is a condition which is undesirable and we have an interest in getting rid of it. A similar line of reasoning can be encountered in Georges Canguilhem’s *The Normal and The Pathological*, where Canguilhem observes that it is not the case that concepts of health and disease (or harm and benefit) have resulted directly from the rise of medicine, but that medicine itself exists *because* we consider some states to be pathological and in need of rectification. In much the

²³⁴ Ibid, p. 557

²³⁵ Sedgwick, P., *Psycho Politics*, Pluto Press, London, 1982, p. 32

same way, values exist because we exhibit preferences for certain goods, states, traits, behaviours, and environments; values are ways of exhibiting or ascribing our preferences to external objects or their characteristics in systematic, clearly delineated ways, i.e. with a constant and easily identifiable (albeit subject to cultural interpretations) pattern. Life itself – even more so in the case of social species like humans and other higher order primates – can be seen as a normative activity, because it establishes norms: ‘life is not indifferent to the conditions in which it is possible... life is polarity and thereby even an unconscious position of value; in short, life is in fact a normative activity.’²³⁶ This firm conviction has led Canguilhem to proclaim that ‘the sick man is not abnormal because of the absence of a norm but because of his incapacity to be normative.’²³⁷ But does the normal state designate the habitual state of a specific organ, system or organism, or the ideal, or both?²³⁸ Canguilhem discusses two senses of normality: statistical (descriptive) normality – how others are functioning, and therapeutic (normative) normality²³⁹ – how a particular person should be functioning with regards to her own personal habitual condition.²⁴⁰ Paradoxically – given Canguilhem’s own solid scientific background and his extensive experience as a physician – he does not see law as playing a central role in these phenomena. Canguilhem explains the difference between law and biological normativity, stating that pathological events occur in compliance with physicochemical laws whilst simultaneously going against biological norms: ‘When the wastes of digestion are no longer excreted by the organism and congest or poison the internal environment, this is all indeed according to law (physical, chemical, etc.) but none of this follows the norm, which is the activity of the organism itself.’²⁴¹ Laws are not that which makes up existence as they do not have any tangible presence, unlike the creatures, events and environments which exhibit them in various flexible ways: ‘what the fox eats is the hen’s egg and not the chemistry of albuminoids or the laws of embryology.’²⁴² Laws are theoretical

²³⁶ Canguilhem, *Op. cit.*, p. 126

²³⁷ *Ibid*, p. 186

²³⁸ *Ibid*, p. 126

²³⁹ *Ibid*, p. 123-124

²⁴⁰ For instance, let us say that both my healthy, fit sister and I – a person in frail health, have the flu, and we both go to the same doctor. The goal of the treatment provided for me should be to restore my health to what it normally is, rather than attempt to push even further and make me as fit and healthy as my sister, i.e. healthier and fitter than I normally am.

²⁴¹ Canguilhem, *Op. cit.*, p. 129

²⁴² *Ibid*, p. 197-198

abstractions, and if used to define health or disease, the resulting definition would be just another law, just another theoretical abstraction: 'it is life itself and not medical judgment which makes the biological normal a concept of value and not a concept of statistical reality. For the physician, life is not an object but rather a polarized activity, whose spontaneous effort of defense and struggle against all that is of negative value is extended by medicine by bringing to bear the relative but indispensable light of human science.'²⁴³

Therefore it is not surprising that in concepts like health and disease, there is always necessarily a fusion of fact and value, which creates an unsurmountable obstacle in the way of naturalist approaches. As pointed out by Elselijn Kingma, Boorse definitely does not succeed in providing a value-free account of disease.²⁴⁴ In his BST (Biostatistical Theory) health is defined as statistically typical contribution of all organism's parts and processes to the organisms overall goals of survival and reproduction. To reiterate, typical here means typical with respect to a reference class – an age group of a sex of a species, for instance 28 year old male humans. Reference classes have a central role in BST because of the wide variety of functioning across our species – what has been established as 'normal' for one group may not be viewed as 'normal' for another group. For example, low hemoglobin counts may be 'normal' in adult women who tend to lose blood during menstruation, but may indicate anemia, leukemia or other problems in newborns whose bodies usually produce high levels of adult hemoglobin in order to replace the production of fetal hemoglobin which is switched off after birth. However, it is Boorse's requirement that reference classes must be 'appropriate' – in other words, a reference class must be a 'natural class of organisms of uniform functional design'.²⁴⁵ This means that reference classes will be based on normative claims about what is 'natural' or 'uniform', since it is not clear exactly what these terms mean, or at least what Boorse takes them to mean. Thus it appears that the process through which reference classes are selected and formed relies on normative judgments, on values. Since the role played by reference classes in BST is a very important and central one, one might argue that Boorse's whole theory is implicitly normative: BST cannot be value-free when its basis (the reference

²⁴³ Ibid, p. 131

²⁴⁴ Kingma, E., 'What is it to be healthy?', *Analysis*, 2007, Vol. 67, No. 294, pp. 128-133

²⁴⁵ Boorse, 'Health as a Theoretical Concept', p. 555

classes) depends on values. The formation of reference classes is what determines the distinction between health and disease. But the distinction between health and disease must (at least according to Boorse) be determined solely by empirical facts. It should be empirical facts, and not values, which determine that '28 year old male humans' is an appropriate reference class and the class 'people with schizophrenia' is not an appropriate class. In other words, Kingma has shown that Boorse does not offer a value-free and purely empirical account of health, because his procedure for the selection of reference classes is not based on objective criteria. Still, while the influence of values cannot be escaped, there can be little doubt that normative judgments alone are not sufficient criteria for defining disease.

Some have attempted to solve this difficulty and boost the explanatory and descriptive power of value judgements by merging them with factual statements. The resulting so-called 'hybrid' theories present an interesting option to try and combine the advantages of normativist and naturalist accounts of disease while at the same time eliminating their weaknesses. Chris Megone, for instance, believes that there is no separation, that fact and value are fused in the natural world.²⁴⁶ According to his Aristotelian notion of natural kinds, the supposedly evaluative judgment as to what constitutes a healthy human being is the same as the supposedly factual judgment as to what constitutes a human being.²⁴⁷ Megone's explanation of this is that the cycle of changes that constitutes the function of the human being also determines what a human being is, since the potentialities that are realized when a member of a natural kind fulfils its (the member's) function also constitute the essential potentialities of all members of that natural kind. That is why he believes that elaborating a satisfying account of (mental) disease would require both functional analysis and evaluative elements.²⁴⁸ However, further in this chapter I shall demonstrate that functional analysis relies

²⁴⁶ Megone, C., 'Mental Illness, Metaphysics, Facts and Values', *Philosophical Papers*, 2007, Vol. 36, No. 3, pp. 399-426

²⁴⁷ Megone, C., 'Aristotle's Function Argument and the Concept of Mental Illness', *Philosophy, Psychiatry, and Psychology*, September 1998, Vol. 5, No. 3, pp. 187-201

²⁴⁸ Megone, C., 'Mental Illness, Human Function, and Values', *Philosophy, Psychiatry and Psychology*, March 2000, Vol. 7, No. 1, pp. 45-65

on accounts of function which are in themselves problematic. I will also show that, while values and facts may indeed be fused in the natural world, they are still not the same entities.

b) Are diseases the things that physicians treat?

It goes without saying that some diseases – like HIV, for example, are treatable but have no known available cure in today’s medicine. It is also common knowledge that physicians also treat a lot of conditions which clearly are not diseases: they cure broken limbs, prescribe contraceptive pills, perform abortions, cosmetic surgery and circumcision, or assist in childbirth and procedures involving technologies for assisted reproduction. While these procedures can arguably enhance one’s well-being and quality of life, most people would consider it counterintuitive to interpret them as cures, or the respective conditions they address – as diseases. This type of miscategorization may result from overinclusive definitions which describe disease as a biological failure – for instance Megone’s definition of disease as ‘incapacitating failure’.²⁴⁹ Framed in Aristotelian – that is, teleological – terms, Megone’s definition equates health to being a good specimen of a certain kind, i.e. possessing qualities that enable one to lead a good life and to reproduce, all in the ways typical for the kind.²⁵⁰ On these terms, disease acts as an incapacitating condition which prevents the specimen from achieving the above-described goals. This has led Rachel Cooper to express a concern that Aristotelian approaches cannot define disease properly since they end up lumping together different kinds of harm instead.²⁵¹ Cooper rightfully points out that biological ‘bads’ like short stature, or even moral vices and social ‘bads’ like a lack of education, are all examples of incapacitating ‘bads’ which are not diseases.²⁵² This argument has also provided the basis for her criticism of Megone, whose account of disease she sees as overinclusive and poorly equipped to distinguish between true diseases and moral vices (like laziness, for example).²⁵³ According to Cooper, this level of conceptual discrimination could be achieved if more conditions are added to the criteria list, such as that the state to be labeled disease be a ‘bad

²⁴⁹ Megone, C., ‘Mental Illness, Human Function, and Values’, p. 63

²⁵⁰ *Ibid*, p. 49

²⁵¹ Cooper, R., ‘Aristotelian Accounts of Disease: What are they good for?’, *Philosophical Papers*, Vol. 36, No. 3, pp. 427-442

²⁵² *Ibid*, p. 431-432

²⁵³ Cooper, R., *Psychiatry and Philosophy of Science*, Routledge, New York, 2007, p. 37-38

thing to have', that the afflicted persons be considered 'unlucky', and that the state could be treated. However, while Cooper's otherwise adequate and successful normative account of disease does exactly what it promises, it may turn out to be problematic on several levels. The first criterion risks slipping into the territory of politically incorrect language, not only by reinforcing negative stereotypes about diseased and disabled people's lives as somehow less worthwhile or valuable, but also by depriving their respective communities of the possibility to define their afflictions in their own terms. The second criterion, in addition to contributing to this negative image, commits the fault of sounding vague and unspecific – precisely what a definition ought not to be – and only serves to further illustrate Boorse's point about values as unreliable tools for determining which states are disease. However, the issue with the third criterion, which is meant to serve as an aid in distinguishing between diseases and socioeconomic 'bads', goes beyond politically problematic wording or fuzzy terminology; it risks slipping into a categorical mistake. The term 'treatment', often taken to be synonymous with 'curing', has a separate meaning covering a variety of clinical behaviours, including 'managing', 'caring' for, and 'tending' to. The different use of these terms is philosophically grounded on the practical distinction between controlling a chronic condition (as in diabetes 'management'), reducing the frequency and intensity of its outbreaks (as in cystic acne 'treatment'), tending to unpleasant symptoms (as in 'caring' for wounds, or taking 'care' of an ill person), and a complete eradication of disease (also known as 'curing' – applicable to the context of a mild case of influenza, but not to the context of an HPV or herpes infection). While Cooper clearly distinguishes between cure and other kinds of medical attention (hence her opting for the more general term 'treatable', which is applicable to a wider range of conditions, including all 'curable' ones), her account does not seem to filter out treatable conditions which are not diseases, meaning that she may end up repeating that same mistake which she identifies in Megone's work – 'lumping together' different kinds of 'harmful' states (in this case, states like undesired pregnancy²⁵⁴ or drug addiction). As Boorse noted more than

²⁵⁴ Cooper, of course, has discussed the case of unwanted pregnancy at some length in her 2002 paper 'Disease' (see p. 278-279), where it is mentioned as a potential problem for her account of disease. While Cooper herself appears to regard undesired pregnancy as a type of disorder, she has stated that the reasons most people's intuitions would not cohere with her account on this matter are: a) a tendency for our intuitions to 'lag behind changes in the disorder-status of a condition'; b) the notion that women 'are supposed to become pregnant'. Although I agree with position a) in principle, I do not think that it applies to this particular case, or even to the medical discourse on fertility in general. If we were to turn the example around and discuss the inability to become pregnant instead, we would see that the lay populace's intuitions are, in fact, rather

four decades ago, clinical practice addresses (or tends to, or indeed 'treats') multiple bodily concerns, not all of which can be considered to be proper diseases, and this critical remark about the applicability of the 'treatability' criterion continues to be just as relevant today. Nevertheless, Cooper's account represents an inspirational change from the dismissive and superficial approach to the social dimensions of disease, which has long dominated medical thinking and the philosophy of medicine.

Even in the past, some of the most profound analyses on the matter rely on the implicit intuition that disease is something more than an accidental temporary inconvenience, and attempt to further this intuition by accentuating the physiological and conceptual links between disease and mortality. An interesting example can be found in *The Normal and the Pathological*, where Canguilhem quotes the legendary French physiologist Jean Pierre Flourens, noting how 'most men die from disease; very few die, strictly speaking, of old age'²⁵⁵, and then draws on that observation in order to expand French sociologist Maurice Halbwachs's idea that every society has 'the mortality that suits it'.²⁵⁶ Halbwachs, who firmly supported the view that workplace conditions and hygiene affected mortality rates, in so doing laid the foundations of 20th century European sociology of medicine and sparked research interest in the combined effects of geography, historical influences, and lifestyle on health and mortality rates. Once the social sciences turned their attention to the mortality rates and disease profiles of different populations, variations in functional rhythms for people of different ethnic and cultural backgrounds, races, and lifestyles began to emerge as a fruitful ground for aetiological and epidemiological analyses.²⁵⁷ Porak, for instance, saw diseases as

quick to acknowledge a condition's newly acquired 'disorder-status'. Infertility, in all of its shapes and forms, has been medicalized for as long as assisted reproduction and fertility therapy have been around, and not just due to sexist views about women's supposed duty to become mothers (male subfertility is also pathologized and medicalized), or due to misguided thoughts about our biological design (most people are at least vaguely aware of the high maternal and newborn mortality rates before the arrival of modern medicine, which testified that, indeed, not all of us are fit to carry a pregnancy to term and deliver a healthy infant). Therefore I disagree with Cooper about both the status she assigns to unwanted pregnancy and the reasons she suggests will lead most people to reject said status.

²⁵⁵ Canguilhem, *The Normal and the Pathological*, p. 160

²⁵⁶ Halbwachs, M., *Les causes du suicide*, Puf, Paris, 2002, p. 4, p. 63-67, p. 287-288

²⁵⁷ Trostle, J., 'Anthropology and Epidemiology in the Twentieth Century: A Selective History of Collaborative Projects and Theoretical Affinities, 1920 to 1970', in *Anthropology and Epidemiology: Interdisciplinary Approaches to the Study of Health and Disease* (Ed. C. R. Janes), D. Reidel Publishing Company, Dordrecht, 1986, p. 59

disturbances of rhythms that resulted from ‘fatigue or overwork, that is, from any exercise exceeding the proper adjustments of the individual’s needs to the environment,’ while Vallois observed that there have been typical diseases for every historical period depending on the prevalent lifestyles associated with it.²⁵⁸ That is how the newly increased focus on mortality in the late nineteenth and early twentieth centuries prompted a thorough investigation of the social forces at play behind heightened cancer, diabetes and heart disease rates in the industrialized world, which in turn resulted in a decisive rejection of single-cause explanatory models of disease. It was revealed that potentially any serious disturbance – however far removed from physicians’ primary field of observation or scope of corrective influence – could cause disease, and thus acquire medical significance. Therefore it is not entirely unreasonable that the concept of multifactorial aetiology should produce a broader picture of medicine as an aggregate area of expertise which deals with a variety of human concerns; however, the logical step from accepting disease heterogeneity (and the supposed aggregateness of medicine) to construing the category of disease itself as an aggregate of ‘all conditions which are treated by physicians’, is an intellectual fallacy, a non sequitur. Nevertheless, scrutiny on the harmful working and living conditions associated with increased mortality led to unprecedented awareness of the human dimensions of disease – feelings of illness, incapacitation, debility, and most of all, suffering. Unsurprisingly, those also needed to be quantified in order to be rendered more comprehensible, so along with anthropology and social epidemiology, another couple of disciplines that flourished in the 20th century was that of medical metrology and statistics. Coincidentally, it is statistical normality that we shall address next.

c) Are health and statistical normality the same thing?

The third criterion opposed by Boorse is statistical normality. When taken as the ultimate indicator of health, it would lead to people with unusual characteristics (such as red hair or a rare blood type) being considered as diseased even when they clearly are not, while failing to register people with common conditions (like myopia) or nearly universal diseases (like dental

²⁵⁸ Canguilhem, *Op. cit.*, p. 168 and 173, respectively.

caries).²⁵⁹ Another problem with the criterion of statistical ‘normality’ has been articulated decades ago by Georges Canguilhem, who reflected on the descriptive concept of anomaly and the appropriate ranges within which individuals demonstrating deviations from the average would still be considered normal. Biological or medical standards do allow some oscillations or variety, he notes, and it is difficult to say when the line between normal and abnormal has been crossed, as statistical methods alone do not provide the necessary means to distinguish firmly between the two, so instead we find ourselves relying on conventions and guidelines when making those judgments.²⁶⁰ Clearly not all anomalies are pathological; rather, most of them can be explained as acceptable statistical variations in structure, i.e. as comparatively unusual and peculiar ‘in terms of one’s organization’.²⁶¹ Therefore the pathological is always abnormal, but since diversity or simply being different are not pathologies per se, there has to be an additional assessment factor: an intuitive understanding or an evaluative judgment of something going ‘wrong’,²⁶² meaning that even statistics-based explanatory models of health and disease still have to operate in conjunction with non-epistemic criteria like values and ideals. But the latter two do not exist independently, they are derived from, and collectively shaped and maintained by, human communities in order to serve normative purposes. In fact, Canguilhem explicitly points out that he regards the ‘normal’ human as a normative human, or a human who is capable of establishing norms,²⁶³ and life itself – as a kind of ‘polarity’ which determines the organism’s preference for some conditions and avoidance of others. Behavioural norms for all living beings, he argues, are defined by the organism’s natural constitution: ‘even for an amoeba, living means preference and exclusion. A digestive tract, sexual organs, constitute an organism’s behavioral norms’²⁶⁴. Indeed, even the very existence of medicine itself can be explained through this dynamic ‘polarity’: ‘...no living being would have ever developed medical technique if the life within him – as within every living thing – were indifferent to the conditions it met with, if life were

²⁵⁹ Boorse, C., ‘Health as a Theoretical Concept’, *Philosophy of Science*, December 1977, Vol. 44, No. 4, p. 566

²⁶⁰ Canguilhem, *Op. cit.*, p. 154 reads: ‘In order to represent a species we have chosen norms which are in fact constants determined by averages. The normal living being is the one who conforms to these norms. But must we consider every divergence abnormal? ... Guiding hypotheses and practical conventions are needed, allowing one to decide what value... constitutes the transition from normal to abnormal.’

²⁶¹ *Ibid*, p. 133

²⁶² *Ibid*, p. 137

²⁶³ A sentence on p. 139 reads that “normal man is the normative man, the being capable of establishing new, even organic norms.”

²⁶⁴ *Ibid*, p. 136

not a form of reactivity polarized to the variations of the environment in which it develops.²⁶⁵ The norm, then, appears to be ‘the persistence of life’²⁶⁶, or living organisms’ self-preserving behaviours, self-healing properties and struggle against infections. While pain may be ‘not in nature’s plan’, as Leriche assures us²⁶⁷, disease most certainly appears to be part of the grand scheme of things; the presence of immune systems and their associated formation of antibodies in reaction to pathogenic microorganisms give eloquent testimony to this interpretation of our physiology, meaning that ‘in a sense one could say that continual perfect health is abnormal.’²⁶⁸ The pathological can be considered normal in instances where normality is defined in terms of statistics and statistical frequency. According to Canguilhem, the reason behind this is that ‘health’ has two meanings, depending on whether health is taken absolutely or as ‘qualified’,²⁶⁹ i. e. as a normative concept defining an ideal type, or as a descriptive concept outlining a specific organism’s dispositions and behaviour. But disease is something which could appear at either one or both of these levels, i.e. a person can be considered diseased both in relation to others and in relation to her usual, ‘normal’ self, as noted by Canguilhem. For obvious reasons, large-scale statistics (or even small-scale statistics) are not appropriate tools if one’s goal is to account for diseases which are characterized not by divergences from the overall average, but by deviations from an individual average.²⁷⁰

However, the statistical component has dominated the philosophical discourse on health and disease for a very long time, which is especially obvious in some of the debate’s seminal works created in the 1970’s, such as the ones written by Kendell (who ties the category of disease to evidence of increased mortality and reduced fertility)²⁷¹ or Taylor (who discusses ‘patient classes’).²⁷² It was also widely believed to have been successfully employed in Boorse’s writings via the sophisticated Biostatistical Theory (BST) he had developed in support of his

²⁶⁵ Ibid, p. 130

²⁶⁶ Ibid, p. 138

²⁶⁷ Leriche, R., *Chirurgie de la douleur*, Masson, Paris, 1940, p. 483

²⁶⁸ Canguilhem, Op. cit., p. 137

²⁶⁹ Ibid

²⁷⁰ Ibid, p. 153

²⁷¹ Kendell, R., ‘The concept of disease and its implications for psychiatry’, *British Journal of Psychiatry*, 1975, Vol. 127, pp. 305-315

²⁷² Taylor, F. K., ‘The medical model of the disease concept’, *British Journal of Psychiatry*, 1976, Vol. 128, pp. 588-594

account. It was not until Cooper and Kingma exposed the inherently flawed logic behind reference classes that many other readers became aware that any information yielded by the BST would be neither sufficiently informative nor particularly objective. As pointed out by Cooper, statistical normality also depends on additional factors like environment, geographical location, lifestyle and culture just as much as it does on age, sex and species – the three crucial characteristics that Boorse’s far too broadly construed reference classes rely on.²⁷³ At the same time, if reference classes are allowed to become too narrow, they become uninformative with regards to any general principles or tendencies that one might try to draw from them. In addition, with especially narrow reference classes the distinction between accidental and non-accidental contribution to functions would become eroded: for instance, let us suppose a recent study has confirmed that 25 year old white female vegetarian non-smokers who live in a US megapolis are less prone to HPV-related uterine cancers than their meat-consuming, smoker peers from East European towns with smaller populations. If that were the case, could this tendency be attributed to subtle physiological differences between the two classes of women, or to the differences in their diets, smoking habits or environments? Or would it be yet more plausible to hypothesize that cultural factors like higher levels of exposure (or sensitivity) to public health campaigns facilitate preventive behaviours and thus lead to marginally lower disease rates among the citizens of the US megapolis? These questions are not impossible to answer, but would require further investigation, which would take us far beyond the relatively straightforward act of compiling statistical results. As pointed out by Leonelli, data and models serve different epistemic functions, and exhibit different levels of abstraction when representing a given target system.²⁷⁴ This view supports my position that, without interpretation, statistically derived data becomes a purely descriptive formal representation of the functioning across a group of superficially similar organisms. Only when coupled with background knowledge or theoretical reflections on the acquired results can it lead to legitimate conclusions. However, the larger the amount and the scope of additional background knowledge required for completing this process, the more subject to error it is; moreover, an increased reliance on multiple sources of background knowledge opens the door to evaluative judgments by introducing an extra

²⁷³ Cooper, R., ‘Disease’, p. 266

²⁷⁴ Leonelli, S., *Data-Centric Biology: A Philosophical Study*, The University of Chicago Press, Chicago, 2016

step in the procedure – the selection of sources based on their relevance and reliability. That, in itself, can guarantee different conclusions each time the procedure is attempted by a different agent, even in the presence of an identical sample.

d) Disease as pain or disability.

The fourth and the fifth criterion attacked by Boorse are, respectively, pain, suffering or discomfort, and disability, reflecting the rather common tendency (intellectual fetish, even) to falsely assume causal links between diseases and discomfort and/or debilitating conditions. Diseases like HIV and syphilis can remain asymptomatic; the people affected by them may not experience any discomfort, pain or suffering for many years post infection. On the other hand, healthy women may feel intense pain during childbirth, or even during menstruation, but neither of those is a pathological state per se. Similarly, diseases like eczema and dental caries are not (and do not lead to) disabilities, while a lot of ‘normal’ natural occurrences or phases in the lives of organisms are: the infant’s inability to walk and consume solid foods, the diminished mobility observed in advanced age, the absence of ovulation during the initial months of breastfeeding, the instances of female incontinence during the first weeks following vaginal delivery, the experience of mittelschmerz (also known as painful ovulation), et cetera.

While disease can and often does overlap with pain and debilitating states, it does not completely coincide with them. It is wise to avoid conflating those three distinct categories, as long as that does not lead to a complete disregard for the human dimension of disease – the experience of living with disease. Hybrid accounts of disease are an attempt to overcome this conceptual difficulty by merging together elements of naturalism and normativism in order to combine the two approaches’ strengths whilst simultaneously eliminating their weaknesses. Robert Spitzer²⁷⁵ and Jerome Wakefield²⁷⁶ have tried to achieve this effect by

²⁷⁵ Spitzer, R. L., ‘Harmful dysfunction and the DSM definition of mental disorder’, *Journal of Abnormal Psychology*, August 1999, Vol. 108, No. 3, pp. 430-432

²⁷⁶ Wakefield, J. C., ‘The concept of mental disorder: On the boundary between biological facts and social values’, *American Psychologist*, 1992, Vol. 47, No. 3, pp. 373-388, also see Wakefield, J. C., ‘The concept of mental

describing 'mental disorder' as a 'harmful dysfunction'. 'Dysfunction' is a term meant to describe measurable properties of objects found in the material world, natural systems available to the observing eye, while the term 'harm' means nothing outside the framework of human moral vision, it is similar to a label that we attach to things to mark them with our disapproval, fear or disgust. The naturalist element of the account – 'dysfunction' – is admittedly there to introduce a sense of objectivity that would not be present if we were to be guided exclusively by the concept of 'harm'. On the other hand, as many dysfunctions are minor or compatible with the demands of ordinary everyday life, the naturalist element alone would be an insufficient foundation on which to base any judgements regarding the pathologization or medicalization of a particular condition.

Wakefield has stressed that judgements about 'harm' differ across societies. He appears to embrace, rather than question or problematize, this reliance on sociocultural frames of reference, while paying little attention to individual norms, subjective experiences and their role in establishing the presence of 'harm' for the affected persons. However, a truly debilitating condition will not become any less 'harmful' to the individual simply because a certain community or culture lacks the conceptual resources to imagine it as such and perceive its potential to cause 'harm' in another context, or because the occasion to experience this 'harm' never arises for the affected individual. The opposite is also true: a person who does not present with complaints that can be traced back to identifiable structural and functional changes is not automatically considered 'diseased' just because she does not function exactly like everyone else around her. While based on a correct intuition about the arbitrariness of concepts like 'harm', Wakefield's assumptions tend to overestimate just how widely the criteria for harmfulness can vary between different cultures. A severe case of dyspraxia, for example, would be considered problematic in virtually all cultures, regardless of their value systems, whilst an equally serious case of dyslexia may never even be detected in an illiterate community that does not rely on written language.

disorder: diagnostic implications of the harmful dysfunction analysis', *World Psychiatry*, October 2007, Vol. 6, No. 3, pp. 149-156

However, that is not the main issue with Wakefield's account – the bigger problem is that the account says too little about how we *ought* to think about disease. It more or less accurately sums up the social and psychological mechanisms operating behind the attribution of the label 'disease', but does not ask if there is a more productive and socially progressive way of construing it. To put this in the terms developed by Haslanger, such an account constitutes a 'descriptive project' when it should strive to be an 'ameliorative' one²⁷⁷ and seek to question or improve the status quo.

It also invites a list of questions with no easy answers: how harmful is too harmful, and what levels of 'harmfulness' would be considered as a criterion that medical attention is required? How are we expected to measure objectively the presence of a normative element that the author allegedly agrees is predominantly contextual and therefore arbitrary? Would that task also be assigned to physicians, or would it be the patient's responsibility to evaluate the 'harmfulness' of her own condition? If 'harmfulness' is construed as causing distress and suffering, then it would be inapplicable to a wide range of asymptomatic diseases and disorders which attack their hosts 'silently', without affecting their lives in an especially dramatic or pervasive manner – as is the case with the majority of sexually transmitted infections. Another example is toxoplasmosis, which is particularly interesting because of the contrast between its negligible risks to the host versus the high risks to the host's pregnancy. The latter type of risks raise an important question about the subject experiencing harm – in this case the unborn foetus, who is likely to suffer from hydrocephalus or other types of brain damage as a result of the infection. If a condition is harmless to the host, but harmful to others around her, is it considered a disease? Human males almost never develop complications following HPV infections with the strains 16 and 18, but can transfer those to female partners who, unless vaccinated or regularly screened, could then go on to face the dangers of cervical cancer. However, since the host has not experienced a dysfunction himself – much less a harmful one – his state as a passive carrier would not be considered as a disease on Wakefield's account. Relaxing the definition, for instance by specifying that the dysfunction may be 'potentially harmful', 'harmful to others', or only 'occasionally harmful', could resolve

²⁷⁷ I have already defended my position regarding the social-political implications of disease definitions, diagnostic labels and medical identities in Chapter 4, where I refer to Haslanger's work in footnote 186.

the tension on a superficial conceptual level, but not without adding more confusion on a practical level. The question how to distinguish between ‘harmful’ and ‘harmless’ states would remain, sparking further enquiries and replacing the original focal point of the health/disease definitions philosophical debate. Thus the ‘harmfulness’ of a dysfunction – be it a somatic or a ‘mental’ dysfunction – ought not to rank high among the reliable criteria for whether or not a certain condition is a disease (or a disorder). That being said, the notion that certain disease states can be harmful to oneself or others is still sufficiently philosophically and existentially significant to feature in discussions of health care and patient experiences. As shown in Chapter 4, shutting down such topics can impoverish medical thinking, and silence an already vulnerable group. The goal, then, should be to strike an intellectual balance between staying true to the original task (answering the question ‘What is disease?’) and allowing our judgment to be enlightened by these additional perspectives. This makes phenomenology a useful ally, as it can bring us important philosophical insights into ‘harmful’ disease experiences without committing us to structure disease definitions around the vague concept of ‘harm’.

Phenomenology of medicine is an intellectual movement characterized by its focus on embodied experiences of health, suffering and illness, and their meaning for clinical practice and philosophy of medicine. Authors such as Fredrik Svenaeus²⁷⁸, Anna Luise Kirkengen²⁷⁹, Eric Cassell, S. Kay Toombs²⁸⁰, and Havi Carel have expressed opinions that the ways in which people respond to their own disease, their experiences of living with disease and the often negative ways in which it affects their well-being, have not received enough philosophical attention. Carel proposes a phenomenological approach which draws on a sharp distinction between illness (as subjective experience) and disease (as an objectively identifiable state). On this approach illness is not just the impairment of an organ or body function but something which affects the entire person, as well as her relationship to the physical and the social world

²⁷⁸Svenaeus, F., ‘The phenomenology of suffering in medicine and bioethics’, *Theoretical Medicine and Bioethics*, December 2014, Vol. 35, pp. 407-420; for a more recent example see Svenaeus, F., ‘Anorexia Nervosa and the Body Uncanny: A Phenomenological Approach’, *Philosophy, Psychiatry, and Psychology*, March 2013, Vol. 20, No. 1, pp. 81-91

²⁷⁹ Eriksen, T. E., Kirkengen, A. L. et al, ‘The medically unexplained revisited’, *Medicine, Health Care and Philosophy*, August 2013, Vol. 16, No. 3, pp. 587-600

²⁸⁰ Toombs, S. K., ‘The Meaning of Illness: A Phenomenological Approach to the Patient-Physician Relationship’, *The Journal of Medicine and Philosophy*, 1987, Vol. 12, pp. 219-240

that she inhabits. In contrast, the naturalistic approach is characterized by a fixation on measuring diseases and the people affected by them in objective parameters and seeing how far they deviate from the norm, which Carel sees as an incomplete, one-dimensional view. By focusing on 'disease' (a dysfunction of a body part or system) and leaving out 'illness' (the social, existential, and emotional effect disease has on the diseased person and their life, in other words – the experience of living with disease), naturalists implicitly posit disease as the primary concept and illness as a secondary concept derived from it. This perspective is at odds with the practical realities of the clinical context, where medical professionals are met with patients and their complaints (rather than just their patients' detached organs or some abstract 'biological processes'), and deal with illness's very real and profound impact on human life, attempting to mitigate 'harm' wherever possible.

While Carel does not reject the naturalist view and even admits that it 'sits well with the training many practitioners have received and with their workplace culture'²⁸¹, she expresses an opinion that clinical practice could benefit from an improved version of it, augmented by a solid phenomenological approach which leaves space for health care specialists to take into account their patients' descriptions of their own experiences of suffering or adaptation to illness, since these could be just as informative and useful as screening procedures. Strongly influenced by Merleau-Ponty's writings, Carel's view distinguishes between the (objective) 'biological body' and the (subjective) 'lived body'. The biological body is the material body, the body as an object, the body 'as it is'. The lived body is the 'first-person experience of the biological body', the body as lived by the person. Carel notes that in the normal everyday life of the healthy person the two bodies are aligned and in harmony, in other words – the objective state of the biological body and the subjective experience of it are overlapping. The healthy body is usually taken for granted and remains inconspicuous until changes related to illness or disability begin to take place. That is when we start to experience the body's processes consciously by focusing our attention to the malfunctioning body part that causes us problems. In illness we experience the difference, the disrupted harmony between the biological and the lived body, which the first chapter of Carel's book *Illness* illustrates with the

²⁸¹ Carel, H., 'Phenomenology and its application in medicine', *Theoretical Medicine and Bioethics*, 2011, Vol. 32, p. 42

example of anorexia nervosa.²⁸² Looking at the biological body (the body as it is) of someone affected by this condition, we will notice signs of severe and prolonged malnourishment, with the scale showing a very low weight and the body mass index of the person indicating that she is underweight. However, the person will still insist that she is obese, and by her own descriptions it will be obvious that her lived body (her subjective body) is a heavy one. Carel claims that her account would help us distinguish between someone who has a real disease like anorexia nervosa and someone who is otherwise healthy but is very underweight simply because of unfortunate circumstances, such as being unable to afford food. The second person's experience might not be characterized by a rift between her biological body and her lived body like the anorexic person, but a naturalist account would still view her condition as a disease because of its departure from the norm. However, there is a clear (and vast) difference between the person who avoids food due to a distorted body image, and the person who is too poor to afford sustenance. The second person would go back to her normal weight if her socioeconomic circumstances were to change, allowing her to have regular meals. The anorexic, however, would likely continue to be ill even if hospitalized and made to gain weight against her will, as her body dysmorphic disorder would ensure that a gap remains between her biological and her lived body.

This strong focus on subjective experiences is simultaneously the strongest and the weakest component of the phenomenological account. Its supposed effectiveness in capturing genuine cases of illness would depend entirely on the reliability of the testifying patient's assessment and interpretation of her own symptoms, which creates an unexpected difficulty with regards to persons with hypochondriasis,²⁸³ who may be incorrectly diagnosed with one or more of the conditions they claim to suffer with. As hypochondriacs often exhibit detailed knowledge of the conditions' associated symptoms and their overactive imagination translates into a genuine belief that they are experiencing all of them, there is a chance that a rift between biological and lived body may be present even in the absence of an underlying disease experience. This could lead to problems with overdiagnosis, biased testing and needless medicalization, as the patient's compelling testimony may be taken as a sufficient source of

²⁸² Carel, H., *Illness*, p. 29

²⁸³ Illness anxiety disorder.

conviction for a practitioner who is forced to operate under strict time and resource constraints. This is just one example of how the phenomenological account and its implicit assumptions that patient reports will always be accurate or reliable would become acutely philosophically problematic upon application to certain practical contexts. As noted by Eric Cassell, the patient's knowledge 'endows bodily occurrences with meaning'²⁸⁴ which is subject to interpretation: the patient can choose to attribute her condition to illness, but also to factors like overwork and fatigue, for example.²⁸⁵ Thus one might argue that certain patients who are in denial about their state (like the person with anorexia nervosa from Carel's example) could continue to reject a diagnosis, while anxious but otherwise healthy patients can continue maintaining their irrational beliefs that they are seriously ill, sometimes even managing to convince their own physicians. In both cases the practitioner will have few options other than to accept their stance and proceed accordingly, if the phenomenological account of illness were to be applied as a judgment tool for establishing the presence (or absence) of pathological states.²⁸⁶ But since medicine also habitually deals with numerous conditions which are not considered to be diseases, including cases of what Carel refers to as 'illness without disease', practitioners often have an intuitive grasp of nearly all notions implied by Carel's phenomenological account, as well as a profound understanding of the difference between diseased and non-diseased states; according to many philosophers of medicine, including Cooper, it is arguably policy makers who need an account of disease in order to be better equipped to distribute justice and resources where afflicted persons are concerned.²⁸⁷ Therefore another problem with the phenomenological account would be the impossibility to step beyond the idiosyncratic beliefs of the sufferer and to come up with firm, objectively established criteria as to what constitutes illness. Just as the case with disease, this

²⁸⁴ Cassell, E., *The Nature of Suffering*, p. 95

²⁸⁵ *Ibid*, p. 93

²⁸⁶ The view that 'many of the prototypical phenomenological insights regarding the lived experience of illness bring with them new problems that undermine their apparent utility' has been defended in a recent paper by Sholl, where he argues that, while phenomenology may be a useful method for describing lived experiences, it lacks the theoretical resources to explain them. According to Sholl, the focus on personal experiences 'results in a suite of medical issues that cannot be addressed, or only problematically so' (see pages 392, 405, and 408 in Sholl, J., 'Putting phenomenology in its place: some limits of a phenomenology of medicine', *Theoretical Medicine and Bioethics*, 2015, Vol. 36, pp. 391-410). The examples provided by Sholl include anosognosia (which is also known as being unaware of one's own medical condition, and which I, too, have addressed on this page), sleep apnea (the suspension of breathing during sleep), and conditions which appear either in the early stages of fetal development or prior to the possibility of memory formation and conscious experience.

²⁸⁷ Cooper, R., 'Disease', p. 266

debate can be expected to go on indefinitely, and the phenomenological account of illness, however insightful, raises even more questions than it answers. Some of them, however, are valid and urgent with respect to the intellectual task of defining disease. The phenomenological approach can help enrich philosophy of medicine with an important perspective on the role of signs and symptoms in disease, if the two concerns about the naturalist approach outlined below are addressed.

1) It does not give the complete 'picture': an account which focuses on the process which takes place in the body of a diseased person, but does not include the effects suffered by the person, does not represent this process fully. This is why an account of disease must include illness (the effects of the disease on the diseased) as well.²⁸⁸

2) It is not an accurate representation: it is certainly a misrepresentation of a disease to give an account of it that does not include something so crucial as the ways in which disease may a) change a person's relationship with her own body (by means of affecting the relation between the biological and the lived body); b) influence the person's relationship with her environment ; and c) trigger a reaction of adaptation to the limits imposed by illness on the body, during which complex compensatory processes begin to take place in the organism (a phenomenon to which I have referred as 'biological normativity' following Canguilhem's example).

To sum up, disease is not simply a dysfunction in an organ or body system. It can, and often does, manifest as a situation with enormous and complex social, economic and emotional consequences for the affected and the people around them. Even more importantly,

²⁸⁸ An early paper by Boorse acknowledges this incompleteness, but defends it with the following statement: 'It is disease, the theoretical concept, that applies indifferently to organisms of all species. That is because, as we shall see, it is to be analyzed in biological rather than ethical terms. The point is that illnesses are merely a subclass of diseases, namely, those diseases that have certain normative features reflected in the institutions of medical practice. An illness must be, first, a reasonably serious disease with incapacitating effects that make it undesirable[...].' See Boorse, C., 'On the distinction between disease and illness', *Philosophy and Public Affairs*, Autumn 1975, Vol. 5, p. 56, where Boorse discusses illness as a sub-category of disease. This is an unconvincingly argued distinction, as one and the same disease can be experienced as 'reasonably serious' and 'incapacitating' by different people (as I have already shown in previous chapters and will demonstrate again in Chapter 6).

disregarding these existential aspects leaves the naturalist view narrow, incomplete and one-sided, as its focus on objective parameters and departure from the 'norm' implicitly portrays the body as a passive ground or environment in which disease develops as a process. In reality, the body seldom remains unresponsive to the changes taking place in it – it reacts, attempting to adapt to new conditions or compensate for loss (for instance, people who go blind usually report that they have experienced a heightening of their other senses, most often in their hearing) and so on. By refusing to acknowledge this natural adaptive mechanism and the compensational behaviours of ill people towards their conditions, the naturalist view misrepresents disease. As already explained, in illness the habitual relationship between the biological and the lived body changes and life is no longer what it used to be while the person was still healthy. Actions that required little or no efforts, like walking, could change into tasks of immense difficulty. The usual ways in which the person connected to her environment and social circles are lost, and a new way of living and socializing must replace them. Adaptability and creativity play a crucial role in the process of creating a new, modified version of comfort, allowing for what Carel's paper 'Can I be Ill and Happy?' has appropriately named 'well-being in illness'²⁸⁹. Carel's book *Illness* explains in even greater detail how as the ill person starts to form new habits, the body adapts to the new situation by means of complex biological mechanisms for compensation which are activated in order to ensure optimal functioning and resource distribution. In Carel's case, the body of a person suffering from LAM 'learns' to avoid difficult movements that require a lot of effort on behalf of the lungs and heart. At the same time, goals and plans are changed, tasks are carried out more carefully and in compliance with the ill body's diminished strength or capacity. It is important to point out that in this context adaptability is seen not as an exclusively physical trait, but as a complex characteristic with biological and psychological components possessed by both the ill and the healthy person; a characteristic which ensures that the obstacles encountered in a person's social and physical environment are met with maximum efficiency and flexibility. In the next section, I will show that the insufficient attention paid to certain dimensions of adaptability is not unique to naturalism – normativism and hybridism are also guilty of this charge, although while

²⁸⁹ Carel's paper 'Can I be Ill and Happy?' suggests that well-being and illness are not mutually exclusive, arguing that people with chronic conditions, such as a wheelchair user or a person with Down's syndrome, for example, can lead fulfilling lives, and be healthy in the sense that they are both well-adjusted to their conditions and free of other diseases. See Carel, H., 'Can I be ill and happy?', *Philosophia*, 2007, Vol. 35, No. 2, pp. 95-110

naturalism disregards the psychological and social aspects of adaptation, hybridism and normativism are very likely to leave out 'biological normativity' (i. e. living organisms' tendency to respond to internal or external stimuli selectively, and to regulate their own states, functions and behaviours accordingly). I will also show that, while important, the adaptability factor – even when considered in all its aspects – still does not qualify as an exclusive necessary and sufficient condition for labeling a certain state as either 'health' or 'disease'.

e) Health as adaptability, disease as maladaptivity.

There are, of course, some authors who identify health with biological notions of fitness and adaptation, which explains why the sixth criterion of health critiqued by Boorse in 'Health as a Theoretical Concept' is adaptability, and he does not hesitate to share his observations that most times an organism which is well adapted for one environment might not be well adapted for another, and that fitness would always be relative to the organism's environment. Thus a condition otherwise considered a disease might turn out to be advantageous in a certain environment, because it would make the one affected by it more likely to survive – as in the example provided by Boorse, where a person who has cowpox would be lucky during a smallpox epidemic, but that would not make her healthy, or mean that cowpox is no longer considered a disease.

However, there are further reasons why a definition which accounts for health purely in terms of fitness or adaptivity may warrant a philosophical critique, the most obvious of which is that the concept of adaptation describes a behaviour, rather than a trait. In that sense, while 'adaptability', or the characteristic of being successful in one's behaviour of social adaptation, could indeed be causally related to health (in the sense that it could contribute to it, or stem from it), this is not a sufficient reason to center an account of health on it. Cowardice, Machiavellianism or egoism are among the many examples of behaviours which could potentially contribute to survival and health, but which are nevertheless not regarded as necessary or sufficient criteria of health, despite requiring the least amount of strain for the

subject (since they are essentially strategies for avoiding obstacles and danger, rather than overcoming or adapting to them).

Now, let us consider the appeal of physical adaptability (understood in terms of ‘biological normativity’) as a criterion for health. The resulting definitions would place health and disease on a wide spectrum, suggesting that health and illness may not be entirely mutually exclusive.²⁹⁰ However, they would also imply objectively established criteria for determining the degree to which a physical state or trait can be considered conducive to adaptability (and therefore to health). Normativists whose theories gravitate towards notions of devaluation and social labeling would not be willing to entertain the possibility of objective rules for concluding whether a specific biological trait would guarantee adjustment to a specific environment or not. Naturalists who tend to define health negatively, i.e. as the absence of disease and dysfunction, would not be willing to see it as an ability or activity with varying degrees (a view which would not only leave it without an upper limit, as pointed out by Boorse himself,²⁹¹ but also problematize the very notion that disease could be entirely absent). In a chapter on experimental pathology Canguilhem remarks that certain writers ‘claim continuity between health and disease in order to refuse to define either of them’ and ‘say that there is no completely normal state, no perfect health’²⁹², noting how this would mean that there could be only sick people. Let us briefly return to Chapter 3 and consider the following example of a theory that suggests continuity between health and disease – Bernard’s claim that the ‘pathological’ phenomenon is but a quantitative variation of the ‘normal’ phenomenon – or, in other words, that the difference between a diseased and a healthy state would be in units for objectively measurable parameters. Canguilhem has explicitly stated his support for this theory, and even formulated similar explanations of his own, allowing that symptoms could be ‘the quantitatively varied product of constant mechanisms of the physiological state’, or that ‘it is possible for some mechanisms to be the same in the state of health and in the state of disease.’²⁹³ The difference, he notes, lies in the outcome: in his example with stomach

²⁹⁰ An idea that we have already encountered in Carel’s work; see my previous footnote.

²⁹¹ Boorse, C., ‘Health as a Theoretical Concept’, p. 570-572

²⁹² Canguilhem, G., *The Normal and the Pathological*, p. 77

²⁹³ *Ibid*, p. 82

ulcers, the stomach is no longer normal not because of the presence of hyperchlorhydria²⁹⁴ per se, but because it is literally digesting itself. It is then the disrupted independence of functioning that is identified as a sign of pathology, rather than the ‘abnormal’ parameters detected in the organism: ‘a function could be said to be normal as long as it is independent of the effect it produces’, and thus ‘the stomach is normal as long as it digests without digesting itself.’²⁹⁵

This holistic-spirited example reintroduces the Ancient notion about the indivisible totality of functions, where a problem with just one can damage or block all the rest – a notion familiar both to practitioners and to historians since the early days of humoral medicine.²⁹⁶ Coincidentally, humoral medicine’s notion of health as a well-balanced totality of the body’s inter-related, inter-dependent functions is where homeostatic notions of health and life have their theoretical and conceptual origins. Homeostasis, which I discussed in Chapter 3, is a term first put to use by biologists and physiologists to describe a particular form of adaptive behaviour where the organism attempts to regulate its own functions when one or more of them deviate from their habitual pattern. The term is typically applied to contexts where the physiological changes in question have been produced by ‘stressors’ or dramatic shifts in one’s environmental circumstances, but nevertheless describes a reaction that is directed inwards, rather than at the organism’s external milieu. It is not the environment that the organism is attempting to regulate, but itself. Adaptation, in contrast, involves a wider range of responses to one’s state – modifying oneself, but also attempting to influence and modify one’s environment through various strategies and techniques, just as beavers are capable of both modifying their body temperature and building complex lodge structures to protect themselves from harsh weather conditions. Therefore, an adaptivity-based account of health would place high priority on the successful relationship to one’s environment.

However, when our account of a particular state is framed in terms of actions, we are

²⁹⁴ High gastric acid levels.

²⁹⁵ Canguilhem, *Op. cit.*, p. 82

²⁹⁶ Porter, R., *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present*, Fontana Press, London, 1997, p. 9, also p. 56-58

essentially defining a behaviour rather than a constitutional trait. This implies that, rather than being 'healthy' or 'sick', one *acts* in a 'healthy' or 'sick' manner; that diseases are the product of an inadequate relationship between organism and environment, where the organism's actions are not on par with the 'requirements' of its surroundings. Unlike the case with the social model of disability, where hostile architectural environments are construed as the result of careless urban planning which ignores the differently abled persons' needs, adaptivity accounts of health would locate the problem within the ones affected by it. That is in no way made clearer by Boorse, who appears to favour a more 'passive' reading of adaptivity: his example focuses on traits rather than behaviours, showing how the presence of one type of pathogen could guarantee immunity against another, morphologically similar, pathogen.²⁹⁷ But while a state can no doubt play a role in adaptation, the latter is ultimately determined by behaviour. For instance, the 'cowpox' infected individual from Boorse's example may indeed be advantaged during a possible 'smallpox' epidemic, when her already present infection will protect her from contracting a new and more devastating one. What happens, however, if the 'cowpox' victim is unaware that her status will offer her protection, and promptly decides to flee the city at the first sign that a 'smallpox' epidemic is approaching? What if she, then, heads somewhere else, where her infected state causes her to experience social isolation, starvation, extreme abuse, and ultimately death? Or what if 'cowpox' ends up taking her life, instead of allowing her to acquire immunity to future 'cowpox' or 'smallpox' infections?

Clearly a trait should not have to depend entirely on blind luck in order to be considered adaptive – as also suggested by Boorse, who distinguishes between accidental and non-accidental causal contributions to survival.²⁹⁸ Furthermore, we speak of 'advantage' when referring to situations (i.e. occasions), but we use the term 'adaptivity' when referring to environments. While it is possible to conceive of the occasional scenario where 'cowpox' or myopia could be beneficial, that makes them only circumstantially convenient at best. Advantage is contextual and often depends on little more than blind luck, whereas biological adaptivity involves consistent goal-orientedness. As this is the goal-orientedness at a cellular,

²⁹⁸ As we have seen in Boorse, C., 'Health as a Theoretical Concept', p. 557, '[o]ne squirrel might catch its tail in a crack en route to being run over by a car, but that would not make defense against cars a function of the squirrel tail'.

organic, systemic and behavioural level that Boorse has referred to in his description of bodily systems, one might argue that it is in every way consistent with his account of health. His argument that circumstantially convenient conditions would cease to be considered diseases within situations where they are advantageous is thus unconvincing. Advantage and adaptivity are two distinct categories referring to trait-occasion and organism-environment dynamic respectively. As disease is not a form of behaviour, it should not be considered as adaptive even on the relatively rare occasions where it does prove itself to be of some momentary advantage.

Furthermore, as I showed in Chapter 2, the work done by Carel and Lindsey successfully demonstrates that adaptability and creativity are common responses to disease and disability, and that the persons affected by these conditions are capable of 'transcending' them. Rather than being a constitutional trait exclusive to 'healthy' individuals, adaptivity is a response to the demands of one's body and environment, an example of 'biological normativity' in action. To conclude this part of my analysis, Boorse has been correct in regarding adaptivity-based health/disease accounts as unreliable, but has not succeeded in identifying the proper reason why. This sub-section was intended to further develop his insight on the matter, then expand it into a proper, detailed argument against adaptivity-based accounts of health/disease.

5. 4. Going forward: a revised understanding of hybridism.

Sections 5. 2. and 5. 3. have assisted me in developing a more productive way of systematizing, evaluating and comparing the most common tactics for defining health/disease by allowing me to focus on particular groups of strategies rather than basing my opinion of them entirely on the ideological or philosophical commitments they have been shaped by. This method of assessment has been inspired by the paper 'Health as a Theoretical Concept', where Christopher Boorse has grouped different approaches to health/disease definitions in terms of focal points (i. e. the features they consider to be central in disease phenomena), instead of merely pitting different schools of thought against each other. I have recreated the

structure, albeit not the content, of Boorse's critique, and used it as a tool in my comparative analysis, where it has helped me:

- 1) ... to investigate where and how different methods can overlap conceptually;
- 2) ... to establish which particular strategies are best equipped to reflect 'biological normativity' and the reactive nature of disease;
- 3) ... to appreciate the contributions offered by different theories, rather than overemphasize their flaws.

The most useful contributions now need to be re-combined and used in the creation of a revised version of hybridism, an example of which will be presented in Chapter 6, and then defended in Chapter 7. This optimized hybrid account will be capable of expressing the complex multidimensional nature of disease (including the aspects outlined in point 2) from the list above) without exacerbating issues such as negative stereotyping or stigmatization. It will also be formulated in a relatable 'language of pain and reactivity' similar to the one employed by phenomenology of illness. Chapter 6 will be dedicated to an examination of phenomenology's potential to aid me in developing the required formulation by supporting a very important philosophical distinction I am going to make – the one between the categories of 'symptoms' and 'clinical signs'. As a bonus, Chapter 6 will also show how this distinction could enhance some of the existing phenomenological theories about health and well-being within disease or disability.

6. What might we expect a discussion of ‘signs’ and ‘symptoms’ to add to our understanding of health and disease?

6. 1. Filling in the explanatory gaps.

From what we have seen so far, disease phenomena are dynamic and multidimensional, and living with disease is characterized by reactivity – by various complex processes driven by ‘biological normativity’ as well as social, psychological and existential flexibility. A similar notion underpins Carel’s article ‘The Philosophical Role of Illness.’²⁹⁹ In addition to showing how life as a diseased person may unlock one’s philosophical potential, the paper indicates that reactivity, compensation and adaptation are crucial elements of such a life. This view gives more substance to the position that I defended in Chapter 5 – that phenomenology is better equipped than naturalism, normativism or hybridism with regards to accounting for the ‘biological normativity’ as well as the psychological, social and existential flexibility of people living with disease. As I have also argued in Chapter 1, the body is both a medium³⁰⁰ of, and a participant in, the temporal and spatial relations we have with the world; it is a necessary condition for having organized subjective experience.³⁰¹ Due to embodiment’s crucial role as a background of experience, its structure and form are bound to influence the constitution of space and time for us.³⁰² Illness has the potential to turn previously enjoyable and straightforward activities into difficult and unpleasant ones by introducing radical changes which destabilize the content or structure³⁰³ of experience. Such changes, however, can also force us to confront aspects of our being that we previously did not reflect upon – for instance our adaptability, dependency, or potential for edification; they can modify our life expectations, or trigger a re-evaluation of our concepts of ‘hard’ as we limit the scope of our activities in order to avoid strain or failure, or modify our interactions with the environment as an adaptation strategy. When the body ceases to be ‘silent’ and symptom-free, it becomes

²⁹⁹ Carel, H., ‘The Philosophical Role of Illness’, *Metaphilosophy*, January 2014, Vol. 45, No. 1, pp. 20-40

³⁰⁰ Merleau-Ponty, M., *The Phenomenology of Perception*, Routledge, New York, 1962, p. 146

³⁰¹ Zahavi, D., *Husserl’s Phenomenology*, Stanford University Press, Stanford, 2003, p. 99

³⁰² Smith, D. W., *Husserl*, Routledge, London, 2007, p. 223

³⁰³ Ratcliffe, M., ‘Varieties of Temporal Experience in Depression’, *Journal of Medicine and Philosophy*, Vol. 37, No. 2, pp. 114-138

an object of explicit attention; its problematized relationship to the external world generates reflections or questioning of the philosophical kind. Therefore the de-familiarizing effects of illness could potentially turn it into a 'philosophical point of entry',³⁰⁴ a form of *epoché* (a term popularized by Husserl³⁰⁵, which he applies when referring to the procedure known as 'bracketing', 'suspension', or 'phenomenological reduction') for the sufferer. It is important to note that, in the instance of living with a life-altering disease, the *epoché* arises as a result of alienating experiences, which in turn are produced by both the objectification encountered in clinical contexts and the rift between biological and lived body. The very act of seeking clinical help implicitly carries the risk of patient objectification exactly because it brings forth some features of our physical experiences that can be difficult to make sense of without the guidance provided by the professionally impartial, dehumanizing medical insight. In the context of orthodox medical thinking, disease is localized within the biological body. This is true both for contemporary naturalist accounts of disease such as Boorse's and for some of the first accounts of health/disease which date as far back as Antiquity. Aristotle's works, for instance, present us with a view of health as the optimal state of the human being, a state which allows human flourishing and the achievement of typical goals such as survival and reproduction in a way which is typical for the species.

As we have seen in the previous chapter, centuries after Aristotle, health is still predominantly teleologically construed, defined through functions and goal-orientedness. In Boorse's case it is seen as species-typical functioning³⁰⁶, in Megone's – as a natural kind's member's actualization of potentialities.³⁰⁷ The naturalist approach has been criticized for neglecting the experience of illness and failing to recognize and explain the existential impact of illness or loss of capacities. It has also been under attack for its supposed inability to account for diseases which are not dysfunctions (for instance treated asthma) and dysfunctions which are not diseases (like artificially induced ovulatory dysfunction in users of oral contraceptives). A

³⁰⁴ Which is how Zahavi interprets Husserl's *epoché*; see Zahavi, Op. cit., p. 46

³⁰⁵ Husserl, E., *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, First Book: General Introduction to a Pure Phenomenology*, Martinus Nijhoff Publishers, The Hague, 1983, p. 61, p. 65, and p. 70

³⁰⁶ Boorse, C., 'Health as a Theoretical Concept', *Philosophy of Science*, 44, 4, December 1977, pp. 542-573

³⁰⁷ Megone, C., 'Mental Illness, Human Function, and Values in Philosophy', *Psychiatry, & Psychology*, 7, 1, March 2000, pp. 45-65

phenomenological approach which distinguishes between 'illness' and 'disease' as two separate categories might resolve these problems. In Carel's case, it presents the category of 'illness' as a cluster of conditions that include symptoms of discomfort, pain or other unpleasant feelings produced by the body,³⁰⁸ or bring significant changes into the sufferer's social or spatial world. The category of 'disease', on the other hand, is allowed by Carel to remain firmly on naturalist territory, as she acknowledges the need for a definition suitable for the purposes of the much more limited clinical contexts (such as laboratory standardization). Following our observations from Chapter 5, we now know better than to define disease as statistical abnormality, maladjustment, or 'that state which is treated by physicians'. A more plausible definition would describe it as a condition characterized by signs of drastic deviation(s) from the individual's typical medical parameters (where said deviations are not welcome and are not a matter of choice for the affected individual), regardless of the presence or absence of any symptoms. Both these definitions rely on an analysis of the distinction between signs and symptoms – a topic which seems to get insufficient attention. The present chapter will explore and outline this distinction in order to demonstrate its potential to benefit phenomenological approaches by increasing their ability to account for 'biological normativity', as well as cementing their position that 'illness' and 'disease' are distinct categories.

It has been suggested that Boorse's naturalistic account needs to be augmented by a phenomenological approach which also takes into account the impact of illness on the ill person.³⁰⁹ Carel, for example, defines illness as 'not simply a problem in an isolated body part, but a problem with the whole embodied person and her relationship to her environment.'³¹⁰ She criticizes the narrowness of the naturalist view which leaves this experience out and focuses only on disease as an objectively existing state of the organism.

At first glance Carel's criticism appears to be justified, and it does succeed in presenting the

³⁰⁸ In the case of mental disorders – by changes in the state of the brain and the nervous system. This issue will be addressed in the next chapter.

³⁰⁹ Carel, H., *Illness*, Acumen Publishing, 2008, p.18

³¹⁰ *Ibid*, p. 73

naturalistic view as both incomplete and inaccurate. Indeed, an account which focuses on the process which takes place in the body of a diseased person but does not include the effects suffered by the person does not represent this process fully. It could also be argued that disease is misrepresented by accounts which leave out crucial characteristics of the experience of having a disease, such as the numerous ways in which disease could affect a person's relationship with her own body or the environment, or how it triggers reactions of adapting to the limits imposed by illness on the body, and as a result complex compensatory processes begin to take place in the organism. These insights have been anticipated decades before Carel by Canguilhem, who describes the experience of living with disease in the following manner:

'To be sick means that a man really lives another life, even in the biological sense of the word. To return once more to diabetes, it is not a kidney disease because of glycosuria, nor a pancreatic disease because of hypoinsulinemia, nor a disease of the pituitary; it is the disease of an organism all of whose functions are changed, which is threatened by tuberculosis, whose suppurated infections are endless, whose limbs are rendered useless by arteritis and gangrene, moreover, it can strike man or woman, threaten them with coma, often hit them with impotence or sterility, for whom pregnancy, should it occur, is a catastrophe, whose tears – O irony of secretions, are sweet.'³¹¹

This excerpt contains very important insights into the nature of disease which typically gain little saliency in philosophical debates – for instance the issue of comorbidity. Comorbidity is a term referring to the phenomena of two or more disease states occurring simultaneously, where causal and correlational links may or may not exist between them (e.g., the states in question could share a common cause, or one of them may have led to the other). The phenomenon of comorbidity appears to support Canguilhem's belief that a body's functions can be separated only theoretically, as in real life cases of illness they are connected and dependent on each other. This has inspired him to claim that symptoms or signs should not be considered separately, in the abstract: '[i]t seems very artificial to break up disease into symptoms or to consider its complications in the abstract. What is a symptom without context or background? What is a complication separated from what it complicates? When an isolated

³¹¹ Canguilhem, *Op. cit.*, p. 87-88

symptom or a functional mechanism is termed pathological, one forgets that what makes them so is their inner relation in the indivisible totality of individual behaviour.³¹²

Indeed, what is a symptom? What meaning has it without the contextual framework provided by patient history? Cassell, Canguilhem, Carel and many others have pointed out that physicians come into contact with concrete individuals, not with disembodied organs or dysfunctions. All of these complete and concrete individuals have a relevant background, both within the purely clinical context and outside it, that waits to be examined by the physician. Because of their intimate connections to this background, symptoms, when spelled out, can illuminate and define it, thereby allowing the physician to gain necessary insights into the patient's condition. Carel is correct in remarking that in personal human experience disease cannot be reduced to a dysfunction in an organ or body system. It could be a life-transforming event, a situation with enormous and complex social, economic and emotional consequences for the affected and the people around them. But with Boorse the focus is on objective parameters and departure from the norm, and subjective experiences hold no significance, which is why Carel finds his view narrow, incomplete and one-sided. However, three points need to be made here.

Firstly, Carel's philosophical focus lies on the experience of living with disease, on its impact on the person's relationship to her environment. Her work does not really develop a new view on disease itself, but rather leaves this task to others. I suggest that we make a further distinction between the two. Secondly, her criticism against Boorse seems to be directed less at his understanding of disease per se and more at the naturalistic view's failure to include reflections on experiences of disease. By leaving out the natural adaptive mechanisms and behaviours of the ill body, the naturalistic approach misrepresents the experience of disease, rather than disease itself. Finally, understanding illness involves more than simply recognizing it as the subjective side of disease. That is why I think it would be better to further distinguish between the two. Boorse's account is one-sided not so much because of its third person stance as because of the way it implicitly portrays the body as a passive ground or

³¹² Ibid

environment in which disease develops as a process, while in reality the body seldom remains unresponsive to the changes taking place in it – it reacts, attempts to adapt to the new conditions, to compensate losses. For instance, people who go blind usually report that they have experienced a heightening of their other senses. A closer look at signs and symptoms might fill in the existing gaps in naturalistic approaches and provide a more realistic account of health/disease.

Cooper has argued that naturalistic disease-as-dysfunction accounts are nearly always problematic and cannot fully capture disease. A condition can be a disease without being a dysfunction (for example asthma, when treated), and there are also dysfunctions which are not diseases (for example infertility caused by intake of contraceptive pills).³¹³ A common – and problematic – feature of both these problems with naturalistic accounts is the neglect of signs and symptoms as subjectively experienced, both physiologically and existentially meaningful, changes brought about by one's condition.

The naturalistic view pays insufficient attention to signs and symptoms, reducing them to mere expressions of disease or ignoring them altogether. But even their supposedly minor role of manifestations of dysfunction might turn out to be more important than previously thought.

First of all, if all aspects of biological existence and behaviour could be conceived teleologically, as the naturalistic view seems to suggest, then so are signs and symptoms. As noted by Megone, 'functional explanation will be possible to the extent that there is some perspective from which it has positive value.'³¹⁴ In that case, why not conceive of symptoms as non-accidental causal contributions to the organism's goals – in other words, as functions of the organism's various organs and systems? Quite often symptoms and signs can be part of a complex compensatory mechanism aimed at restoring the organism's health. This is most obvious in endocrine disorders such as diabetes insipidus, where the excessive thirst of the

³¹³ See Cooper, R., 'Disease', *Stud. Hist. Phil. Biol. & Biomed. Sci.*, 33, 2002, pp. 263–282

³¹⁴ Megone, C., 'Mental Illness, Human Function, and Values in Philosophy', p. 57-58

sick person is caused by a severely diminished production of vasopressin – the antidiuretic hormone responsible for retaining water in the body. In other words, it could be construed in terms of reactivity, viewed as an attempt at restoring what has been lost.

The idea about health as a kind of biological equilibrium is by no means a new one. Health has often been described as homeostasis, or the property of systems to self-regulate and maintain a constant stable condition. We have already seen how this idea can be encountered in the writings of 19th century French physiologist Claude Bernard who wrote about homeostasis, or the stability of the organism's internal environment (*milieu intérieur*) as a necessary condition for life. Bernard described the homeostasis of the body's *milieu intérieur* as a state maintained by complex processes of compensation and equilibration of 'external variations', a process during which all of the organism's systems are involved, allowing the body to regulate itself and ensure its own life and health.³¹⁵

However, two objections could be made to this idea. Firstly, as argued by Boorse, many life functions are not homeostatic and even upset the organism's balance rather than maintain it – perception, growth and pregnancy are examples of this. Therefore he thinks there is no point in 'trying to view corresponding diseases such as deafness..., dwarfism..., or sterility as homeostatic failures'.³¹⁶ Secondly, another difficulty with health-as-homeostasis accounts lies in their inflexibility which does not allow for health in old age where changes in the organism are just as abundant and frequent as they are during active growth. The kind of flexibility needed for a realistic account of health could be derived from Georges Canguilhem's work.

In Canguilhem's theory life and health are a type of reactivity, a so-called 'dynamic polarity'³¹⁷ in which certain things or states are avoided, while others are sought, and these all change over time in accordance with the organism's evolving needs. Therefore health could best be

³¹⁵ Renan, E., Bert, P., Moreau, A., *L'oeuvre de Claude Bernard*, J. B. Baillière et fils, Paris, 1881, p. 68, p. 71-73

³¹⁶ Boorse, C., *Op. cit.*, p. 550

³¹⁷ Canguilhem, G., *The Normal and the Pathological*, Zone Books, New York, 1991, p. 126

compared not to homeostasis but to homeorhesis³¹⁸, a term which I have borrowed from developmental biology. Homeorhesis describes something regulated around certain factors and ‘points’ which do not remain fixed, but instead gradually change over time. Bernard regards any change as a possible source of disturbance: ‘To him, disease is an alteration in the normal functioning of the anatomical element, an alteration which is due either to [the element] itself, or to the composition of the blood or internal environment, or to the mode of distribution of the internal environment.’³¹⁹ However, diseases often appear as results of the more drastic or peculiar changes which are not a part of the organism’s growth, metamorphosis or aging. Signs and symptoms could be said to be expressions and reactions to these changes. In any case a slightly more detailed look at signs, symptoms and the differences between them would be useful for understanding illness and disease. I will present the differences in the two sections below.

6. 2. Signs.

There is no doubt that cases of having a disease without actually feeling diseased are possible – one could be the carrier of a potentially lethal virus like HIV without feeling unwell, or be infected with a sexually transmitted bacteria like *Chlamydia trachomatis* without ever experiencing any symptoms or noticing any signs. Signs are the objectively measured side of a state. Hormonal levels, blood pressure, bone density and other biomedical parameters exist and could be examined at any time, but they only acquire the status of pathological signs within the context of a certain condition with which they are associated. This usually occurs through examination, when signs become problematized and rendered to scrutiny. As they are available for third-person observation, signs represent the objective side of disease. By definition they are ‘taken’ separately, dehumanized, detached from the sufferer, because the

³¹⁸ The term was introduced by English biologist Conrad Hal Waddington to explain the development of animals, see Waddington, C. H., *How animals develop*, George Allen & Unwin Ltd., London, 1946. Today it is often used to describe the metabolism of animal body tissues. For an example see Bauman, D. E. and Bruce Curie, W., ‘Partitioning of Nutrients During Pregnancy and Lactation: A Review of Mechanisms Involving Homeostasis and Homeorhesis’, *Journal of Dairy Science*, 63, 9, pp. 1514-1529.

³¹⁹ My translation. For the original text see Renan, E. et al, Op. cit., p. 74: ‘Pour lui, la maladie n’est qu’une altération dans le fonctionnement régulier de l’élément anatomique, altération due soit à lui-même, soit à la composition du sang, du milieu intérieur, soit au mode de distribution de ce milieu.’

role assigned to them in the cultural 'ritual' of examination requires that they take on the form of laboratory test results, blood samples and all other types of objective measuring.

Even though both signs and symptoms could be results of a disease, signs are merely an observable characteristic or outward expression which accompanies disease. For example, in cases of gastroenteritis laboratory tests may reveal the presence of bacteria and dead leukocytes – a clear sign that inflammation has occurred. However, these are just observable traits of the infection – just a fact, and not an event; just a number or level, and not an action or reaction. Any changes to them would only occur in accordance with the progress of disease, reflecting and expressing its stages. To the patient they indicate, rather than constitute, the presence of a pathology. Because of this, signs have sometimes been described as a 'change in bodily or mental functioning which is not reported as a distressful complaint, but which the skilled observer recognizes as indicative of such maladaptation as is likely to cause or to have caused danger or distress to others or to the patient himself.'³²⁰

A further illustration of the distinction between the two categories can be encountered in Canguilhem, who engages in an analysis of Leriche's concepts of health as 'life lived in the silence of the organs', and disease as that which 'irritates men in the normal course of their lives and work, and above all, what makes them suffer.'³²¹ Here we encounter an idea very similar to that of Carel who accentuates the unawareness of one's body in health, the complete alignment between biological and lived body. Again, we come across the notion that the healthy person is someone who experiences her body as obedient and inconspicuous; someone who does not encounter surprising limits or obstacles created by her own physicality. The sick body is a source of trouble, disease is 'irritation', an opposition between subject and body, habit and disruption, will and reality. There is one very obvious objection to this account of health: it is widely known that there are many silent diseases which do not produce symptoms in the sufferer. Accepting Leriche and Carel's similar definitions of health as a 'silence of the organs' would amount to regarding such people as healthy when they are

³²⁰ Foulds, G. A., *The Hierarchical Nature of Personal Illness*, Academic Press Inc. (London) Ltd., New York, 1976, p. 39

³²¹ Canguilhem, Op. cit., p. 92-94

not. Leriche himself has shown that an absence of complaints does not amount to absence of disease, except from point of view of the sick person. He has also added that, in contrast, in order to define disease from a point of view of the physician, disease 'must be dehumanized'.³²²

But would it be right to assume that there can be sickness without a sick *person*? As we have seen in Chapter 2, Cassell has been adamant that this separation is artificial and does not hold up. Canguilhem has also rejected the notion in his critique of Leriche, discussing the example of a man who unknowingly has kidney cancer but dies in a car crash: 'according to Leriche's theory, ... one should conclude in favour of a disease, although there would be no one to whom to attribute it – neither to the cadaver which is no longer competent, not retroactively to the formerly live man who had no idea of it, having had his life come to an end before the cancer's stage of development at which, in all clinical probability, pain would have finally announced the illness.'³²³

Hardly anyone would agree that a symptomless cancer cannot be considered a disease, but the claim that we cannot attribute the state of disease to a cadaver appears to hold some truth. Indeed, where in the dead body can we find either dysfunction or awareness of symptoms, experience of pain, suffering? Disease is dynamic, dependent on life and vital functions just as much as health is, therefore the more realistic concept of disease would be the sick person's, and not the pathologist's, in spite of objections that sensation does not possess the same kind of theoretical value or epistemic reliability.³²⁴ What becomes clear from this account, then, is that disease ought not to be seen as 'a parasite living in and off of the man it consumes'³²⁵, but rather as a new biological order to which one must become adapted. Leriche's definition of disease, as rightfully noted by Canguilhem, is one elaborated in terms of disease's effects and the sufferer's awareness of them – or symptoms. Carel has presented a similar view in her phenomenological account, where the state of illness involves perceiving one's body as conspicuous, i.e. experiencing it as one would a previously unfamiliar obstacle.

³²² Ibid

³²³ Canguilhem, Op. cit., p. 92

³²⁴ Ibid, p. 98

³²⁵ Ibid, p. 97

In illness, certain aspects of the body become thematized that were previously unacknowledged as important or problematic while they were still being experienced in the manner most habitual to the patient. Only the affected have access to those aspects, which are experienced as symptoms. The role of symptoms will be further analyzed in the section below.

6. 3. Symptoms.

Symptoms, in contrast with signs, are subjectively experienced. Sometimes there would be complaints without any particular identifiable cause, and unpleasant symptoms would be present in the absence of anything which could properly be labeled a disease. Migraine is associated with intense headache, nausea and increased sensitivity to light and sound. Although the research of scientists from the Leiden University Medical Center, the Netherlands reported in JAMA (Journal of the American Medical Association) in November 2012 has established a correlation between migraine and an increased risk of brain lesions,³²⁶ the exact cause of migraine is a combination of blood vessel enlargement and the release of pain-triggering chemicals that results from it, and neither one of these triggers is a disease per se.³²⁷ However, the discomfort and pain felt by sufferers are debilitating enough to qualify for medical attention.

Symptoms cannot be separated from illness, while signs can and often are. Symptoms can also be related to conditions which are not illness in the sense that we normally attribute to that word. Pregnancy could cause lightheadedness and exhaustion; intense feelings of disgust could provoke nausea and stomach cramps; an athlete's sore muscles are a source of pain; allergic reactions often go together with swelling, discomfort and skin irritation, etc. That is why a phenomenological account may result in a lax, indiscriminate application of the term (unless substantiated by additional methods for discrimination). However, so far we have seen that illness cannot be separated from its symptoms, except in an artificial way that distorts

³²⁶ Palm-Meinders, I. et al, 'Structural Brain Changes in Migraine', *Journal of the American Medical Association*, 2012, 308, 18, pp. 1889-1896

³²⁷ Vasodilation itself is not a disease. In fact, vasodilator drugs are often used for treating conditions like congestive heart failure, hypertension and others.

the understanding of illness as combination of physiological and psychological discomfort (both highly subjective in nature).

Symptoms could be better described as the person's unique reactions to the changes she experiences under the influence of disease, injury or other states which are capable of causing suffering. For example, the nausea and loss of appetite experienced by sufferers from gastroenteritis are provoked by an inflammation of the intestines due to viral or bacterial infections of the digestive tract. Symptoms have a psychosomatic nature and thus are also influenced by the subject's unique psychological constitution, attitude, emotions and expectations about their condition. The gastroenteritis sufferer with low bacteria counts might still experience severe nausea due to stress, fear or discomfort at the thought of the disease and low tolerance for pain and suffering, while another person with the same signs might not experience any nausea at all.

A view which distinguishes between signs and symptoms without separating their realities would be better equipped to account for conditions which do not present any observable signs upon examination. '*Mental illnesses*' are a good example. Many of them are still thought to lack physical manifestations, but virtually all of them would be accompanied by symptoms. A person suffering from a severe personality disorder would have a different experience of life, a different social world, a different way of perceiving, engaging with her surroundings and with other people. A lot of the time her choices in life, activities, professional development and interpersonal relationships would be limited or changed under the influence of her condition. At the same time, blood tests or brain scans performed on this person may never reveal anything out of the ordinary – no sign of a problem. Yet the condition is harmful both to the sufferer and to those around her, and treatment options are available.

A possible counterexample to my definition of symptoms and their relation to illness could be that someone being tortured could count as a case of illness.³²⁸ My response would be that

³²⁸ Many thanks to Dr Peter Vickers for this counterexample.

despite the presence of pain and discomfort which clearly indicates a harmful state of the organism, the rest of the conditions remain unfulfilled – there is no change in the person’s relationship to her body, environment, and social world. The tortured victim is experiencing physical damage inflicted on her by another person, and not a change produced by her own body; technically she still possesses the physical capacity to get up and run away (insofar as she is neither disabled nor infected with an illness-inducing pathogen), and is unable to rely on this capacity simply because she is restricted by ropes. Finally, whilst she is clearly being abused by her torturer, she is not experiencing social stigma as a result of her body’s condition or appearance. The same objection could also be applied to the counterexample with the person who goes on an expedition to the North Pole, only to find that her adventure involves more pain and discomfort than it does positive experiences.³²⁹ Her symptoms – cold, pain, loneliness – result from a conscious decision which could easily be changed at any given time. Should that happen, they will be reversed. The expeditioner’s social isolation is self-imposed, whereas that of the medieval leper is forced upon him by other members of his community and prevents him from leading a fulfilling life or maintaining productive relationships; her discomfort in an allegedly hostile environment is a natural reaction to be expected, rather than a clue that her functioning may be impaired. Finally, like the victim of torture, the expeditioner possesses the her own suffering unaided, as it does not originate from factors beyond her control – such as her own constitutional characteristics, or the presence of a pathogen in her system.

6. 4. Addressing the implications that the distinction between illness and disease holds for accounts of health and disease.

According to phenomenological accounts such as Carel’s, diseases and illnesses are two distinct classes of conditions which may overlap in certain cases. For example, in cases of bronchitis both disease and illness are present – a sputum culture test reveals the presence of bacteria and the sufferer experiences coughing fits and difficulties in breathing. Combining this distinction with the one that I make between signs and symptoms could result in various interesting new definitions. For example, illness could be defined as a condition that includes

³²⁹ I am very grateful to the late Prof. Jonathan Lowe for this counterexample.

symptoms of discomfort, pain or other unpleasant feelings produced by the body which bring significant changes into the sufferer's social or spatial world. Disease, on the other hand, can be defined as a condition in which there are signs of drastic unintended deviation(s) from the individual's typical medical parameters that she has no control over; the presence or absence of any symptoms is of no relevance in this case. Many of the relatively rapid changes which take place during periods of growth are, of course, 'normal', and so are the slower ones that occur naturally with ageing. Puberty, maturity and old age are natural phases of development and, as with every kind of development, the transition between these phases is accompanied by gradual changes in most (or all) biological parameters. When I write about 'drastic deviations' from the organism's typical clinical parameters, I mean ones which are unexpected for the organism's current 'phase'. For instance, low hemoglobin counts may be 'normal' in adult women who tend to lose blood during menstruation, but may indicate anemia, leukemia or other problems in newborns whose bodies usually produce high levels of adult hemoglobin in order to replace the production of fetal hemoglobin switched off after birth.

6. 5. Cementing the distinction between 'signs' and 'symptoms'.

So far in this chapter we have been exploring the richly nuanced conceptual world of health, illness, disease, and all that lies in between, whilst simultaneously trying to come up with a classification that would enable us to see the subtle differences between these states. Certain theoretical tools have proved themselves rather valuable – among them the first person vs. third person point of view distinction allowing for a distinction between illness as a subjective condition and disease as an objective condition; and let us not forget to point out the flexibility of a homeorhetic model of health which allows for health in old age, infancy and adolescence – unlike fixed homeostatic models. They have helped me create my 'working account' of illness and disease and base it on a specific way of defining the two distinct categories of signs and symptoms.

However, we have yet to establish a set of criteria to be used when determining what constitutes a symptom. I would like to propose three of those, listed as follows, and discussed in further detail below:

- A) Ethical – symptoms need to have an effect on our existence as moral agents (i.e. by affecting our autonomy, freedom, will, or relationship to others);
- B) Perceptual – symptoms need to have an effect on our physical perception of ourselves or other people or objects of the outside world;
- C) Suggestive – symptoms need to be unusual subjective experiences, which produce within the sufferer a feeling that help from a professional is needed or appropriate.

Typically all symptoms of illness meet at least one of the first two criteria, but many may not meet C), for example because they are minor, or because they get misinterpreted by the sufferer as an altogether different phenomenon (e.g., someone may falsely believe that her blurred vision is caused by fatigue, when in fact she is experiencing the early symptoms of a migraine attack). Therefore, while C) can certainly be sufficient, I do not regard it as a necessary condition for an experience to be considered a clinical symptom. That is why I prefer to initiate my *exposé* by focusing on the first two criteria.

A) Ethical - I will begin this outline with a brief clarification that, due to preoccupations with practicality and applicability, I shall be using David Seedhouse's definition of 'ethical' as presented in his paper 'Against medical ethics: a philosopher's view', where only meaningful other-directed actions and events that affect the lives of others count as possessing ethical content, insofar as it is exactly the need to conduct oneself with consideration for others that provides the very basis for ethics.³³⁰ ³³¹ Having spelled this out, I would like to introduce a requirement that symptoms should have this kind of social-ethical side to them, that is, to have the potential of producing moral changes in the sufferer's world, for instance to influence their relationships with others or their outlook on life. For instance a chronic pain in the stomach (be it due to an ulcer or another condition) is a symptom that has the potential of drastically altering an otherwise relaxed and agreeable individual's moral composition,

³³⁰ Seedhouse, D., 'Against medical ethics: a philosopher's view', *Medical Education*, 1991, 25, pp. 280-282

³³¹ I cannot relate to objections to Seedhouse's characterization of ethics which state that it neglects philosophical positions that do not fit within this framework of 'other-directedness', such as Kantian ethics. I happen to think that most of the ill-fitting examples do not translate very well into medical practice anyway (this is especially true for Kantian moral philosophy, due to its impractical concern with the motivation behind actions). A good example of this criticism, however, can be found at Cassel, J., 'Against medical ethics: Opening the can of worms', *Journal of Medical Ethics*, 1998, 24, pp. 8-12

rendering her irritable and prone to conflict, and impairing the quality of her daily social interactions.

Before anyone engages in criticism against the slightly one-sided view presented above, I want to clarify I do not mean to negate that such unpleasant experiences could also occasionally hold a secret potential to unlock our capacities of moral improvement. In two of his recent articles, Ian Kidd convincingly argues that illness can be edifying in the ethical sense.^{332 333}

B) Perceptual – This sub-section is intended to be very brief as the idea about spatial, temporal and other aesthetic changes has already been introduced in previous chapters. Experiences of temporal shrinking of one’s world – such as the feeling that there is not sufficient time left for everything that needs to be done, or that everything takes much longer than usual; experiences of an altered relationship to space (e.g. a hundred meters is now too big a distance to cover by foot) or to one’s surroundings (e.g. everyday objects are more difficult to reach and grab due to muscle pain, or have become rather difficult to detect for the person with impaired eyesight) are all examples of the aesthetic side of symptoms. A deeper and more thorough look at these changes has been provided by Carel in her book *Illness*.³³⁴ In addition to the abovementioned complex spatial-temporal changes that concern interaction, there could also be much simpler aesthetic changes of a more passive, purely perceptual nature: like in taste, smell or tactile sensations, all of which could diminish a person’s quality of life or affect the way she regards her normal everyday routine and her overall relationship with the environment. A previously loved scent becomes nauseating to the smell-sensitive cancer patient undergoing chemotherapy; a young child who is down with a bad case of flu suddenly finds the taste of her favourite food disgusting; the darkest and most quiet bedroom in existence could never make a day in bed more comfortable for the migraine sufferer, etc.

³³² Kidd, I. J., ‘Can Illness Be Edifying?’, *Inquiry – Interdisciplinary Journal of Philosophy and Social Sciences*, 2013, Vol. 55, No. 5, pp. 496-520

³³³ Kidd, I. J., ‘Transformative Suffering and the Cultivation of Virtue’, draft version on www.academia.edu, last accessed on 25 November 2013, 15:01 h.

³³⁴ Carel, H., *Illness*, Acumen Publishing, 2008

C) Suggestive – This requirement reflects the need of intervention and, as it seems to me, is very much in line with the original meaning of the Ancient Greek word σύμπτωμα, or ‘that which befalls’. The onset of a symptom is something that calls to us through the very power of its sheer abruptness; indeed, a symptom’s very emergence demands our attention and is capable of generating even more worry than an actual diagnosis from a doctor. The first experience of abdominal cramps during pregnancy could be a rather stressful period for the inexperienced expecting mother. Are those just the ‘normal’, regular Braxton Hicks contractions that everyone else gets, or are they the ‘bad’ kind of contractions that signalize a problem, what is the difference and how is it made? To put the process in descriptive terms, symptoms typically raise concern, which leads the troubled mind to seek help for the troubled body.

A possible objection could hold that the same principle also applies to signs – they, too, are perfectly capable of raising alarm. However, the subtle difference here is that symptoms are subjective experiences, which gives them a somewhat more direct influence over the sufferer’s behaviours and outlooks, while signs could be subjected to interpretation and acquire a vast array of meanings as a *result* of said interpretation. For instance, if one goes to get one’s eyes checked, the ophthalmologist might be able to announce the presence of a potential eyesight problem only after a thorough visual acuity test that reveals the patient’s inability to read the last two lines on the screen. The ophthalmologist might then diagnose the patient with mild myopia, and the diagnosis will draw its meaning exactly from that source – the objectively established signs. In contrast, the symptoms experienced by the patient would usually already possess a certain meaning for her as a sufferer, even before any further investigation or consultation with a specialist. The previously unexperienced inability to read the subtitles at the cinema, and the previously unfamiliar need to squint when looking at distant objects are already a source of concern for her even before she has had a chance to book an appointment with a practitioner. Each of us has a specific set of biological or personal (social, ethical, professional and other) norms of functioning. Whatever falls outside this habitual framework, is regarded with suspicion based on its being unusual and ‘unlike’ us, not based on its being ‘abnormal’ in relation to an abstract statistically derived standard of functioning.

After these lengthy clarifications it is time to turn our attention to another aspect of symptoms – their reactive nature, which is best represented in cases of ‘mental illness’ and ‘personality disorder’. As already stated, the term ‘symptom’ refers to the suffering individual’s account of her distress. This definition can be extended beyond the realm of physical states, and onto impairments that the individual experiences in the social, occupational, behavioural, emotional areas of human functioning. Many have written, for instance, on the role of mental illness symptoms as a way of dealing with demanding life situations. Sir Denis Hill described the manifestations of depression (like low self-esteem) as a ‘response to a crisis situation’ or ‘forms of communication’, which are used by the sufferer in order to signal her distress to others.³³⁵ Hilgard speculated that symptoms of mental distress could be a product of ‘defence-mechanisms’³³⁶, e.g. against feelings of guilt or anxiety. Even phobia is eligible to be explained in terms of reactivity or defence mechanisms, and such explanations can be observed as early as the 1930’s when Freud theorized that phobias could be self-imposed restrictions meant to avoid anxiety-triggering objects and situations.³³⁷ It is not the existence of a defence mechanism per se that is troubling, it is the manner through which it is applied to real life situations. The disproportionate reaction to a moderate (or, in some cases, non-existent) threat may indicate that the line between rational and irrational fear has been crossed. Whether that should raise any suspicions of maladjustment or not, what appropriate criteria for distinguishing between maladjustment cases which require medical attention and those which do not, however, are two questions which require further investigation. A more detailed overview of my ideas on the matter, along with some relevant suggestions, will be presented in Chapter 7. For now I will limit myself to the claim that a distinction between symptoms and clinical signs could highlight some of the most powerful biases we have with respect to the complicated relationship between socially conditioned beliefs about ‘*mental* health’, cultural norms of behaviour, and medical models of health and disease.

³³⁵ Hill, D., ‘Depression: disease, reaction, or posture?’, *The American Journal of Psychiatry*, October 1968, Vol. 125, No. 4, pp. 445-457

³³⁶ Hilgard, E. R., ‘Human motives and the concept of the self’, *American Psychologist*, September 1949, Vol. 4, No. 9, pp. 374-382

³³⁷ Freud, S., *The Problem of Anxiety*, W. W. Norton, Inc., New York, 1936, p. 29

6. 6. Optimizing hybridism: signs and symptoms between naturalism, normativism and phenomenology of illness.

One of the main arguments in the last two chapters was that ‘biological normativity’ (understood as the organism’s tendency to seek or avoid certain states or influences), as well as the human propensity to psychological, social and existential flexibility, are crucial features of the dynamic of human life, and are thus present in all states along the continuum between health and disease. Chapter 5 has shown that, with the exception of phenomenology of illness, most philosophical accounts of disease are not well equipped to reflect this reality. Instead, they either create the impression that the diseased body is a passive arena of pathological processes, or exaggerate the centrality of one’s relationship to her physical environment for health, forgetting that sick people can often be very well adjusted. Chapter 6 has developed this argument further, partially drawing on Carel and Lindsey’s ideas about well-being in disease and disability. It has also shown that phenomenology of illness can benefit from a sharp distinction between the categories of ‘symptoms’ and clinical ‘signs’, which would increase its ability to account for the phenomenon of ‘health within illness’ whilst remaining logically and conceptually coherent, and psychologically realistic. It is entirely plausible that a person may be exhibiting clinical signs of deterioration from her usual ‘health parameters’ and still be physically adapted to the limitations that her condition imposes on her life. It is just as plausible that a ‘healthy’ person who has not exhibited any such clinical signs could still experience debilitating symptoms, which may have a temporary negative effect on her habitual well-adjustedness.

The ‘signs/symptoms’ distinction reflects the complexity of disease phenomena without sacrificing consistency, and adds multidimensionality by spelling out an entirely uncontroversial observation which would fit seamlessly within the majority of accounts – with the possible exception of only the most narrowly construed naturalist ones. It would work especially well with normativist definitions such as the one designed by Cooper, who has laid out the ground for such a distinction with her insightful remarks on the way well-managed conditions and harmful non-diseased states problematize naturalist as well as hybridist

definitions. With all of that in mind, most philosophers would have to agree that the proposed distinction is one worth considering when formulating an account of disease. Moreover, it would help with the creation of an account which satisfies the important criteria addressed in Chapter 1 and towards the end of Chapter 3:

- 1) ... that the account be relatable, i. e. framed in terms that people living with disease would more readily associate with rather than ones which reinforce negative stereotypes or contribute to the stigmatization and disempowerment of an already vulnerable group of people;
- 2) ... that the account acknowledge the dynamic polarity of disease phenomena (which I also mentioned above when discussing living organisms' 'biological normativity');
- 3) ... that the account reflect the multidimensionality of disease phenomena, i. e. the possibility that they could have effects of a biological as well as a psychological, social or existential nature;
- 4) ... that the account prioritize incorporating a relatable 'language of pain and reactivity' over delivering a definition of maximum technical precision;
- 5) ... that the account bring together the two distinctive languages of patient and physician.

What should have become obvious by this point is that all of these conditions cannot be satisfied relying on just one approach, nor are they meant to. When combined and used as methods rather than theories, the philosophical perspectives we have examined so far have the potential to contribute to an integrated account of disease meeting all of the above-described criteria.

While the main goal of my dissertation so far has not been to deliver such an account, but rather to unpack the cultural influences underpinning the disease definitions debate, as well as to investigate the conceptual difficulties to deliver such an account, I would now like to propose a solution, which I will then defend and develop further in the remaining chapter. I

would consider an account of disease appropriate and functional if it relied on the following, or sufficiently similar, conditions:

1) ... that the patient exhibit clinical signs of deviation from her own usual health parameters (as opposed to clinical signs of deviation from a statistically defined average) that cannot be explained with growth, pregnancy, or aging, and are not a matter of free choice;

2) ... that, when fully informed and capable of assessing her condition, the patient (or a proxy, where adequate)³³⁸ would consider her current symptoms, or the ones she might reasonably expect to experience in the future, as obstacles to her physical and emotional integrity and comfort, or to her participation in society.

This account combines naturalist elements (which can be observed in the first condition, in the notion that clinical signs of unintended deviation from one's usual health parameters could indicate a pathological state) with normativist and phenomenological ones (which can be observed in the second condition's focus on subjective experiences and evaluative judgments). In the sense that it combines all these elements, the account is hybridist. In the sense that it also meets the requirements listed on the previous page (as well as in Chapters 1 and 3), it represents an optimized version of hybridism, which is better able to account for 'biological normativity', and to present disease in rhetorically neutral terms which capture its meaning without relying on negative stereotypes (e.g. associations with 'harm', 'bad', 'incapacitation', 'deficiency', 'failure', or 'defects').

Applying this account to one or two paradigmatic examples of disease, for instance pneumonia and cancer, is the next logical step. Both of these medical conditions meet the first requirement: that is to say that they are both characterized by the presence of clinical signs

³³⁸ In a footnote on p. 125 where I discuss Sholl's critique of phenomenology of medicine, I mention anosognosia, or the lack of awareness of one's medical condition. This is one example which clearly shows the need for criteria such as 'fully informed' and 'capable of assessing her own condition'. Further examples include states characterized by delusions, hallucinations, loss of consciousness or memory, and other states which may permanently or temporarily affect a person's ability to reflect on her condition. The 'proxy' criterion, on the other hand, is necessary in order to help us account for young children, babies and fetuses.

of deviation from the individual's own usual health parameters, where the changes did not result from free choice, or from ordinary physiological processes like growth, aging or pregnancy. The second requirement has been met too: although both diseased persons may be partially or completely unaware of their conditions, we can reasonably expect these persons (or a proxy, where applicable) to agree that the symptoms would present an obstacle to their physical integrity, comfort, and ability to participate in society. It should not take too much rumination to conclude that applying the optimized hybrid account of disease to other common conditions such as influenza, diabetes and chlamydia would provide the same reassuring results. But what about some of the less straightforward cases out there? Would rare or atypically occurring diseases be able to slip through the cracks?

In a paper from 2000, Amundson discusses a male UK mathematics student with subclinical hydrocephaly. The young man, whose case was first described in the 1980's by the British neurologist John Lorber, allegedly had 'an IQ measured at 126, a normal social life, and ... no more than 10% of the average person's brain tissue'.³³⁹ Lorber – who, just as Feinberg, appears very skeptical about the presumed causal links between structure and function³⁴⁰ – was not surprised that the boy exhibited an average level of performance despite the severe abnormality. He noted that 'a substantial proportion of patients appear to escape functional impairment in spite of grossly abnormal brain structure.'³⁴¹ Moreover, the student had never experienced any symptoms, and the only clinical sign of his condition prior to getting tested was having 'a slightly larger than normal head'.³⁴² Was the boy diseased or not?

According to Lorber's observations, an individual's chances to lead a 'normal' life while having a hydrocephalic brain depend on whether the condition is chronic or acute, and whether it

³³⁹ Amundson, R., 'Against normal function', *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 2000, Vol. 31, No. 1, p. 40 and p. 41

³⁴⁰ See Chapter 2.

³⁴¹ Lewin, R., 'Is Your Brain Really Necessary?', *Science*, 1980, Vol. 210, p. 1232

³⁴² *Ibid*

has developed slowly.³⁴³ In the case of the young mathematician, there was probably never a time in his life when his cranium was not filled with cerebrospinal fluid, or when the remaining brain tissue was not being pushed by the hydrostatic pressure. Coincidentally, this means that the first condition of the optimized hybrid account of disease has not been met, as the student did not present with a drastic deviation from his usual health parameters – just with a deviation from the structural standard typical for our species. He also fails the account’s second condition – he had little reason to worry about any life-altering symptoms, as shown by his academic success and his active social life. Had the boy developed the condition at a later stage of his life and in a more acute form, he may have met these criteria and been considered diseased, but based on the information we have about his case, we would have to conclude that he was, in fact, a very healthy young man.³⁴⁴

Structural abnormality clearly does not equal dysfunction in all cases, and the optimized hybrid account of disease has been created with that knowledge in mind. However, we have yet to see what implications this might have for another complex category – that of psychiatric conditions. Chapter 7 is going to introduce some problematic aspects of psychiatric nosology and diagnosis, and see how the optimized hybrid account can help introduce more thoughtfulness and conceptual clarity to the intellectual processes involved, and contribute to the resolution of some practical problems such as overdiagnosis and unwarranted medicalization.

³⁴³ Ibid, p. 1234

³⁴⁴ Readers who agreed to review an earlier draft of this chapter have pointed out that my account would also leave out congenital ‘defects’ like Down syndrome or autism, where there is no demarcation line of ‘before’ and ‘after’. I regard that as an implication of my account, rather than a problem for it. I view such ‘conditions’ as ways to be, and not as health problems – although, of course, some of them may be associated with a higher risk of morbidity; for instance, people with Down syndrome are thought to be more likely to suffer from heart disease and certain types of cancer (see Yang, Q. et al, ‘Mortality associated with Down's syndrome in the USA from 1983 to 1997: a population-based study’, *The Lancet*, 23 March 2002, Vol. 359, No. 9311, pp. 1019-1025).

7. Applications of the ‘optimized’ hybrid account. ‘Mental illness’, nosographical bias, and unwarranted pathologization – a few potential areas of reformation

‘The very concept of a distinction between physical and mental illness is but a crude convenience for classification...’³⁴⁵ ~Detre and Jarecki

‘Thomas Detre, in his article “The Future of Psychiatry,”..., expresses his view that “the mind and the brain are the same”; he adds that though psychological sensitivity is essential to diagnosis, clinical research and patient care, the future of psychiatry, and the comprehension and treatment of mental illness will be best served when mental illness is approached as a biological disorder, to be studied with criteria of ‘hard science’, not by “social pseudo scientists on semipermanent vacation from medicine.”’³⁴⁶ ~Gerard

‘Psychiatry, like beauty, appears to depend upon the eye of the beholder.’³⁴⁷ ~Lefever

7. 1. A few words on certain types of cognitive bias in disease classification.

The above quote by Lefever betrays a high level of skepticism regarding the objectivity of psychiatric diagnoses. While we may be unable to eradicate bias from human reasoning, the least we could do is increase our awareness of the way it influences clinical judgement, and educate ourselves about the non-medical factors that have helped shape diagnostic criteria in the past and present. Here I am going to show how my account can be applied to conditions from the category of ‘mental illness’ in order to highlight their complexity and serve as a reminder not to take diagnostic labels as neutral representations of reality. When used correctly, with the necessary dose of methodological skepticism and a readiness to explore

³⁴⁵ Detre, T. P., and Jarecki, H. G., *Modern Psychiatric Treatment*, Lippincott, Philadelphia, 1971, p. 75

³⁴⁶ Gerard, Donald L., ‘Chiarugi and Pinel considered: Soul’s Brain/Person’s Mind’ in *Journal of the History of the Behavioural Sciences*, Fall 1997, Vol. 33, 4, p. 402, see note number 8

³⁴⁷ Lefever, R., “‘Decision Making’ in Medical Care: Is It a Consumer Good?’, *IEA Health Unit Paper No. 8*, London, The IEA Health Unit, 1990, p. 74

the values and sociocultural meanings affecting medical thinking, the optimized hybrid account of disease can act as a safeguard against rushed, indiscriminate diagnoses. As it is designed in a way that increases our chances of detecting and resisting biased interpretations and tendentious diagnostic criteria, it may also be helpful in identifying diagnostic labels that serve covert functions of control, coercion, or social oppression. Chapter 7 is meant to serve as a demonstration how this can be achieved.

Sections 7. 1. and 7. 2. are going to lay out the sociocultural landscape of psychiatric nosology and introduce some key issues with it, such as the underrepresentation of '*mental illness*' in our mental image of prototypical diseases (in large part due to the false dichotomy between '*mental*' and physical conditions) and the difficulty of establishing reliable, stable and non-arbitrary standards as to what constitutes 'normal' or 'abnormal' behaviour. This will be done in order to expose the need for careful, context-sensitive, psychologically perspicacious assessment for each suspected case of '*mental illness*'.

Sections 7. 3. and 7. 4., then, will deal with various problematic aspects of overdiagnosis and unwarranted pathologization, before suggesting that one way to alleviate these issues would be to apply the optimized hybrid account of disease. As the account offers a more nuanced philosophical understanding of the distinct diagnostic roles that the categories of 'signs' and 'symptoms' play in a typical clinical encounter, it may be used as an aid in distinguishing between conditions which warrant medicalization and ones which do not.

To provide support for this claim, Sections 7. 5. to 7. 7. will perform a 'test run' of the optimized hybrid account of disease by applying it to four very challenging categories of conditions. The examples I will be working with are: stress (Section 7. 5.), drug addiction (Section 7. 6.), male hysteria in WWI Germany (Section 7. 7. a)), and eating disorders (Section 7. 7. b)).

As already stated, my main goal here is to provide a tactic of mitigating, rather than altogether

neutralizing, issues such as overdiagnosis and unwarranted medicalization; to detect and identify false, inadequate or otherwise problematic clinical judgements in relation to ‘*mental*’ conditions. That is, in itself, already a rather hefty and ambitious task, which must begin with a lengthy outline of the main obstacles lying ahead. One of these obstacles is the cognitive bias that is implicitly present in psychiatric nosology – especially the kind of bias stemming from the Western philosophical notion of mind-body dualism, which has dominated professional and lay intuitions alike for a very long time and despite the strong presence of reductionist intellectual movements among scientists.

There is an unwarranted, but wide-spread misconception regarding the history of ‘*mental illness*’. The general public tends to assume that ‘*mental*’ health conditions were most often treated as moral or ‘*spiritual*’, religious phenomena right up until the Enlightenment when a psychosomatic approach was taken by doctors like Vicenzio Chiarugi, Philippe Pinel³⁴⁸ and Benjamin Rush.³⁴⁹ However, apparently the idea about the organic roots of ‘*madness*’ was anticipated as early as the sixteenth century by the Swiss doctor Paracelsus in his book on *Diseases which lead to a Loss of Reason*.³⁵⁰

In more recent historical tradition, ‘*disorders falling into the province of psychiatry have been those of unknown etiology, and, as researchers have ascertained etiology, some disorders ... have often shifted to the province of neurology,*’³⁵¹ as has been observed by Detre and colleagues who point to tertiary syphilis as an example. Ultimately, this tendency has resulted in a gradual shift towards disease-centered psychiatry.³⁵² The 1980’s represent but a peak in

³⁴⁸ ‘Though Chiarugi’s biological emphases were major forbears of biological psychiatry, in Pinel’s *Traité* we find an emphasis on the theme of controlled clinical research, thoughtfully voiced, long before the late nineteenth-century developments in statistics on which today’s clinical research methodology is founded’, see Gerard, Donald L., ‘Chiarugi and Pinel considered: Soul’s Brain/Person’s Mind’ in *Journal of the History of the Behavioural Sciences*, Fall 1997, Vol. 33, 4, pp. 381-403, p. 401

³⁴⁹ ‘Rush’s magnum opus, *Medical Inquiries and Observations upon the Diseases of the Mind*, held that madness was an arterial disease, “a great morbid excitement or inflammation of the brains”’, see Beam, Alex, *Gracefully Insane: The Rise and Fall of America’s Premier Mental Hospital*, PublicAffairs, New York, 2001, p. 23-24

³⁵⁰ Ackernecht, E. H., *A Short History of Psychiatry*, Hafner, New York, 1959/1968, p. 22-23

³⁵¹ Detre, T. P., et al, ‘The Future of Psychiatry as Clinical Neuroscience’, *Academic Medicine*, Vol. 84, 4, April 2009, pp. 446-450

³⁵² I am using Richard Castillo’s expression, check the footnote below for reference.

this trend, with the publication of seminal works such as Nancy Andreasen's book *The Broken Brain: The Biological Revolution in Psychiatry* (1984) where according to Castillo 'mental disorders were conceptualized as specific biological diseases in the brain with the same ontological status as diabetes or cancer.'³⁵³

Today, with the gradual accumulation of more and more evidence to support that '*mental disorders*' are the result of 'abnormal' neural processes, it could be argued that the dichotomy mental illness-somatic illness has lived its life. Even the impaired emotional functioning³⁵⁴ that characterizes schizophrenia (which features among the most studied conditions in this category) is shown to stem from 'a disturbance of effective connectivity in the neural networks linking the midbrain and the medial prefrontal system'³⁵⁵ that may be responsible for the 'quasi absence of emotional reactions.'³⁵⁶ For instance, the results of numerous studies confirm that the amygdala acts as a 'seat' of all affective and social processing, and, if damaged – as a source of alterations in affective and social behaviour patterns.³⁵⁷ It could be the case that '*mental illnesses*' are little more than the symptoms of an 'abnormal' somatic condition, such as the presence of lesions in the brain, or a chemical imbalance. Similar conclusions about the somatic nature of '*mental disorders*' can be drawn from literature on depression, which often links anhedonia³⁵⁸ and emotional numbing to genetic vulnerabilities.³⁵⁹ The same goes for the etiology of many disorders from the schizophrenic spectrum.³⁶⁰

Based on the aforementioned evidence, adopting a position which reduces '*mental disorders*' to disorders of the brain and assigns to them a status no different than that of any other

³⁵³ Richard J. Castillo, *Culture and Mental Illness*, Brooks/Cole Publishing Company, Pacific Grove, 1997, p. 13

³⁵⁴ Gur, Raquel E. et al, 'Flat Affect in Schizophrenia: Relation to Emotion Processing and Neurocognitive Measures', *Schizophrenia Bulletin*, 2006, 32, 2, pp. 279-287

³⁵⁵ Fahim, Cherine et al, 'Brain activity during emotionally negative pictures in schizophrenia with and without flat affect: An fMRI study', *Psychiatry Research: Neuroimaging*, October 2005, 140, 1, 30, pp. 1–15

³⁵⁶ Ibid

³⁵⁷ Bliss-Moreau, Eliza et al, 'Neonatal Amygdala Lesions Result in Globally Blunted Affect in Adult Rhesus Macaques', *Behavioural Neuroscience*, December 2011, 125, 6, pp. 848-858

³⁵⁸ The inability to experience pleasure.

³⁵⁹ Chapman, L. J., Chapman, J. P., and Raulin, M. L., 'Scales for physical and social anhedonia', *Journal of abnormal psychology*, 1976, 85, 4, pp. 374–382

³⁶⁰ Brandon, Nicholas J., and Sawa, A., 'Linking neurodevelopmental and synaptic theories of mental illness through DISC1', *Neuroscience*, 2011, 12, pp. 707–722

somatic disease might seem as the most appropriate course of action, at least as far as definitions are concerned. Such a move might also, at least at first glance, have the benefit of solving the major issue of social stigmatization of '*mental illnesses*', which would arguably be less likely to generate such attitudes if it were perceived as a treatable disorder of one's biochemical make-up. Since the idea is neither that recent nor especially ground-breaking, one has to wonder why giving '*mental illness*' the same moral and ontological standing as that of somatic conditions continues to meet such stubborn resistance, as demonstrated in ordinary communicative language. We still use the same outdated and vague expressions which perpetuate myths and clash with scientific evidence: *mental* problems, *maladie mentale*,³⁶¹ *душе́вная болéзнь*,³⁶² *enfermedad mental*.³⁶³ Could that be the result of a cognitive bias distorting our judgement?

In his book on medical care, Gary Wright develops a theory about 'prototype diseases' after referring to cognitive psychologist Rosch's work in categorization and the prototype effect:

'Rosch found evidence that people rate certain members of categories as the better examples of those categories. ... For instance, subjects would more quickly identify a chicken as a true bird than an emu. ... And she found that when judging similarity, there were asymmetries: penguins were thought of as more similar to robins than robins to penguins. ... Thus prototypical category members carry more weight in determining our general sense of the category... However, typicality is not the only feature of category members which accords them differential significance in reasoning. There is also the ideal prototype, ... the stereotypical one, and then there are salient members of a class: particular ones coming to mind because of recency (you heard of them lately) or primacy (you heard of them first) effects, or something else causing them to be especially vivid in the imagination...'³⁶⁴

Likewise, schizophrenia and depression may not be exactly the first conditions that come to

³⁶¹ French phrase. Literal translation would read '*mental illness*.'

³⁶² Russian phrase. Literal translation would read '*spiritual illness*.'

³⁶³ Spanish phrase. Note that '*enfermedad*' (illness) is a general term applied to various kinds of unpleasant conditions. Native speakers of Spanish would use the word '*trastorno*' (typically in the phrase '*trastorno psicológico*') when referring to the conditions known in English as '*mental disorders*.' Nevertheless, an equivalent to the phrase '*mental illness*' does exist in the Spanish language as well, just like in the majority of other European languages.

³⁶⁴ Wright, H. G., *Means, Ends and Medical Care*, Philosophy and Medicine series, Vol. 92, Springer, Dordrecht, 2007, p. 15

mind when one is asked to name a disease. With the possible exception of psychiatrists, most persons are significantly more likely to list conditions such as cancer, diabetes, or influenza. Therefore, *somatic* conditions are the prototypical category members in this example – obviously different in terms of degrees of saliency, but definitely more influential in terms of determining our general sense of the category ‘disease’ than are *mental* conditions.

This bias, however, demonstrates just one extreme of the attitudes towards the conceptualization of ‘*mental illness*’. I intend to show that the polar opposite – to which I will refer as needless pathologization – can be just as harmful to our reasoning about disease and disease classifications.

There have been some attempts to stretch the category of disease in order to accommodate a particular type of conditions which sometimes masquerade as ‘*mental illness*’ without fitting the label properly – namely personality disorders. These conditions, which are sometimes referred to as belonging to the so-called ‘grey area,’ have been unwarrantedly thematized as part of the contemporary medical discourse. Philosophers like Papineau, for example, have expressed opinions that an absence of ‘physical disorder’ should not exclude ‘mental disorders’ from the category of illnesses.³⁶⁵ However, I am going to support the view expressed by Adshead and Sarkar, ‘it is commonly argued that personality disorder is not a mental illness, and/or that it is qualitatively different from mental disorders such as schizophrenia.’³⁶⁶

The abovementioned act of artificially extending the diagnostic label of ‘disease’ onto all kinds of ‘abnormal’ behaviour is exactly the topic of this chapter, which will present its counterproductive consequences both on a practical and a purely theoretical level. These will be discussed in more detail in Sections 7. 3. and 7. 4. Before that, in Section 7. 2. I will briefly focus on the difficulty of distinguishing between ‘normal’ and ‘abnormal’ behaviour – an issue which is widely recognized as the point of departure for all discussions of ‘*mental illness*’ and

³⁶⁵ Papineau, D., ‘Mental disorder, illness and biological dysfunction’, *Philosophy*, 1994, Vol. 37, pp. 73-82

³⁶⁶ Adshead, G. and Sarkar, J., ‘The Nature of Personality Disorder’ in *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, p. 16

behavioural problems, but which is in fact results, among other things, from an outdated and fundamentally flawed perspective on human behaviour and personality. The optimized hybrid account of health/disease presented in Chapter 6, underpinned by an understanding of the roles played by the categories of signs and symptoms in clinical judgment, will implicitly guide me in the task of exposing the main philosophical challenges encountered in the process of establishing the boundaries of 'normality' and defining the objectives of psychiatric treatment. It will also aid me in shedding more light on the issues of unwarranted pathologization and excessive medicalization, which I have promised to discuss in Sections 7. 3. and 7. 4., and draw more attention to complex middle ground cases, some examples of which will be presented in Sections 7. 5., 7. 6., and 7. 7.

7. 2. Normal vs. Abnormal.

In the previous section I rejected the somatic illness-mental illness dichotomy based on the ever-increasing evidence which reduces '*mental disorders*' to 'abnormal' neural processes. For instance, I referred to papers which claim that schizophrenia is largely due to 'a disturbance of effective connectivity in the neural networks linking the midbrain and the medial prefrontal system,'³⁶⁷ studies which suggest that brain trauma or defects could act as a source of alterations in affective and social behaviour patterns,³⁶⁸ and literature on depression which attributes certain symptoms of depression (anhedonia, emotional numbness, etc) to genetic predispositions.³⁶⁹

Based on these sources, I suggested that '*mental disorders*' be reduced to disorders of the brain and thus considered as belonging to the spectrum of somatic diseases, where they could feature as somatic diseases resulting in cognitive, emotional and behavioural symptoms.

Since I admit that there is need for means of distinguishing clearly between 'normal' behaviour

³⁶⁷ Fahim, Cherine et al, 'Brain activity during emotionally negative pictures in schizophrenia with and without flat affect: An fMRI study', *Psychiatry Research: Neuroimaging*, October 2005, 140, 1, 30, pp. 1–15

³⁶⁸ Bliss-Moreau, Eliza et al, 'Neonatal Amygdala Lesions Result in Globally Blunted Affect in Adult Rhesus Macaques', *Behavioural Neuroscience*, December 2011, 125, 6, pp. 848-858

³⁶⁹ Chapman, L. J., Chapman, J. P., and Raulin, M. L., 'Scales for physical and social anhedonia', *Journal of abnormal psychology*, 1976, 85, 4, pp. 374–382

and behaviour stemming from, or signaling for, the presence of pathology – that is, a *symptomatic* behaviour – I suggest that we use the criteria offered in the 1980's by Gibbs, according to whom such conditions are characterized by a shift from a previously satisfying balanced way of life to an unstable one dominated by a single mood or behaviour.³⁷⁰ Previously in the history of medical thinking a similar conceptualization of normality has been defended in the 1940's by Cameron, who recognized that 'the distinction between normal and abnormal personality ... must rest upon the relative adequacy of a given individual's performance in comparison with his previous level...'³⁷¹

Note that both of these theories appear to rest on an understanding of symptoms similar to the one which I have developed and outlined in Chapter 6. An important detail here is the flexibility of the concept for 'normality'. It is almost irrelevant whether the person's habitual behaviour could be considered 'normal' by the majority of people, because what really matters is whether her current condition is *symptomatic* – that is, whether it is a cause of distress to her or the people closest to her.³⁷² This should remove two well known difficulties in psychiatry:

a) The difficulty associated with defining elusive, vague terms like 'normality', which are perceived by some authors as context-dependent and socioculturally manufactured. One such example is Castillo.³⁷³ Bromley has also argued convincingly that our perception and interpretation of others' behaviour is a function of the terms and concepts acquired during the process of social learning and language learning in a particular sociocultural (and linguistic) framework.³⁷⁴ In this framework, our impression of another person's 'eccentricity' is largely

³⁷⁰ Gibbs, A., *Understanding Mental Health*, Consumers' Association and Hodder & Stoughton, London, 1986, p. 12

³⁷¹ Cameron, Norman A., *The Psychology of Behaviour Disorders: A Biosocial Interpretation*, Houghton Mifflin Company, Boston, 1947, p. 7

³⁷² Gibbs, Op. cit., p. 12

³⁷³ Castillo, Op. cit., p. 245: 'the definition of bizarreness is a cultural construction... For example, all of the Hindu yogis that I interviewed during fieldwork in India, and virtually all the Indian people who are religiously devout, believe that persons can have supernatural powers. ... To them, and to most people of Indian culture, this is not a *bizarre* belief at all but quite natural.'

³⁷⁴ Bromley, D.B., *Personal Descriptions in Ordinary Language*, William Clowes & Sons Limited, London, 1977, p.

the result of a mismatch between the qualities commonly emphasized in our society and the qualities we have attributed to the person.³⁷⁵

b) The related difficulty of defining the exact objectives of psychiatric treatment, or, as Adshead puts it, the difficulty of deciding ‘whether the object of treatment is to make people behave better; or behave more like others.’³⁷⁶ Unfortunately, this problem can be solved only partially in the manner suggested by myself and by Gibbs. It is eliminated from scenarios where treatment aims to restore a presently troubled patient’s habitual behaviour, but remains for cases where the patient has always had ‘problems’³⁷⁷ and where the question still stands whether to make her ‘better’ or make her more like others. Still, clinical care and treatment ought to be properly adapted to suit the unique needs of the individual, therefore flexible approaches that define normality more idiosyncratically, in terms of one’s habitual behaviour, may be preferable to standardized socially generated definitions.

Of course, there still remains one even greater challenge, and that is the existence of the so-called ‘grey area problems’.

7. 3. On the troublesome ‘grey area’, the problem with pathologization and the nominative-categorical problem with the term ‘personality disorder’.

Philosopher and physician Gary Wright has referred to ‘character disorders’ as a new kind of diagnostic labels featuring conditions which he describes as ‘remote from prototypical

³⁷⁵ According to Bromley, our impression relies on a process of meaningful interpretation of selectively perceived elements of the other’s behaviour and circumstances, during which we create associations with the person and (sometimes unwarrantedly) attribute to him various qualities, intentions, etc. If we are unable to organize these consistently, in a ‘meaningful system’, we ‘tend to regard *him* as inconsistent, peculiar or strange.’ See Bromley, *Op. cit.*, p. 5

³⁷⁶ Adshead and Sarkar, *Op. cit.*, p. 22

³⁷⁷ Although Adshead, for example, challenges the notion that some people are just ‘born’ with a personality disorder, calling it the ‘psychiatric version of St Augustune’s notion of original sin.’ See Adshead, G., ‘Murmurs of discontent: treatment and treatability of personality disorder’ in *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, p. 177: ‘if external events in both childhood and adulthood can shape adult personality functioning, then it is possible to understand personality disorder as an acquired, rather than an innate condition.’

diseases.’ Examples include hysterical personality disorder, sociopathy, borderline personality disorder and other types of atypical conduct where agents are often misrepresented as ill when the description that would fit their behaviour better would be that of ‘social misfits.’³⁷⁸

Two obvious – though still quite difficult to avoid – dangers here are the temptation to define ‘*mental health*’ through behavioural ‘normality’, and the temptation to resort to statistics-inspired methods of determining exactly what constitutes said ‘normality’. Both dangers have been expressed rather clearly by Wright, who notes that ‘normality’ is not an objectively identifiable state and that ‘there are problems with using abnormality as the *sine qua non* of disease, not the least of which is the obvious one: Are we going to label [exceptional people] as diseased? ... There must either be something besides abnormality which renders an exceptional trait pathological, or there must be something about the problem which makes the “abnormality” criterion sufficient.’³⁷⁹

What is more, depending on the environment and context, the ‘sufferer’s’ own ‘pathology’ may as well be her best asset. For example, people with histrionic personality disorder are good actors, and sociopaths can be excellent spies, etc.³⁸⁰ Therefore the same principle goes for all conditions: pathology is contextual and the connotation of pathology is reinforced by the condition’s strong association with symptoms, and not by its mere ‘abnormality’.³⁸¹ A further investigation of the role played by this association in ‘*mental illnesses*’ and ‘character disorders’ might be the key to understanding the distinction between the two. However, such an analysis must begin with a few clarifications.

Casting intellectual debates aside for one brief moment, let us recollect how clinical judgment – and not philosophy of medicine – operates. If a medical professional is to categorize

³⁷⁸ Wright, Op. cit., p. 68. Another author, Cameron, even defines such conditions as unsuccessful coping mechanisms directed at the high amounts of stress and anxiety experienced by the sufferer: ‘of all the behaviour disorders, *hysteria* and *compulsions* give the clearest evidence of being maladjustive techniques which reduce and sometimes eliminate otherwise intolerable anxiety tensions.’ See Cameron, Op. cit., p. 276

³⁷⁹ Wright, Op. cit., p. 47

³⁸⁰ Ibid, p. 45

³⁸¹ Ibid, p. 48

something as a disease, some conditions need to be met. There has to be some sort of contrasting pre-existing state of the organism that was present before the onset of the disease (usually identified as 'health'); the condition needs to be treatable (if not curable); last but not least, there need to be identifiable causes³⁸² for the condition. Perhaps most importantly in the case of '*mental illness*', there need to be identifiable causes that cannot be dismissed as merely parts of the 'sufferer's' personality, i.e. they cannot be character traits. For instance, the depressed person's profound misery (or apathy) is not an 'illness' per se, and treatment does not focus on the feeling (or lack thereof)³⁸³ but rather on restoring the lost balance in serotonin levels which caused it.³⁸⁴

However, unlike the case with prototypical diseases, with mild 'character disorders' there is no identifiable pre-morbid state of 'health', the primary causes have not been identified (or at least have not been identified as physical) and are manifested as a 'part of the person.' In addition, the 'sufferer' herself usually finds nothing wrong with her behaviour – one of the reasons Wright notes that 'neither legal nor medical remedies work well to resocialize these people.'³⁸⁵ This is precisely where my hybrid account of disease comes in, and where the distinction between signs and symptoms, on which it is implicitly based, would be especially helpful. Signs of deviation from an arbitrary social standard of behaviour may be a cause of concern, but it is ultimately symptoms of deviation from one's own 'standard' behaviour which lead patients to seek help. It is only once the mildly 'disordered' patient has been willingly subjected to the appropriate type of medical examination that clinical signs can be detected, investigated, and used to build a diagnosis which explains the *symptomatic* behaviour. For this to happen, the patient (or a proxy, where applicable) needs to have

³⁸² For the purpose of clarity, I suggest that the term 'identifiable' here be used in the same sense in which we apply it to physical phenomena.

³⁸³ I do not seek to downplay depression symptoms or diminish the importance of therapy in relieving said symptoms; however, in order to avoid conflating two different categories, the distinction between cause and effect needs to be highlighted through obvious examples – for instance the fact that medical treatment targets the somatic causes underlying the symptoms rather than the symptoms themselves.

³⁸⁴ An interesting comparison can be made with addiction where treatment (replacement or behavioural therapy) does the exact opposite and seeks to abolish symptomatic behaviour instead of its underlying causes. Though regardless of our definition of disease/illness, establishing addiction's status would be problematic due to the larger involvement of factors such as will power etc: 'the illness is thought to involve the "will" itself', users are seen as "battling" alcohol or drugs, but not having sufficient "will" or independence to win the "battle"', see Wright, Op. cit., p. 67

³⁸⁵ Ibid, p. 68

reflected on her symptoms and found them undesirable with regards to her physical and emotional integrity or comfort – or to her participation in society. Rather than simply stemming from her personality, they need to have posed a threat to it.

The uncertainty regarding the optimal strategies for combating ‘grey area’ problems stems from this category’s notoriously fuzzy boundaries, to which the imprecise definitions of terms like ‘personality’ have no doubt contributed. There is general agreement – both among psychiatrists and among psychologists – that personality is, at least to a certain degree, acquired, and that even inherited traits could be further developed or minimized by learning through habituation or conditioning,³⁸⁶ with close matches between trait and environment resulting in intensification of the relevant trait. For instance, people with compulsive tendencies who spend many years doing jobs which require attention to detail may become increasingly compulsive over time.³⁸⁷ Imitation is another powerful tool for acquiring and incorporating previously unused elements in one’s behavioural repertoire, as suggested by Bandura and Buss: ‘Imitation ... opens up response options that may not already be in a person’s repertoire. ... In one experiment, children watched an adult attack a Bobo doll by punching it and hitting it with a mallet; later, when given the opportunity, they copied these responses, which they had not previously used.’³⁸⁸ What this means is that, while often socially and ethically problematic, not all instances of ‘deviant’ behaviour can be considered *symptomatic*, and certainly not all instances of ‘deviant’ behaviour can be considered ‘clinical signs’ of pathology.

Grey area problems are described by Gibbs as a type of emotional problems which are ‘understandable reactions to experiences’ but which in some extreme cases could turn into ‘*mental* illness.’ They often get conflated with genuine ‘*mental* illness’ (which is somatic-based) even in their less extreme forms, due to the recent medical tendencies for overdiagnosing and exaggeration of signs – a problem whose consequences will be discussed

³⁸⁶ Buss, A. H., *Personality: Temperament, social behaviour, and the Self*, A Simon & Schuster Company, Needham Heights, 1995, p. 25

³⁸⁷ *Ibid*, p. 38

³⁸⁸ *Ibid*, p. 23

in another section of this chapter as part of the argumentation against the overuse of terms like '*mental illness*'. For now it suffices to reiterate that this particular problem can be solved by adopting the few simple criteria listed by Gibbs that may help detect the likelihood for underlying pathologies in a subject's *symptomatic* behaviour: an 'abnormal' (for this particular individual) duration of one predominating mood or behaviour; the presence of experiences that the individual herself finds difficult to interpret; the presence of behavioural and/or emotional changes unrelated to the individual's experiences; difficulties in maintaining relationships.³⁸⁹ I do not propose these criteria simply because they lend more credibility to the results from my philosophical discussion of symptoms in Chapter 6, but because they also happen to correspond to an established existential truth: with illness and disease, there is always a 'before' and an 'after'; there is always a change.

The original list of criteria compiled by Gibbs contained an additional couple of elements that I chose to omit since they applied equally well to character traits, or even to bodily disfigurements. For instance, one might find that the phrase 'the individual has a negative influence on those who surround her' also applies to disfigured people whose appearance may disturb small children, or to people who simply have a more unwelcoming personality. However, while a broad definition of health/disease may permit us to regard disfigurement as a health problem, it would be a little extreme to regard mere unattractive personalities as *symptomatic* of diseases. Similarly, the phrase 'the mood or behaviour is a source of suffering for the individual', while not applicable to some actual disorders like psychopathy,³⁹⁰ can be extended to healthy persons whose altruistic nature and dedication to others leaves them at a disadvantage, but that should not mean that these persons are disordered in any way. From now on I will refer to any such implications or claims as 'unwarranted pathologization' or 'needless pathologization'.

When dealing with the realm of '*mentality*', we should be aware of the dangers posed by

³⁸⁹ Gibbs, Op. cit., p. 12

³⁹⁰ 'These men and women don't seem to worry. Ironically, with the Age of Anxiety supposedly oppressing civilized mankind, they have been diagnosed as "deficient in anxiety."' – see Harrington, A., *Psychopaths*, Simon and Schuster, New York, 1972, p. 16

unwarranted pathologization. These dangers can be roughly grouped into two kinds of undesirable consequences depending on their presentation, which could be either on a practical or a purely theoretical level. As I have tried to show, unwarranted pathologization is, in its very essence, a problem of miscategorization, misrepresentation, and misuse of terminology. Were it obvious to more people, this type of pathologization's enormous potential for negative impact on nosography and philosophy of disease would be enough motivation in itself to make us reconsider our current indiscriminate use of the terms 'disorder'/'illness' and reserve this use for conditions of a confirmed somatic-based origin. However, this is a theoretical type of danger, which resides on a more abstract level and thus concerns fewer interests. The practical consequences of unwarranted pathologization, on the other hand, are of a more palpable nature. Therefore, I will focus on them to derive my argumentation against the overuse of mental infirmity labels and the related problem of needless medicalization – two issues which may gradually be reduced over time if we were to start applying my hybrid account of disease and the notion about the distinction between signs and symptoms.

7. 4. The disastrous consequences of excessive pathologization for society and health care services.

On a theoretical level, needless pathologization could lead to the already discussed categorical mistakes that damage the accuracy of classification, and on a practical level – to problematic approaches that jeopardize the reliability, availability and cost-effectiveness of treatment, the image of doctors, and the patient's social functioning. Since my research on accounts of disease is motivated not only by philosophical curiosity, but also by a concern for applicability to real life contexts (including health care policies, social interaction and legal matters), a large part of my argumentation against overdiagnosis and excessive medicalization will necessarily focus on the practical difficulties. Here I will present several of them without claiming that the list is in any way exhaustive. The specific regard and treatment reserved for psychiatric conditions should not be extended to any problem that could be solved by character training, education or sheer will power.³⁹¹ Emotional states, culturally determined behaviour and

³⁹¹ I do not mean to be dismissive of these tactics' significance, but simply to accentuate that their role in [medical] treatment has undergone a dramatic historical shift. Today they serve more as

personal qualities need not be labeled or classified as anything more than that by psychiatrists and therapists for the following reasons:

1) It is neither just nor productive to medicalize mere character flaws or mild behavioural ‘imperfections’ resulting from inadequate upbringing,³⁹² inability to adapt to cultural differences, or minor misunderstandings.

For instance, the quiet loner in the classroom is not necessarily suffering from ‘schizoid personality disorder’ – he may simply be more independent, ambitious and focused on his studies rather than socializing with others; analogically, the wallflower at the party is not necessarily an example of ‘avoidant personality disorder’ – she may be the result of strict religious upbringing that promoted female modesty, or she may just be naturally shy. There is a myriad of factors that may or may not have helped to shape her behaviour.

It appears that society (re)shapes human conduct by promoting certain types of behaviour while at the same time discouraging others. The latter are sometimes thematized as potential ‘clinical signs’ – that is, they become known as ‘maladjustments’, ‘deviant behaviour’, ‘eccentricities’, or ‘abnormalities’, depending on the degree to which they differ from what is accepted by the public. The former, however, become ‘norms’ and are continuously maximized in the sociocultural environment, sometimes in such subtle ways that allow them, over time, to permeate our lifestyles completely and shape our expectations from ourselves and others. In short, they not only condition us to treat situations or persons who do not fit

complementary/additional therapy and sometimes focus on problems that are not *medical* in the strictest sense. However, traditionally, they have been known as classic forms of therapy back from the time when psychological approaches were still predominant. For an interesting glimpse on how hypnotism and suggestion therapy used to be regarded during the early days of psychotherapy, see Maehle’s overview of the work of German physician Moll: Maehle, Andreas-Holger, ‘The powers of suggestion: Albert Moll and the debate on hypnosis’, *History of Psychiatry*, 2014, Vol. 25, 1, pp. 3-19

³⁹² One of the best examples is this paragraph on *induced paranoid disorders*: ‘Any child, in adopting the prevailing attitudes of his early environment, is likely to develop habitual suspicion, resentment ... and overconcern ..., if these are the habitual attitudes of his elders. For example, in an isolated mountaineer community where strangers are always treated as suspect and unwelcome, the average child will exhibit an attitude of suspicion and hostility towards strangers that would be considered pathological in the child of an ordinary rural or urban community,’ see Cameron, Op. cit., p. 439

this predictable behavioural framework with alarm, distrust, or disapproval bordering with hostility; they also open the door to unwarranted pathologization.

To deal with our own negative attitudes, we engage in processes of rationalization in which we justify them by (often falsely) attributing negative values to the persons or behaviours we reject. For instance, the fact that females exhibiting a marked disinterest in motherhood are often regarded with suspicion and dislike can be (falsely) explained on the basis of such females' supposed 'selfishness', 'cold-heartedness' and 'immaturity' – regardless of whether or not they actually possess these qualities. Similarly, 'illnesses' can be attributed, or pathologies can be 'made up' where there are none present. This would be a lot more difficult to do in the presence of strict criteria that need to be met in order for a specific characteristic or behaviour to be considered *symptomatic* of a potentially clinically significant pathology. As I have argued throughout all chapters so far, the criteria in question do not need to be 'objective' or 'culturally blind'; quite the opposite, they need to account for the presence of sociocultural influences in order to be better able to detect potential cases of unwarranted pathologization – an idea that has also been embraced by some medical practitioners. In his book from 1997, Castillo reveals the influence of socioculturally conditioned beliefs and internalized cultural ideals on people's behaviour, advising fellow clinicians to 'see the client and her eating behaviour within the total sociocultural context',³⁹³ as well as to regard sexual disorders as 'maladaptations occurring within a particular sociocultural aspect' rather than intrinsic characteristics of the patient.³⁹⁴ To him diagnosing, just like any other type of human behaviour, is culture-based, and he describes medical practice as a process in which 'indigenous clinicians assess and diagnose the problem consistent with local culture,'³⁹⁵ implying that most often certain influential sets of culturally conditioned stereotypes and expectations are the reason the 'problem' even exists in the first place. There is a fairly straightforward way to avoid, or at least diminish, the threat described by Castillo, and it involves becoming more receptive to the notion that a legitimate diagnosis requires that signs and symptoms be fully contextualized within a particular clinical case rather than a statistically

³⁹³ Castillo, Op. cit., p. 155

³⁹⁴ Ibid, p. 146

³⁹⁵ Ibid, p. 29

or socially derived 'norm'. However, the first step to that is to acknowledge our human tendencies to regard characteristics and behaviours departing from the socially accepted 'norm' rather unfavourably.

In nearly every human society, members demonstrate a notable need, even dependence, on the predictability, clarity of intentions and agreeability of others. The majority of participants have to be able to meet these needs, if a society is to continue existing as such. Therefore, to a certain degree, qualities such as personal integrity and predictability, as well as behaviours which conform to the current predominant 'norm' in a society, shape the foundations of social life. To ensure their stability, members jointly pursue ways of minimizing the number and severity of even the slightest cases of 'deviance'. As a result, individuals who exhibit different mannerisms, speech, or even appearance, are pressured into conforming, or shunned when they fail to do so. The more severe the mismatch, the bigger the need of society to exercise control over these individuals, so when these measures do not suffice to neutralize the undesirable effects of the 'deviant's' behaviour on her social group, her perceived 'issue' may be medicalized in order to give more weight to the demand that she change her ways, and to restrict the scope of her potentially 'dangerous' influence on others. As noted by Foucault, diagnosis can be turned into a powerful tool for social-political control and abuse.³⁹⁶

The 'dark' bits of psychiatry's history reveal its abusive potential as a tool of oppression over vulnerable 'deviant' minorities like gay men,³⁹⁷ and of social tyranny keeping 'in check' major, yet just as vulnerable, groups – like women.³⁹⁸ A lesser-known, but just as valid example concerns men – the situation described by Paul Lerner in his book on war neurotics. *Hysterical Men* describes the development of German psychiatry during the 'insanity boom' period between WWI-WWII – a period when economic factors dictated the idealization of war and the pathologization of men's normal emotions like fear, pity and desire for peace.³⁹⁹ Section

³⁹⁶ Foucault, M., *Madness and Civilization*, Vintage Books, London, 2006

³⁹⁷ See Bayer, R., *Homosexuality and American Psychiatry: The Politics of Diagnosis*, Princeton University Press, Princeton, 1987

³⁹⁸ See Russell, D., 'Psychiatric diagnosis and the oppression of women' in *International Journal of Social Psychiatry*, 1985 Winter, Vol. 31, 4, pp. 298-305

³⁹⁹ Lerner, P. F., *Hysterical Men: War, Psychiatry, and the Politics of Trauma in Germany, 1890-1930*, Cornell University Press, New York, 2003, p. 2

7.7. will discuss this example further in order to illustrate how psychiatry's conventions with regards to the concept of 'deviation' are, so to speak, historically contingent, which is among the reasons we need an account of disease as the one I promote – an account which defines pathological states in relation to a 'norm' set by the unique experiences and physiological properties of a particular patient, and not in relation to an arbitrary set of generalized 'norms'. The social pressure to 'fit in' can be damaging enough to an individual's welfare even without the additional stress of stigmatization associated with '*mental illness*' and 'personality disorders.' Civilized societies which value non-judgmental fair treatment ought to be striving for a safe, tension-free atmosphere. While there may still be a long way to go until humanity eradicates unfair practices like stigmatization or shaming, the least that could be done is to make sure that incorrect profiling does not add even more people to the number of victims of such practices. Therefore, it is vital that medical practitioners remember their moral duty is to promote the health and well-being of society as a whole, not to contribute to the exclusion and mistreatment of certain groups. While my optimized hybrid account of disease and the philosophical distinction between 'signs' and 'symptoms' that it is based upon do not offer any quick and easy solutions, they can certainly help cultivate the right attitude – one of psychological sensitivity, attention to cultural frame of reference, concern about the individual, and philosophical acumen.

2) It is both inaccurate and inappropriate to medicalize understandable behaviour and to promote 'treatment' for it (even when it does cause distress to the behaving subject or others). As a consequence, the public's trust and respect for medical professionals may be diminished, and some persons might become too afraid to seek help when they do develop problems.

It is tactless to present someone's grief over a lost relative as 'depression'. It is disrespectful to reduce someone's rightful fears of illegal eviction from a dishonest landlord to 'anxiety disorder'. It is unacceptable to label every child with high energy levels as a sufferer of attention deficit disorder simply because it is more convenient for teachers and parents alike to drug the child into passive obedience. What is more, it is unprofessional to demand that such people start medication, or to blame their problems on a lack of treatment.

The recent tendency in Western medicine to pathologize an increasingly wider variety of reactions and behaviours not only leads to ethical problems as the ones described in sub-section 1), it can also erode the social status and authority of practitioners, and turn away potential future patients. In a recent paper on personality disorder in adolescence, Adshead et al argue that diagnosis is a stigmatizing label which makes young adults vulnerable to rejection – an issue worsened by the unfortunate reality that diagnoses of this kind tends to “stick” and not be revised as the young person changes.⁴⁰⁰ Overdiagnosing may hint at a lack of empathy and understanding, deficits in knowledge, or dishonesty and greed. In any case, it is not hard to see why many would prefer to avoid the doctor who finds an issue with everyone. The account of disease which I have proposed is formulated in a manner that promotes genuine concern about patient well-being, and, when combined with the necessary amount of critical thinking, context-sensitivity and psychological intuition, can thus contribute to solving this problem.

3) Needless pathologization could have detrimental effects on personal responsibility and self-government.

An issue that sub-sections 1) and 2) did not address was that of personal responsibility. Contemporary science has paved the way for vigorous attempts to subject not only ‘*mental illness*,’ but also all aspects of personal subjectivity, to a complete reframing in biomedical terms. However, excessive theoretical emphasis on claims regarding the exclusively biological roots of all behaviour may be downplaying the significance of human will and the importance of personal responsibility. Let us consider how this translates for some of the practical areas where responsibility matters the most – therapeutic jurisprudence and law.

Carson and Heginbotham have argued that legal rules and procedures are social forces with enormous therapeutic or anti-therapeutic potential for affecting ‘disordered’ people – an issue to which therapeutic jurisprudence has helped promote more attention.⁴⁰¹ Two of the

⁴⁰⁰ Adshead, G. et al, ‘Personality disorder in adolescence’ in Sarkar, J. and Adshead, G. (Eds.), *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, p. 130

⁴⁰¹ Carson, D. and Heginbotham, Ch., ‘Therapeutic Jurisprudence and Psychopathy’ in Heginbotham, Ch. (Ed.), *Philosophy, Psychiatry and Psychopathy: Personal identity in mental disorder*, Ashgate Publishing Ltd, Aldershot, 2000, p. 131

more obvious effects – that of labeling (a social phenomenon which we have already discussed in Chapter 4) and that of diminished liability – are closely related, due to the considerable exculpatory scope of certain diagnostic labels.

Labeling theory, especially the works of Scheff, has shown how people often adapt their behaviour to fit the expectations that are placed upon them together with labels like ‘madness.’⁴⁰² Therefore, when convinced that they are ‘ill,’ very few members of society would remain capable and willing to accept personal responsibility for their own well-being or their actions towards others. The ‘illness’ then becomes a justification for erroneously tolerating what could only be described as thinly veiled deliberate wrongdoing.

This issue has been brilliantly captured by Thomas Szasz, who objects to people without confirmed biological malfunctions being declared as ‘ill’ simply because of the mistakes they make, and warns readers about the possibility that the use of ‘*mental illness*’ as a convenient socially acceptable excuse for deviant conduct may generate a whole ‘class of irresponsible persons.’⁴⁰³

The same problem has also been addressed in literature on the ethical, social and legal aspects of drug addiction, for instance Sporken and ten Have’s article on heroin use where the authors point out the flaws of medicalizing social and moral problems like addiction.⁴⁰⁴ Their critique reveals this strategy as both futile and fundamentally counterproductive on a social level. It is futile because it discourages rehabilitation of ‘patients’ by diminishing their sense of liability and the confidence in their own self-control. It is fundamentally counterproductive on a social level because it decreases their responsibility to others and makes them unlikely to ever contribute to society in any meaningful way.

⁴⁰² See, for example, Scheff, T. J., *Being Mentally Ill: A Sociological Theory*, Aldine Transaction, Piscataway, 1984, p. 158

⁴⁰³ Szasz, T. S. et al, ‘Mental Illness as an Excuse for Civil Wrongs’, *Journal of Nervous and Mental Disease*, August 1968, Vol. 147, Issue 2, pp. 113-123

⁴⁰⁴ Sporken, Paul and ten Have, Henk, ‘Heroin Addiction, Ethics and Philosophy of Medicine’, *Journal of Medical Ethics*, Vol. 11, No. 4 (Dec., 1985), pp. 173-177

In addition to eroding people's sense of personal responsibility and legal liability, the emphasis on their status as 'disordered' could contribute to their victimization and promote unfair treatment. There have been observations that such persons often become targets of unjust attitudes and are likely to be judged unfavourably in court proceedings. Moore has drawn attention to the matter by pointing out the paradox in situations where 'disordered' offenders can manifest as 'fearsome perpetrators and traumatized victims' at the same time.⁴⁰⁵ An account of disease like mine, which promotes an empathetic and responsible patient-centered ethics of diagnosis, highlights the possibility of decreasing or mitigating such tragic occurrences through a simple change in attitude.

4) Needless pathologization can lead to dysfunctional resource distribution in health care by focusing expenses and medical attention on cases that do not genuinely need them, and thus depriving the cases that do.

In the growing number of economically challenged countries over the globe, it is often the case that health care systems are already struggling to provide all patients with the necessary support. Any additional burden comes at the cost of cutting down certain services, or wearing out the few providers who are 'spreading themselves thin' under the pressure of unceasing demands for care.

While we may have little control over the numbers of people who develop genuine diseases every year, we could at least alleviate the pressure on health care systems by making sure we exclude needless and artificial categories from the already wide-stretched spectrum of health care receivers. Extending health care to persons who 'suffer' from what can only be described as character flaws neither helps those persons nor leaves sufficient time and resources for patients who truly need care: 'we have moved the diagnostic thresholds lower and lower, we tend to bring many more people into the fold of patienthood ... without understanding ... that

⁴⁰⁵ Moore, E., 'Personality disorder: its impact on staff and the role of supervision' in Sarkar, J. and Adshead, G. (Eds.), *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, p. 190

the marginal benefit may in fact be very marginal.⁴⁰⁶ One relatively recent example is a study from 2008 which revealed that over half of 700 patients who had received the diagnostic label of ‘bipolar disorder’ did not in fact meet the criteria for the condition.⁴⁰⁷ Other examples include the numerous cases of ADHD overdiagnosing in children, discussed in an overview of studies which was authored by American pediatricians and showed evidence of this substantial overdiagnosing’s adverse effects on education.⁴⁰⁸

Dealing with the challenges posed by overdiagnosis and unwarranted pathologization in the context of ‘*mental illness*’ is going to require complex measures, but Section 7. 4. has shown that the first steps in that direction involve acknowledging the existence of the problem, and adopting an outlook which will promote more responsible attitudes towards diagnosis, as well as a more empathetic approach to patients. One of the ways these attitudes could be cultivated involves introducing changes to the way we construe disease – this is to say that, with the right account of disease at hand, we should be able to solve significant practical problems generated by a lack of conceptual clarity. The account I have proposed in Chapter 6 is eligible for this task, due to its sensitivity to the distinction between signs and symptoms, which would increase our ability to spot diagnostic criteria or labels that are inadequately formulated, unnecessary, or redundant. While I do not claim that the optimized hybrid account of disease offers quick and easy solutions, or that it functions as an automatic detector of inadequate diagnoses, I am confident in its aptitude to function as detector of bias, and an aid in keeping track of intellectual and clinical tendencies that may lead to the production of problematic diagnoses and diagnostic labels. I also believe that, when applied critically, it would help us detect and resist diagnostic criteria and labels that have been produced artificially as a covert form of state control or social oppression, as I intend to show in Sections 7. 6. and 7. 7. Before this, Section 7. 5. will perform a ‘test run’ on my proposed account by applying it to a truly obscure group of conditions, namely the category of stress.

⁴⁰⁶ Lichtenfeld, L., ‘Book Review – Overdiagnosed. Making people sick in the pursuit of health’, *Journal of Clinical Investigation*, 1 August 2011, Vol. 121, Issue 8, pp. 2954

⁴⁰⁷ Zimmerman, M. et al., ‘Is Bipolar Disorder Overdiagnosed?’, *Journal of Clinical Psychiatry*, 2008, Vol. 69, pp. 935-940

⁴⁰⁸ LeFever, G. B. et al., ‘ADHD among American Schoolchildren: Evidence of Overdiagnosis and Overuse of Medication’, *The Scientific Review of Mental Health Practice*, Spring/Summer 2003, Vol. 2, No. 1, available online at <http://www.srmhp.org/0201/adhd.html>, last accessed on 6 December 2016, 19:39 h.

This ‘test run’ will function as a demonstration of the account’s potential to bolster conceptual clarity, both in the sphere of clinical reasoning and outside it.

7. 5. ‘Grey areas’ and the case of stress: From adaptation and external stimulus to stress as a symptom.

One of the questions that need to be addressed is where stress stands according to a disease definition which relies on the distinction between signs and symptoms. Does it classify as a disease, does it count as a symptom, or could it, perhaps, be either or both, depending on the particularities of specific cases? The answer would largely depend on the way we are going to respond to the main question: whether the concept of stress describes A) the influence of external factors, or B) the sufferer’s reaction to them. A brief historical overview of the studies and theoretical developments involved in this investigation seems to point that B), rather than A), is the case.

The 20th century brought about a significantly increased (and ever growing) awareness of the long-term ill-health risks associated with stress, especially in relation to veterans and victims of war – an example which will be discussed further in the first half of Section 7. 7. As noted by Mark Jackson,⁴⁰⁹ increasing numbers of scientists began demonstrating preoccupation with the ‘aetiological significance of emotions, adaptation, instability, and stress.’ Among them were Franz Alexander – who was certain that many among the currently unexplained diseases would be revealed as resulting from chronic distress⁴¹⁰ – as well as Noel H. M. Burke⁴¹¹ and Helen Flanders Dunbar,⁴¹² two other pioneers of psychosomatic medicine who both regarded destabilized emotional states as detrimental to health and warned their readers against the dangers of worries. The idea that ‘spiritual’ distress could result in somatic ill-health was not original, as numerous physicians had already intuitively reached the same conclusion ages

⁴⁰⁹ Jackson, M., *The Age of Stress: Science and The Search for Stability*, Oxford University Press, Oxford, 2013

⁴¹⁰ Alexander, F., *Psychosomatic Medicine: Its Principles and Applications*, W. W. Norton & Company, New York, 1965

⁴¹¹ Burke, N. H. M., ‘Some aspects of the inter-relation between bodily and mental disease’, *British Journal of Medical Psychology*, 1926, Vol. 6, pp. 110-120

⁴¹² Dunbar, H.F., *Emotions and Bodily Changes*, Columbia University Press, New York, 1935

before the first official scientific investigations into the matter. As we have seen in Chapter 3, in the philosophy of French physician Claude Bernard life meant survival by means of regulation and compensation of external influences – a theory to be further developed by biology professor Lawrence Henderson in the beginning of the 20th century. Henderson, however, made a point that biological stability was not to be understood as ‘absolute constancy’, but rather as something ‘cyclical’ and ‘adaptive’.⁴¹³ This idea was reflected in the works of many prominent later researchers, such as Hans Selye who developed an account of the so-called ‘general adaptation syndrome’. In his book *The Stress of Life*, Selye introduced the reader to a relatively simple classification where the general adaptation syndrome was ‘only the visible manifestation of stress’, and stress itself was but ‘the common denomination of all adaptive reactions in the body.’⁴¹⁴

It appears that Selye was not the sole example for this trend to equate adaptation and good health. The first half of the 20th century brought along a rather large group of authors defining health through either adaptability or homeostatic stability (or, in some cases, both). American surgeon George Crile attributed a variety of conditions, ranging from indigestion and cardiovascular disease to insanity, to ‘chronic emotional stimulation’.⁴¹⁵ Walter Bradford Cannon, who studied in the Harvard Medical School and was supervised by Henry P. Bowditch (a student of Claude Bernard’s), conducted laboratory research which successfully demonstrated a causal link between emotional reactions like fear and the activation of adrenal glands. These results led him to the firm conviction that emotional disturbances could cause both psychological and organic disorders, and therefore had to be incorporated into medical practice, especially in relation to cardiovascular disease and digestive disorders.⁴¹⁶ Scottish physician James Halliday’s work is known for articulating concerns about the stress-inducing influence of social problems like poverty or unemployment, and drawing attention to the need

⁴¹³ Henderson, L. J., *The Fitness of the Environment*, Nabu Press, Charleston, 2010

⁴¹⁴ Selye, H., *The Stress of Life*, McGraw-Hill, New York, 1956

⁴¹⁵ Crile, G. W., ‘A Mechanistic View of Psychology’, *Science*, New Series, 29 August 1913, Vol. 38, No. 974, p. 289; also see Jackson, M., ‘Perspectives on the history of disease’ in Jackson, M. (Ed.), *The Routledge History of Disease*, Routledge, New York, 2016, p. 8-9

⁴¹⁶ Cannon, W. B., ‘The role of emotions in disease’, *Annals of Internal Medicine*, 1 May 1936, Vol. 9, pp. 1453-1465

of desperate measures for solving them.⁴¹⁷ Formally echoing Selye's line of thought, the American neurologist Harold Wolff also considered stress to be a kind of reactivity or resistance to external influences, and recognized the presence of models of reaction similar to the above scheme. The main difference concerned the theoretical content: while Selye's preoccupation lay mainly within the area of physical influences, the American physician identified and positioned sociocultural factors as the primary sources of anxiety and stress-related somatic conditions: uncertainty regarding the rapidly evolving normative and social-political foundations of contemporary societies, as well as insecurities about one's own social status, sense of belonging and personal relationships were a cause of frustration and exhausting struggle which did far more than simply upset one's spirit, and caused just as much damage as the physical pressures from a cruel and demanding environment.⁴¹⁸

So should we consider stress to be a symptom rather than a kind of illness? We have already established that stress is a response of the subject (as an organism, or as a person) to challenging factors arising from without (in other words, stressors). There exists a wide variety of factors which could lead to the experience of stress; patterns in the temporal duration of stress episodes also vary, both between separate episodes experienced by the same subject, and between different subjects. The extent to which each individual is capable of tolerating stress depends on factors which are too complex and numerous, reactions are hard to predict, and health outcomes are often very difficult to causally link to stress. However, one thing is certain: virtually every kind of stress experience has the potential to satisfy at least two of the conditions I have listed in Chapter 6 as part of the criteria for symptoms. Firstly, stress can and does exercise an influence over interpersonal relationships, communication and moral constitution (including moods), therefore it does possess an ethical dimension. Secondly, stress is associated with the release of hormones like cortisol that could increase cravings for high-calorie foods and promote high sensitivity to smells, therefore it does possess an aesthetic dimension. Finally, stress, regardless of its particular manner of manifestation, comes down to a feeling that something is not right, that the body or mind is under unusual strain that needs to be alleviated – often through seeking professional medical help. This

⁴¹⁷ Halliday, J. L., *Psychosocial Medicine: A Study of the Sick Society*, William Heinemann, London, 1948

⁴¹⁸ Wolff, H. G., *Stress and Disease*, Charles C. Thomas Publisher, Springfield, 1953

means that it also satisfies the condition of ‘suggestivity’ (for lack of a better word) – that a need of intervention or change be needed. Therefore, stress could be classified as a symptom and, like with all symptoms, can be experienced in a variety of ways depending on the sources and the sufferer.

Stress, however, cannot be classified as a disease *per se*; neither can it be said to belong among the clinical signs of one, as it cannot be objectively measured and translated into a deviation from the individual’s usual health parameters. While it does feature among the diagnostic criteria for conditions such as posttraumatic stress disorder (PTSD) or acute stress disorder (ASD), it does not exhaust them, and one could easily argue that it is not the stress-related symptoms that act as obstacles to the subject’s physical and emotional comfort or her participation in society, but rather the ‘stressors’ themselves. Therefore, stress does not meet either one of the two criteria which make up the hybrid account of disease I have proposed in Chapter 6. I consider this a success, as it means that my definition is sufficiently conceptually developed not only to deal with obscure categories, but also to avoid the common problem of overinclusiveness by filtering out non-medical problems. The next section is going to test these features of my account further by applying it to the case of drug addiction, where it will perform a different task – identifying the challenges which bias and social stigmatization pose to disease classification.

7. 6. On conceptualizing substance addiction as a disease.

a) The ‘good’ and the ‘bad’: the difference in portrayal.

There are no qualitative distinctions between addiction to the widely used kinds of recreational drugs – like nicotine or alcohol – and addiction to the less popular, illegal class of drugs – like cannabis, cocaine or heroin. The behavioural patterns exhibited by addicts are similar; the health and safety risks associated with them are equally common and likely to occur (albeit allegedly different in their manifestations). However, there appears to be general agreement that certain kinds of addictions are more dangerous than others, and therefore need to be treated medically. The response of contemporary health care systems, which have widened their patient spectrum by introducing rehabilitation programmes for addicts, is more

notable for its paternalistic tendencies than it is for its effectiveness. Every year hundreds of persons labeled as systematic drug ‘abusers’ in China and the U.S. face mandatory rehabilitation as a form of punishment for their unconventional lifestyle choices. Similarly, non-users are deliberately led to believe that all forms of drug consumption constitute pathologies which need urgent corrective measures. This stereotype is reinforced by the fact that upon first glance drug addiction fits well both within the biological and the social models of disease, being both an observable inherent property of the organism and a relational property of an individual to the sociocultural context of a particular environment (insofar as ultimately it is societies who dictate which ‘addictions’ are intolerable and require intervention).

b) On the categorization of medical problems. Addiction as a ‘health problem’ vs. addiction as a ‘disease’.

The medicalization of a certain condition in itself though, be it based on solid scientific evidence, professional agreement or social postulates, is not sufficient reason to include said condition in the category of disease. As I have shown in Chapter 5, physicians deal with numerous complaints, bodily processes or manipulations which fall outside these ramifications – such as painful menstruation, childbirth, circumcision, fertility monitoring, or family planning. To present the matter in logical terms: from the judgment that a condition is conceived of as a medical problem (or can be dealt with as one) does not follow automatically that said condition is necessarily a health problem; any such induction would be a non-sequitur, not to mention an example of incorrectly derived premises (failure to provide adequate analysis and translation of relevant empirical data into the logical procedure). Consequently, since ‘disease’ is not an umbrella term for all health problems but a specific niche in the category of health problems, addiction is even less likely to fit there than in the loosely defined boundaries of general ill-health.

c) Contextualizing drug addiction within the wider framework of contemporary philosophy’s accounts of disease.

Even at first glance it becomes obvious that, with the possible exceptions of normativist accounts such as Cooper's (disease must be treatable, a 'bad' thing to have, and the afflicted person should be considered 'unlucky'⁴¹⁹) or Megone's ('incapacitating failure'⁴²⁰), the proponents of most other definitions of disease would be very keen to exclude cases where the affected person exhibits all of the following characteristics:

- She can choose to function differently (by abandoning her toxic habit);
- She consciously maintains her state through regular use of her preferred stimulant (it did not occur through any natural means, such as through mutation, or via contagion);
- She put herself in the state of being an addict (whereas persons with genuine diseases usually do not have this type of choice).

A naturalist approach is also not sure to provide adequate categorization in the case of drug addiction – or any other form of substance abuse. For instance, drug abuse would be quite problematic for Boorse's biostatistical theory in the context of societies where this behaviour is especially common (albeit still illicit). In Punjab, India, non-users would be a small minority since even school-age children enjoy consuming small opium paste balls on a regular basis. This would mean that, as long as there are no dysfunctions present among the drug-abusing majority, the condition would not be problematized as a state of disease, even if medical consensus or the opinions of the affected construed it as such.

Stereotypical hybridism, e. g. Wakefield's 'harmful dysfunction', might seem like a more plausible candidate at first. It can be expected to let drug addiction and substance abuse 'off the hook' due to the fact that they result from a very natural neurobiological mechanism present in virtually all of us.⁴²¹ Classical hybridism, though, is very likely to extend criteria such as 'dysfunction' to the domain of symptoms instead of their underlying etiology, and since

⁴¹⁹ Cooper, R., 'Disease', *Studies in History and Philosophy of Biological and Biomedical Sciences*, 2002, Vol. 33, pp. 263–282

⁴²⁰ Megone, C., 'Mental Illness, Human Function, and Values', *Philosophy, Psychiatry, and Psychology*, March 2000, Vol. 7, No. 1, pp. 45-65

⁴²¹ Herman, M. A., and Roberto, M., 'The addicted brain: understanding the neurophysiological mechanisms of addictive disorders', *Frontiers in Integrative Neuroscience*, 2015, Vol. 9, Article 18

drug addiction and substance abuse are capable of bringing about rather 'harmful' effects and 'dysfunctions', they would qualify as diseases.

A phenomenological account of illness, such as Carel's, is also quite likely to label drug addiction and substance abuse as diseases, as many of the effects which people experience after drug consumption could fit the description of a 'rift' between biological and lived body. While this description cannot be extended over to the phenomenon of drug addiction itself, it must be reminded that phenomenological accounts are centered around the concept of lived experience of illness rather than that of its underlying pathology, and are therefore highly likely to conflate the two – unlike my hybrid account.

d) Sociological dimensions of medicalization: the relationship between drug abuse and crime.

Part of the serious issues with classifying drug abuse stem from the practice's links to the criminal world – a rather unfortunate association, which is bound to influence not only any practical attempts to handle drug problems, but also any attempts to engage in non-biased philosophical reflections on drug addiction. Nevertheless, the topic of public moral perceptions offers intriguing ground for theoretical research, as it seems to suggest that our relationship to substance abuse and all afflicted persons is purely contextual, based entirely on socially constructed meanings (hence the different attitudes we demonstrate to a heroin addict and an alcoholic, for example). The public's perception of substance abusers appears to be incredibly sensitive to several factors:

- The way the substance is produced – is it an illegal, non-certified business?
- The way the substance is obtained – was it bought secretly from a shady dealer rather than a government-approved source? Did the user commit offenses in order to gain access to it, e.g. engage in theft or prostitution, etc.?
- The way the substance is consumed – does the user try to avoid getting caught while consuming the drug (presumably because there will be legal consequences)?

Typically the higher the number of questions that were answered positively, the more likely we would be to define the substance user not only as an individual of dubious moral or social status, but also as someone who is in need of medical attention. The effect of this prejudice is that illicit drug users are more likely to be labeled as 'sick' than are users of legal substances such as alcohol – despite the rather obvious similarities in the ways that both kinds of addiction habits are developed and 'fed'. As a result, illicit substance abusers are stigmatized and shamed until they become afraid to seek the help they presumably 'need', while the dangers of alcohol and nicotine are, by comparison, virtually downplayed and trivialized.

But the questions we have listed above are not the ones that need answering – they help shape our attitudes towards the substance, which are then transferred onto our attitudes towards addicts. This act of projection is a categorical mistake that could easily be avoided if we were to apply my optimized hybrid account of disease which draws on a philosophical understanding of the diagnostic roles played by the categories of signs and symptoms in clinical judgment. This account would be asking: 1) ... whether the addict exhibits clinical signs of deviation from her own usual health parameters (as opposed to clinical signs of deviation from a statistically defined average) that cannot be explained with growth, pregnancy, or aging, and are not a matter of choice; 2) ... whether the addict exhibits (or may reasonably be expected to experience) any symptoms which, if fully informed and capable of assessing her condition adequately, the addict (or a proxy) would regard as obstacles to her physical and emotional integrity and comfort, or to her participation in society. Since remaining in a state of drug addiction⁴²² is sometimes a matter of choice, the answer to the first question may be negative; and since the predominant proportion of the addict's negative social or emotional experiences are frequently a product of stigmatization rather than of her own symptoms, the answer to the second question may also be negative; most importantly, the answers to both questions will require careful interpretation of evaluative judgements. In short, the optimized hybrid account of disease has been successful in showing that including drug addiction in the category of disease may or may not be appropriate, depending on the details of the case.

⁴²² As opposed to seeking professional help in order to overcome one's addiction.

However, the next test that the account will undergo involves identifying even more complex and problematic examples of bias: the use of deliberately created, discursively supported gendered ‘*mental illness*’ labels. This practice has a long history of being used as a tool of large-scale social oppression and, occasionally, of covert state control. Two of the most interesting and challenging cases will be presented in Section 7. 7.

7. 7. The influence of sex and gender: gender norms and gender-specific discursively produced ‘*mental illnesses*’.

a) Hysterical males? Pathologization of natural emotional responses in males.

During the outbreak of WWI and the German ‘war neurotics’ hysteria, previously thought to be a female problem, came to be seen a manifestation of stress or fear experienced by the ‘constitutionally feeble’ man. Historian Paul Lerner presents the development of the German ‘war against hysteria’ and convincingly argues that male hysteria emerged as a result of a cluster of political and socioeconomic influences unique to late-nineteenth-century Germany,⁴²³ when hysteria began to be diagnosed with an ever-increasing frequency, especially in male survivors of war and railroad or factory accidents. I will use the events described by Lerner in his book *Hysterical Men* as a case study which will allow me to demonstrate how psychiatry’s theoretical apparatus does not operate in isolation from its historical and sociocultural contexts, but is instead very dependent upon them for the production of diagnostic labels, as well as for the processes of determining diagnostic criteria and treatment objectives. I will also argue that we need an account of disease that is designed with awareness of this, which could help us avoid future ‘insanity booms’ resulting from discursively produced overdiagnosis. Naturally, such an account would have to operate in conjunction with a heightened sensitivity to the issues of social control, oppression, and the disturbing potential of psychiatry to be used as a tool of disempowerment – or, in this case, of insidious manipulation meant to send people to their deaths.

⁴²³ Lerner, P. F., *Hysterical Men: War, Psychiatry, and the Politics of Trauma in Germany, 1890-1930*, Cornell University Press, New York, 2003

Historical and sociological literature often construes the phenomenon of hysteria either as a manifestation of the misogynist side of psychiatry, or as ‘a form of proto-feminist protest by disenfranchised Victorian women’, but almost never as a male problem. It is difficult to say how male hysteria should be depicted. To Elaine Showalter, for example, the hysterical soldier was a ‘wartime counterpart of the powerless Victorian woman’⁴²⁴, and she translates his psychosomatic symptoms as suppressed emotions that he would not allow himself to express due to cultural norms and restrictions. However, in psychiatric writings on male hysteria in Germany there is no explicit feminization, in fact, ‘for the great majority of psychiatrists, the operative opposition lay between healthy masculinity and a pathological lack of male behaviour’, rather than between masculinity and explicit femininity.⁴²⁵

Male hysteria is related to the so-called ‘insanity boom’ which coincided with the time when psychiatry was undergoing professionalization and Germany was moving towards modernity, and the second industrial revolution (associated with the production of steel, chemicals and pharmaceuticals) was taking place. The economic and demographic changes which went hand in hand with these three processes led to increased rates of suicide, mental illness, crime and alcoholism, which many authors, like Bonhoeffer and Gaupp, blamed on the anxiety and corrupted values of life in the big cities.

At the same time there was also a rapid expansion of rail networks, which also brought a lot of changes into European life as stunning numbers of the injured workers developed nervous maladies. The English physician John Eric Erichsen tried to explain this with his theory about posttraumatic neurosis (widely considered as a diagnostic ancestor of PTSD or posttraumatic stress disorder): he saw it as an organically induced neurosis resulting from physical trauma, lesions of the spinal cord (also known as ‘railway spine’).

⁴²⁴ Showalter, E., *The Female Malady: Women, Madness and English Culture, 1830–1980*, London, 1987, p. 167-197

⁴²⁵ Lerner, Op. cit., p. 8

Jean- Martin Charcot, however, also having observed the same disturbances in war veterans and victims of workplace incidents, decided that the real cause behind them was a combination of an 'environmental agent provocateur' and 'an inherited, constitutional disposition, or diathèse'. Charcot's theory, which gave primacy to the emotional effects of trauma, had a huge international success, becoming especially influential in neurologist circles in Germany (more specifically by inspiring the works of Nonne and Oppenheim).⁴²⁶ Then Hermann Oppenheim developed another theory (the TTN or Theory of Traumatic Neurosis) which offered two explanations for the observed symptoms.⁴²⁷ One of them merely repeated Erichsen's conclusions, while the other one was based on the purely psychological consequences of fear, shock and anxiety. Oppenheim emphasized the former, which earned him criticism from Alfred Hoche who observed that the recognition of TTN led to 'an epidemic of nervous weakness.'⁴²⁸ Since many German physicians appeared to agree, TTN fell in disfavour, mostly because of fears that it could lead to malingering or benefit fraud. That is why hysteria quickly became an attractive diagnostic alternative to traumatic neurosis since it was a diagnostic label which relied on proper somatic localization. However, the works of Gaupp and Bonhoeffer suggested that there were no objective scientific criteria for distinguishing between normal and hysterical people, as observations seemed to show that both a normal and a hysterical person would react hysterically to the same stimuli. Thus the line between normal men and hysterical men was blurred and an 'insanity boom' ensued.⁴²⁹

Around the same time, doctors began to establish and perpetuate myths about war as a cure, as well as about the perfect soldier as an ideal of masculinity. War was postulated both as a way of achieving the ideal and as a way to counteract against mental and physical degeneration, as a way of cultivating strength, discipline, courage and other valuable traits. What is more, it was presented as a cure for everything from nervous crisis to impotence.

⁴²⁶ Micale, M. S., 'Charcot and the idea of hysteria in the male: gender, mental science, and medical diagnosis in late nineteenth-century France', *Medical History*, October 1990, Vol. 34, No. 4, pp. 363-411

⁴²⁷ Holdorff, B., 'The fight for 'traumatic neurosis', 1889-1916: Hermann Oppenheim and his opponents in Berlin', *History of Psychiatry*, December 2011, Vol. 22, No. 88, Part 4, pp. 465-476

⁴²⁸ Lerner, P. F., Op. cit., p. 34

⁴²⁹ Ibid, p. 38

Warfare became 'masculine medicine' while peace was feminized.⁴³⁰ The health and masculinity ideals that prevailed during that time served as a means of manipulating men into accepting war; war was seen as a way to restore themselves to their 'rightful role'. Peace, charity and pity, as well as emotions like fear, were pathologized, and even from the distance of time, it is not difficult to infer that the main reasons behind all this were of a purely economic nature. Since war was a costly enterprise, there was an always present concern that an epidemic of 'pension hysteria' would add to the already tremendous expenses, hence Germany's vigorous opposition to the inconvenient diagnostic label of traumatic neurosis.

Building an outlook that is more mindful of the diagnostic purposes served by the 'symptoms' and 'signs' categories in clinical judgment could help us avoid unwarranted pathologization and excessive medicalization, and thereby the threat of manipulative tactics as the one presented above. This involves putting to use an account of disease capable of detecting disingenuous diagnostic criteria – i. e. diagnostic criteria that serve a function other than establishing what the individual's typical performance is like, and whether or how she has 'deviated' from that. Applying my optimized hybrid account from Chapter 6 to the case of the 'hysterical' German soldier from WWI, I would have received rather unconvincing results, as the man would not have met either of my conditions. He would not have exhibited a deviation from his typical clinical parameters, and he would not have exhibited symptoms that threaten his ability to participate in society, or his physical and emotional comfort. If anything, his reaction of fear in the face of certain death would be conducive to survival, not to mention completely understandable – perhaps much more so than if he had actually expressed a passionate desire to fight in WWI. Thus it would have been hard to accept or justify a diagnostic label which pathologizes his 'condition', even if that would have contributed to the interests of the state.

b) Pathologizing the rebellion of the oppressed woman: The case of anorexia.

While the question whether medical authorities cause the phenomena of medicalization out of rational self-interest or in an effort to respond to broader social tendencies can be a divisive

⁴³⁰ Ibid, p. 46

topic, there can be little doubt that they currently exercise an enormous influence on nearly all aspects of the lay populace's lives. The power of medical authority over non-medical problems and areas of human experience such as sexual orientation, family planning or lifestyle choices (in the respective contexts of homosexuality, childbirth, and substance consumption, among others) has been discussed extensively. Having offered examples and examined the ways in which medicalization can be subordinated to the goals of surveillance and oppression, I now turn to the ways in which it can be applied for the purposes of shutting down rebellious behaviours.

In this sub-section, I will be dealing with female eating disorders – a deeply meaningful social phenomenon, the complexity of which has traditionally been downplayed, and its crucial features – chalked up to either mere vanity or 'behavioural problems'. The hybrid account of disease presented in Chapter 6, which draws on the distinction between signs and symptoms, possesses the conceptual 'receptors' necessary for the purposes of detecting such unfair interpretations, and promotes the kind of attitude needed for resisting them. Before demonstrating how this works, however, I would like to engage in a brief analysis of the connections between corporeality, autonomy, gender roles, and health in the context of femininity. These links play an important role in Western social expectations of women, and are thus among the key factors which influence diagnostic criteria, as well as the creation of 'gendered' diagnostic labels applied to females.

It could be argued that, in Western cultures and the industrialized world, women's lives and bodies are more intimately tied to the phenomenon of medicalization. Medical surveillance accompanies or even defines many aspects of femininity and the female body: sexuality, contraception, pregnancy, childbirth, reproductive technologies, and lately even aesthetic appearances. Occasionally women reclaim their autonomy by becoming active participants in, and proponents of, medicalization as a tool that lets them control choices related to their bodies – for example in the cases of pregnancy termination rights, or when fighting for increased access to fertility treatments. However, in the context of psychiatry, which by definition involves questioning the patient's sense of reality, health care can turn into

oppression of an already vulnerable group by dismissing evidence of the *symptoms'* social aetiology.

Feminist literature has demonstrated an unprecedented level of awareness of patriarchal culture's role both in psychiatric disorders' aetiology and in their interpretation, rightfully insisting that medicine, psychiatry and psychology are by no means the only perspectives from which pathologized experiences and states could be explored. As this particular sub-section's objects of interest will be eating disorders such as bulimia and anorexia, they will be taken in all the complexity of their social and ontological ambiguity as conditions that are perceived simultaneously as gender-specific and as highly individual pathologies. However, they will also be contextualized within the broader discourse relating to patriarchy's toxic effects on feminine health and well-being, because, as I have previously argued in this chapter, psychiatry's diagnostic criteria and treatment objectives are always highly contingent upon their particular historical and sociocultural frames of reference. It is crucial that practitioners and laypersons alike maintain adequate levels of awareness of this contingency in order to detect and resist instances of overdiagnosing and excessive medicalization – a task which could be greatly facilitated by an optimized hybrid account of disease such as the one I presented in Chapter 6. As we are about to see, there are some occasions when non-compliance with treatment could conceivably be interpreted as a form of resistance to social oppression, or as a personal rebellion against the negative influences in one's private life. Therefore, I am going to suggest that localistic attempts to tie the phenomenon of eating disorders exclusively to a particular group by explaining it as gendered pathology would limit our ability to understand the wider context within which they are socially and discursively produced.⁴³¹

The sociocultural roots of eating disorders have not escaped the attention of the world's leading experts on anorexia in the 1960's: Hilde Bruch, A. H. Crisp, M. S. Palazzoli and R. Slade. The four writers have, albeit admittedly in varying degrees, managed to show that the unquestioned assumptions with which psychiatry and psychology work include the notion

⁴³¹ Malson, H., *The Thin Woman: Feminism, post-structuralism, and the social psychology of anorexia nervosa*, Routledge, New York, 1998, p. X-XI

about 'sanity'/'normality' as the ability to function in a bourgeois patriarchal culture, i.e. the ability to 'perform' as one's assigned social role unquestioningly and without hesitation, in compliance with the norms set for one's gender. Due to its implicit male-centeredness, the Western standard of 'normality' is not a gender-neutral one, hence the internalized conflict experienced by women, who attempt to fit both the man-oriented general notion of 'acceptable' behaviour and the radically different notion of 'well-adjusted' femininity. The clash between 'normality' and its apparent complete opposite – 'femininity' – produces a deep sense of inadequacy, helplessness and inability to achieve social validation as the woman struggles with demands both to be an independent self-contained individual and to center her life around meeting the needs of others, all at the same time and within the same sociocultural context. The lack of control over oneself and one's life becomes a major source of anxiety and uncertainty, surpassed only by the fear of responsibility, and both are often 'managed' through subconscious attempts to avoid existential challenges by reversing, delaying or altogether avoiding biological adulthood.

Crisp, for instance, has described some anorexic behaviours as a form of 'biological regression' to a slim child-like form, or a 'distorted biological solution to an existential problem', which has little to do with the woman's general attitude to food. She would eat if it did not affect her shape or size, he argues, explaining that the ultimate goal of anorexia is not the avoidance of food per se, but rather the 'flight back into psychobiological childhood', which protects the person from a 'maturational crisis.'⁴³² Conceptualizing eating disorders as a gender-specific phenomenon trivializes the problem by presenting it merely as every female's 'natural propensity' to develop extreme dieting habits. The negative attention is moved away from the behaviour, and onto the perpetrator; thus femininity is construed as inherently pathological and characterized by irrational self-destructive inclinations, of which the act of starving oneself is but a predictable consequence; something to be explained by virtue of the dieter's sex. Feminist accounts of the social psychology of anorexia attempt to rectify such misguided attitudes by exposing their problematic 'commonsensical assumptions'⁴³³ about self, experience, gender roles and social interactions, and by demonstrating that psychiatry

⁴³² Crisp, A. H., *Anorexia Nervosa: Let Me Be*, Academic Press, London, 1980, p. 91

⁴³³ Malson, H., Op. cit., p. X-XI

and psychology, rather than problematizing negative stereotypes, tend to take them for granted in the same shape in which they are already present and readily available in our culture. There is a palpable influence of post-structuralism present throughout nearly all examples of the literature, with many relying on additional theoretical frameworks such as psychoanalytic theory to help with their critical analysis of mainstream 'commonsensical' assumptions about the roots of anorexia, or to uncover the reasons for the obvious gender-bias in eating disorder diagnosis distribution.

The psychoanalytical approach may have been inspired by the apparent similarity between gender-biased notions of anorexia and hysteria, which has also provoked authors like Lacan and Mitchell to re-read Freud in their theorizations of masculinity and femininity, before reaching the conclusion that gender identity is ultimately 'an effect of signification and interpretation' (as noted by Lacan who firmly rejected the notion of femininity as a natural category and maintained its anti-essentialist 'symbolic position'⁴³⁴). Such interpretations facilitate Ramas's conceptualization of hysteria as a 'quasi-feminist refusal of patriarchal heterosexuality'⁴³⁵, as well as Cartesian-inspired dualistic accounts of 'anorexia as a discursive production of control'⁴³⁶, where the control exercised by the Self over her body translates into (or makes up for a lack of) control over all aspects of her life as a form both of individualistic 'self-production' and of rebellion against societal oppression: you cannot control me, only I get to make decisions about myself and my body.⁴³⁷

Indeed, hysteria and anorexia nervosa appear to have been closely linked in theoretical medical literature since as early as the nineteenth century. In 1873 Charles Lasègue's *De l'anorexie hystérique* provided one of the first accounts of anorexia, in which the condition was associated with the 'pathological contentment' which hysterical young girls derive from

⁴³⁴ Lacan, J., 'Feminine sexuality in psychoanalytic doctrine' (translation by J. Rose) in J. Mitchell and J. Rose (Eds.) *Feminine Sexuality: Jacques Lacan and the école Freudienne*, Macmillan, Basingtoke, 1982, pp. 123-136

⁴³⁵ Ramas, M., 'Freud's Dora, Dora's Hysteria' in C. Bernheimer and C. Kahane (Eds.), *In Dora's Case: Freud, hysteria, feminism*, Virago, London, 1985, pp. 149-180

⁴³⁶ Malson, H., Op. cit., p. 121

⁴³⁷ Bruch, H., *Eating Disorders: Obesity, Anorexia Nervosa, and the Person Within*, Routledge, London, 1974

becoming their concerned family members' and friends' center of attention.⁴³⁸ However, even prior to that point, nineteenth century medicine was already biased against women as a result of developments which heavily populated the clinical discourse with medical tropes such as 'gendered nerves' (female nerves were thought of as 'weaker' and more 'delicate') and the 'natural invalidism' of women (the female body was ideologically construed as 'incapable of surviving the sexual equality demanded by the suffrage movements'). This historical period's overall obsession with the then-fashionable nervous disorders entered an unholy union with the hostility towards suffrage movements, resulting in attempts to pathologize femininity as fundamentally 'sick' and 'irrational'.

Femininity's presumed biological and intellectual inferiority in relation to masculinity was supposed to justify the disempowered social role ascribed to women – lesser human beings dependent on (and therefore owned by) those who fathered or wed them as they were too 'weak' to survive on their own; second-class citizens undeserving of legal rights as they lacked the epistemic capacity to make valid judgments. As noted by Orbach over a century later, abnormal body size and eating habits have become a symbolic 'language of protest' for some of those who are not given a voice in society; a way to express feelings and positions that were otherwise impossible to spell out.⁴³⁹ This conclusion is also compatible with the mixed results that would be obtained if we were to apply my hybrid account of disease to the conditions of oppressed, 'hysterical anorexic' females in nineteenth century Western Europe. Firstly, clinical signs of deviation from the individual's typical parameters were present, but they were also sometimes the product of a conscious decision to resist control. Secondly, in some women this conscious decision had not resulted from delusion or an unrealistic body image (which would have made it *symptomatic* of an underlying pathology). Finally, the resulting symptoms, albeit eligible for medical attention themselves, were not in all cases the true source of the affected individual's inability to adapt to the demands of her life; sometimes they simply reflected this inability. My account leaves sufficient room for both types of cases, acknowledging that sometimes the nineteenth century 'hysterical anorexic' woman's

⁴³⁸ Lasègue, C., 'De l'anorexie hystérique', short excerpt published in *Journal Français de Psychiatrie*, 2009, Vol. 1, No. 32 (Anorexie-boulimie: Approche clinique et théorique), pp. 3-8

⁴³⁹ Orbach, S., *Hunger Strike: The Anorectic's Struggle as a Metaphor for Our Age*, Faber&Faber, London, 1986, p. 17, also see p. 48

disordered eating was a genuine disease, and other times – an expression of her deep unhappiness with the unfair social order.

A somewhat different perspective is that of social determinism as encountered in Slade, who attributed extreme dieting habits directly to the specific ‘ethics of body regulation’ ascribed to each socially imposed gender role via Protestant upbringing and its constant reinforcement of values like individual hard work, achievement, effort, and ability to delay gratification.⁴⁴⁰ Yet another view, expressed by Bruch, ties anorexic behaviour to a dysfunctional family dynamic where self-denial is associated with virtue and the influence of parents (especially mothers) who consistently place too many demands on the emotionally fragile daughter whilst neglecting her needs and expecting her to selflessly put them second to those of others.⁴⁴¹ However, MacSween has criticized both of the abovementioned approaches for ‘[ignoring] the social significance’ of the disorder by failing to pose (and, consequently, to answer) the question ‘what having an adult female body means in a culture which simultaneously eroticizes, degrades and devalues both women and their bodies, and how the transformation of the formally asexual child’s body into the ambiguous icon of the female body is experienced...’⁴⁴² Thus it appears that Crisp’s approach, while not particularly sensitive to the exact triggers of anorexic behaviour, still provides a more adequate understanding of the basic cycle they operate:

- 1) A problem arises which requires the Self to deal with it.
- 2) The Self experiences fear, anxiety and a pronounced desire not to face the problem.
- 3) The Self starves her body in an attempt to achieve ‘psychobiological regression’.
- 4) The Self withdraws in her child-like state and thus successfully avoids dealing with the problem, while still maintaining a minimal sense of control over her choices in life.

⁴⁴⁰ Slade, R., *The Anorexia Nervosa Reference Book: Direct and Clear Answers to Everyone’s Questions*, Harper and Rowe, New York, 1984, p. 135

⁴⁴¹ Bruch, H., *The Golden Cage: The Enigma of Anorexia*, Open Books, Wells, 1978, p. 106

⁴⁴² MacSween, M., *Anorexic Bodies: a Feminist and Sociological Perspective on Anorexia Nervosa*, Routledge London and New York, London, 1993, p. 41

This explanatory model also has the additional benefit of accounting for anorexic persons' alleged tendency to 'get worse' during times of existential crisis, work-related stress, financial problems or personal and family difficulties, which has led some scientists to believe that anorexia and anxiety disorder may be more closely related than previously thought, or even share a 'common genetic pathway'.⁴⁴³ It is also in line with the psychoanalytic model presented by Palazzoli, which views having an adult female body itself as the challenge that many anorexics would rather avoid. But potential complications such as unwanted attention, however unpleasant or common in the context of an almost pathologically 'increased visibility and objectification [of the body] within late capitalist consumer society,'⁴⁴⁴ are not the main source of the anorexic female's anxiety. Palazzoli's 'object body' theory posits the adult female form as the maturing girl's actual phobic object – a threatening joint representation of the maternal object's worst aspects (e. g., as a controlling or silencing influence).⁴⁴⁵

This 'overpowering' presence reflects the Self's traumatic past experiences caused by the mother's inadequate parenting skills, and, claims Palazzoli, produces or perpetuates 'deficient body cognition', usually in the form of a failure to recognize and meet one's own emotional and biological needs – including hunger. Perhaps even more disturbingly, mature feminine corporeality is revealed by Palazzoli to be the source of the Self's deeply-seated fear of her own sexuality and the undesirable (to the Self) passive, receptive position it entails: 'the adolescent girl ... experiences her feminine sexuality in a passive and receptive way: she is exposed to lewd looks, subjected to menstruation, about to be penetrated in sexual embraces, to be invaded by the foetus, to be suckled by a child.'⁴⁴⁶ This inactive, impersonal role is

⁴⁴³ Berg, K. C., 'Overgeneralization of Conditioned Fear as a Pathogenic Marker of Anorexia Nervosa', study verified by University of Minnesota and the Clinical and Translational Science Institute in December 2014, available online at <http://psychcentral.com/cgi-bin/ct.cgi/show/NCT02148042?term=anorexia&%20=11>, last accessed on 30 May 2015, 13:59 h

⁴⁴⁴ Strathern, A. and Lambek, M., 'Introduction Embodying Sociality: Africanist-Melanesianist Comparisons' in Strathern, A. and Lambek, M. (Eds.), *Bodies and Persons: Comparative Perspectives from Africa and Melanesia*, Cambridge University Press, Cambridge, 1998, p. 5

⁴⁴⁵ Palazzoli, M. S., *Self-starvation: From the Intrapsychic to the Transpersonal Approach to Anorexia Nervosa*, Human Context Books, Chaucer Publishing Company, London, 1974

⁴⁴⁶ *Ibid*, p. 70

experienced by the young individual as a threat to her developing autonomy, and is therefore rejected in the act of containing bodily growth to the best of one's ability.

As in other theories we have observed, in Palazzoli's work the restricted intake of nutrients is not the direct result of a genuine dislike of food or an unrealistic view of one's physique, but rather of the desire to exercise control over one's personal boundaries; again, a protest against one's disempowered state of inactivity is present. Thus it is not hard to conclude that, even if a social change may not be all it will take to control eating disorders, promoting woman-positive views and attitudes may at least help combat the feelings of inferiority and helplessness experienced by females – feelings which often trigger or perpetuate unhealthy behaviours.

The image of the female body as a passive, incomplete recipient object stems from women's secondary, inferior social positions, and is therefore ideologically and culturally shaped in the material practices of everyday oppression, rather than derived from objective realities in the physical world. Therefore society shares a collective obligation to destroy its own mythical creation – the trope of the imperfect, incapacitated female – before it even begins medicalizing and 'treating' some females' rebellious psychobiological practices such as restricted eating. The second half of Section 7. 7. has examined this issue and hinted at a potential solution – the hybrid account of disease presented in Chapter 6.

Since the account is founded on the distinction between signs and symptoms, it possesses the conceptual tools required for detecting and resisting instances of overdiagnosis and incorrect medical profiling, as well as the unfair and negative stereotypes from which they stem. However, there is a very important caveat here: in order to operate successfully, the account needs to be backed up by awareness of psychiatry's contingency upon historical and sociocultural factors – in this case, for instance, upon the complex relationship between feminine corporeality, social oppression, and gender normativity in Western and industrialized societies. No account of disease, however well developed, can function well in the absence of awareness of one's cultural frame of reference; in conditions of willful

ignorance about the way diagnostic labels are produced and applied. Acknowledging the existence of these problems is the first step, which needs to be followed by adopting a more responsible and empathetic attitude towards patients and the art of diagnosis.

7. 8. Chapter Summary.

In the present chapter I have demonstrated how in psychiatric discourse the phenomena known as '*mental illnesses*' are defined not in terms of behavioural 'abnormality' (which is but a secondary characteristic of these phenomena) but rather in terms of somatic aetiology. '*Mental illnesses*' are therefore often not viewed by psychiatrists as strictly '*mental*', and are only referred to in the described manner as 'a crude convenience for classification', as pointed out by Detre and Jarecki.⁴⁴⁷ One of the contributions of this chapter has been to show that, if that is true, then 'personality disorders'— and other examples of the so-called 'grey area' problems defined in terms of socially constructed notions of 'normality' — should not be medicalized and conflated with genuine '*mental illness*' (Sections 7. 1. and 7. 2.).⁴⁴⁸ Based on this, I have suggested that the category of 'personality disorders' with an unidentified aetiology does not belong in nosography or among the topics of medical philosophy (Section 7. 3.). I have also shown that assigning the status of diseases to 'personality disorders' may generate inequality in society, unjustifiably diminish the sense of personal responsibility, and threaten the quality and standards of health care. I have referred to the problems outlined in Section 7. 3. as the 'theoretical dangers', and to the problems outlined in Section 7. 4. as the 'practical dangers' of unwarranted pathologization.

Throughout the entire chapter, I have argued that the only way to solve these issues would be to cultivate a more responsible attitude towards diagnosis and medicalization, as well as an

⁴⁴⁷ Detre and Jarecki, Op. cit., p. 75

⁴⁴⁸ Current scientific knowledge is insufficient to determine whether (and which) 'disorders' have a somatic aetiology. The claims I have made in this chapter only apply to those of them which are, for the time being, thought not to have such aetiology. However, that in no way implies that these conditions are somehow a less legitimate cause for concern and suffering — or that they do not require intervention. The only recommendation to be drawn from the present analysis is to withhold judgements that may result in medicalization, unless and until an underlying pathology is identified (or the existence of such a pathology is strongly suspected) that could be effectively targeted by licensed psychoactive drugs, or through other conventional forms of therapy.

awareness that psychiatry's diagnostic criteria and manner of determining treatment objectives are contingent upon historical and sociocultural context. In short, what is needed is a different perspective – one that may be facilitated, at least to some extent, by an adequate account of disease, combined with a willingness to step outside the medical tendency of 'cultural blindness'.

Sections 7. 6. and 7. 7. have successfully shown that my account of disease has the potential to counteract, or at the very least identify and problematize, the phenomena of unwarranted pathologization and excessive medicalization by means of increasing our ability to detect and resist biased interpretations, or artificially imposed diagnostic criteria and labels intended to function as a covert form of state control or social oppression. Before this, in Section 7. 5. I performed a short 'test run' on my proposed account by applying it to the rather complex and obscure category of stress, in order to reveal the account's potential to deliver conceptual clarity.

8. Conclusion.

When philosophers ask what X is, they usually do not just seek to define it. They seek to provide an ‘account’ of it – to understand and explain it. The humanities’ concern with medicine, health and disease is a concern about the emotional and social aspects of these phenomena and all related or resulting practices and behaviours. It is a concern about how we think and feel about them – what our intellectual, psychological and philosophical responses to them are; how we construe, conceptualize or perceive them; how we interpret, experience or discuss them. A philosopher and scientist asking ‘What is disease?’ utter the same words, but respond to different questions. Although each answer will carry its own value, neither will suffice on its own; they will need to inform and complete each other if we are to gain full understanding of the incredibly complex phenomenon of human disease – a phenomenon which has the power to shape not only the lives of people, but also the destinies of nations. However, whereas a complete understanding would be optimal, it is neither possible nor necessary. I have shown that by identifying and highlighting the influence of values implicitly or explicitly present in all sides of the health/disease definition debate, we should be able to subjugate their transformative potential to the goal of producing a functional, non-problematic account of disease which would not only serve the purposes of policy making and clinical practice, but also those of promoting more general social goals (such as equality or empowerment of the more vulnerable segments of society, among others).

Of course, the obstacles to gaining the necessary insight are many, and a large number of them masquerade as established truths. I have addressed this issue in Chapter 2, where I have examined the dangers of failing to question science’s presumed objectivity and acknowledge the culture-specific context which produced the ideal about ‘value-free’ science or the legacy of Cartesian mind-body dualism (which continues to be deeply ingrained in Western culture, science and medicine); I have also presented evidence that, despite biomedical scientists’ and clinical practitioners’ commitment to high epistemic standards and intellectual rigor, their fields of competence are also subject to the threat of ‘intellectual infirmity’ (and thus just as likely to produce and reinforce harmful stereotypes or false information as every other area

of knowledge). Furthermore, in Chapter 5 I have argued that while a one-sided, 'objective' perspective may be practically useful in some respects, it is philosophically un insightful. In addition to the purely intellectual obstacles faced by those seeking to define disease (which manifest as implicit biases), in chapters 1, 4, and 5 I have also discussed the problematic practical implications of some of the most prominent philosophical accounts of disease currently available. For example, I have brought forward the issue of social expectations and the ways in which health/disease definitions have the potential to shape the social roles assigned to patients and practitioners (is their relationship one of cooperation, or one of control; does it take place in a context of discussion or in one of power struggles?), as well as dictate different trends in health care services delivery and consumption (should patients be passive recipients or proactive consumers in full control of their choices?). In Chapter 4, I have explained the importance of maintaining the discussion that eliminativism attempts to shut down, and outlined its potential beneficial outcomes for a society which already shows strong tendencies towards obscuring or invalidating patient perspectives. I have exposed the links between negative stereotypes (e.g. construing illness in terms of incapacity, dysfunction and failure), dismissing the cultural and emotional meaning of disease (and thereby also of the emotional and physical stress associated with some forms of treatment), and the promotion of unempathetic formats of health care and doctor-patient relationships. But first and foremost, I have delivered a profound, if somewhat unusual, critique of naturalism and eliminativism in the philosophy of medicine.

I have successfully shown that, rather than a paragon of neutrality, naturalism is another value-laden approach. This position has also been defended by Fulford⁴⁴⁹, but what makes my critique of naturalism different is how far-reaching it is - the focus of my attention does not lie simply on the flaws of some of naturalism's particular instances (i.e. the flaws of specific naturalist theories), but rather on the very cultural landscape in which naturalism was conceived and encouraged to flourish – on its history as an ideologically driven reaction against vitalism.

⁴⁴⁹ Fulford, K. W. M., "What is (mental) disease?": an open letter to Christopher Boorse', *Journal of Medical Ethics*, 2001, Vol. 27, pp. 80-85

My critique in Chapter 2 and Chapter 3, then, is directed not only at naturalism *per se*, but also more broadly at the scientific and naturalist pretense of neutrality and infallible objective knowledge, which disregards a wide array of covert biases already existing in medical thinking. As these biases often parade in the disguise of intellectual ‘legacy’ passed down from one generation of scientists and practitioners to the next, Chapter 2 has had to lay out the social and cultural mechanisms operating behind this exchange, as well as the motivation of those who participate in it – a task in which Alvan Feinstein’s theory of ‘intellectual infirmity’ in clinical judgment has been of great aid to me (Section 2. 2.). Thus I have had to address a variety of postulates in medical thinking, such as the tendency to equate biological normativity to strict scientific laws (Section 2. 3.), and the myth about science’s infallibility (Section 2. 8.).

When working on Chapter 2, I have always tried to keep my criticism balanced, fair and constructive. For instance, I have acknowledged the role of societies as enablers of dogmatic and authoritative medical models where covert bias is most likely to flourish (Section 2. 6.); I have also pointed out that some of the humanistic ideals about medicine and medical thinking are, in fact, misguided, as well as socially, practically and psychologically unrealistic (Section 2. 5.) – this includes ideals about the physician or scientist as a an endlessly insightful and empathetic figure. Additionally, I have speculated about the possibility that the seldom discussed additional purposes of medical language – such as elitist ambitions of consolidating the ‘trade’s’ reputation, or the attempt to weed out those deemed less qualified – may have contributed to the social and epistemic chasm between the lay populace on one hand, and practitioners or scientists on the other hand, thus increasing the chance of misunderstandings between the two sides (Section 2. 4.).

However, one of the most important messages of Chapter 2 was introduced at its very beginning, where I discussed medicine’s reliance on specialization, objectification, and orientation – a reliance originating from the dawn of medical professionalization, which guarantees the productivity and effective distribution of labour across all sub-fields of medicine, but also adds limitations to the scientist or practitioner’s area of theoretical

competence (Section 2. 1.). These (actually very necessary) limitations, in turn, diminish the likelihood that a significant number among the specialists in question would be fully capable – or willing – to dedicate sufficient effort to understanding the complex philosophical, sociocultural, conceptual and linguistic dimensions of their work with human diseases. Instead of treading this somewhat uncertain terrain, they focus on the seemingly predictable ‘value-free’ realm of facts and quantifiable information, where science yields the power to detect, explain and correct instances of disease by means of reducing them to ‘deviations’ from the ‘norm’.

This issue has been given more attention in Chapter 3, which has examined the historical roots of fact fetishization (Section 3. 1.), disease objectification and disease quantification, tracing them back to nineteenth century physiological theories (Section 3. 2.) which were meant to counteract the influence of vitalism and eliminate all metaphysical terms or speculations from the public discourse on medicine by proving the physicochemical nature of life phenomena (Section 3. 3.). Thus Chapters 2 and 3 have given strong reasons to question the validity of the ‘value-free science’ ideal, which naturalism appears to be implicitly based upon, and have exposed the obvious (albeit presently forgotten by many) ideological motivations that it stems from, historically.

Chapter 3 bears the additional burden of setting the groundwork for a rejection of eliminativism, as according to my interpretation, eliminativism operates on similar philosophical assumptions as naturalism: for instance, that values or subjective experiences are not central to the debate of health/disease definitions, or that they are needless ‘distractions’ which decrease the productivity of clinical decision-making.

These two arguments have been examined in more detail in Chapter 4’s Sections 4. 1., 4. 2., and 4. 4, then invalidated in Section 4. 3. and Section 4. 5., respectively. The remainder of Chapter 4 has focused on counter-arguments, for which I have relied on a wide variety of sources and disciplines exposing the powerful connection between definitions and social dynamics. Section 4. 6. has been inspired by labeling theory and draws on the notion that the

language we use can affect our social expectations of others, and influence the way we perform our own social roles. Section 4. 7. has developed these views further, and seen them crystallize into the hypothesis that rhetoric (and especially social metaphors of illness) can impact laypersons' experiences of living with disease – a hypothesis which drew on Jackie Stacey's reflections on negative stereotypes about disease, Ian Williams's work on metaphors and the 'iconography of illness', and K. Maynard's theory about medical identities.

Section 4. 8. has taken all this a step further with a detailed demonstration how the notions we hold about health and disease translate in the real life context of public health, where the effectiveness of a particular campaign is always influenced by the way health and disease are construed by the target audience (which is precisely the reason I have ended the section with the suggestion that the hidden transformative power of language and rhetoric could easily be manipulated in order to guarantee different results). This exposition has served a double function – it has cemented my refutation of eliminativism whilst also adding more power to my critique of naturalism's insistence that values can and should be excluded from the debate on health/disease definitions.

I have briefly revisited the latter critique in Chapter 5 before turning my attention to other approaches – namely normativism, hybridism, and phenomenology of illness. Just like with Chapter 4, which has dealt with eliminativism, in Chapter 5 I have drawn on my conclusions from the first three of my chapters, and using them as caveats in order to ensure a clearer point of observation that has allowed me to identify the main conceptual challenges associated with each of these approaches. I have started out with a short introduction in Section 5. 1., where I have asked readers to join me in contemplating the truly remarkable stability of lay intuitions as to which conditions belong in the category of somatic disease – intuitions which, with a few exceptions, have remained more or less unchallenged over many centuries, allowing us to agree that syphilis, for example, is a 'disease'.

In spite of bearing the title 'The chicken or the egg?', Section 5. 1. does not trap us into a philosophical vicious circle, but rather helps us escape one by highlighting the absurdity of

questioning whether a concept of 'disease' was ever present before the existence of medicine and led to the creation of the trade, or was in fact 'invented' by it. My rejection of this common false dilemma, combined with my rejection of radical post-structuralist and normativist interpretations, has provided a hint of what is to follow next in the chapter – namely a section on the importance of asking the right questions, avoiding the pressure to 'pick a side' in the discussion, and resisting the temptation to perceive or frame the health/disease definitions debate in terms of a conflict between conceptual opposites (e.g. by tying it to the fact-value dichotomy).

Confident that I have already exposed the conceptual similarities and shared historical-cultural origins of the two 'main' sides in back in Chapters 2 and 3, have used Section 5. 2. in order to propose a more productive and less intellectually misleading manner of systematizing and comparing the established approaches to health/disease definitions: grouping them based on what they consider to be a central feature of diseases, rather than based on the author's allegiance to a particular ideology. As this has been attempted previously by Christopher Boorse in his original paper 'Health as a Theoretical Concept', my next section was intended as both an overview of the paper's main idea and an attempt to recreate the format - but not the content – of Boorse's critique (Section 5. 3.); this attempt has been largely led by my desire to address particular problematic strategies (e.g. defining health purely in terms of values, construing disease in relation to medical intervention, equating health to statistical normality, making uncritical generalizations which link disease to pain and disability, or representing disease as maladaptivity, as discussed in sub-sections a), b), c), d) and e), respectively), instead of addressing the broader ideological and philosophical contexts within which they are situated.

I have criticized the strategies described in sub-sections a), b) and d) (which are usually associated with normativist and hybridist approaches) for failing to reflect 'biological normativity' – a term I have borrowed from Georges Canguilhem, which describes the way all life forms seek certain influences and states whilst avoiding others; this type of selectivity observed across all species in nature is a reliable indicator that the way we perceive the phenomena of health and disease is not purely a matter of sociocultural influences. I have also

criticized the strategies described in sub-section c) (which are usually associated with naturalist approaches) for failing to reflect the dynamic aspects of life with a disease, instead offering an inaccurate and simplistic representation of the affected organism as a passive vessel. The strategy of defining disease as a form of maladaptivity has been criticized in sub-section e) for a similar reason – its inability to account for disease as a phenomenon that involves adaptation and compensation on behalf of the affected individual.

Just like with my other chapters, I have tried to approach my work on these sub-sections as an investigative critique – a curious and appreciative analysis ultimately resulting in constructive criticism, which identifies flaws and seeks to correct them without tearing down an entire project. Virtually every attempt at defining disease that I have come across during my research has been characterized by at least some valuable insights or compelling arguments.⁴⁵⁰ The question, however, does not boil down to who has created the most philosophically astute theory *per se* – indeed, it does not even have anything to do with creating a theory at all. As I have stated – first in Chapter 1, and then once more in the conclusion of Chapter 3 – the goal is to provide a functional and relatable account of health/disease. Such an account would ‘unify’ the separated languages and practical realities of patient and practitioner without contributing to the negative stereotyping, stigmatization, social exclusion and disempowerment of persons living with disease; it would also reflect the multidimensional nature of disease as a biologically, psychologically and socially complex phenomenon, and account for the body’s ‘biological normativity’ (also known as its ability to respond selectively to external and internal states and stimuli, avoiding some and seeking out others).

Whilst incredibly helpful for such a task, philosophical finesse and precision alone could not deliver these results without the assistance of a ‘language of pain and reactivity’. That is why

⁴⁵⁰ The situation has been summed up rather well by Lennart Nordenfelt, who notes that ‘some diseases picked out by the holistic criteria will not be counted as diseases by the Boorsian ones. A person may be in pain and disabled by internal bodily causes without this condition lowering the probability of the person’s survival. But the converse may also hold, there may be diseases picked out by the biostatistical criteria which are not picked out by the holistic ones.’ See Nordenfelt, L., ‘The concepts of health and illness revisited’, *Medicine, health care, and philosophy*, March 2007, Vol. 10, No. 1, p. 9.

I have dedicated Chapter 6 to phenomenology, which I find to be better equipped in that regard as it can account for the two most neglected aspects of disease – the phenomenon of ‘biological normativity’, and the dynamic processes of equilibration, compensation and adaptation of the diseased individual. Drawing on the works of Havi Carel, Eric Cassell, Fredrik Svenaeus, Anna Luise Kirkengen, and S. Kay Toombs, I have been able to develop my argument about the reactive nature of disease further (Section 6. 1.). I have also introduced a clear-cut distinction between the categories of ‘clinical signs’ and ‘symptoms’, which could be used to upgrade Havi Carel and Elizabeth Lindsey’s theories about well-being within illness,⁴⁵¹ as well as Havi Carel and Ian James Kidd’s ideas about the philosophical role or the edifying potential of illness, respectively. These philosophical projects are relevant not only to our goal of producing a relatable, non-stigmatizing account of disease (as specified by the criteria presented in Chapters 1 and 3); they can also offer valuable guidance in the broader process of phasing out the stigma or negative stereotypes associated with disease, which is why I regard my own addition to them, however modest, as another philosophical contribution put forward by my research.

In this case, my contribution has consisted in facilitating the conceptual distinction between signs and symptoms – a distinction which has the potential to separate issues relating to biomarkers and clinical parameters (clinical signs) from issues relating to the subjective physical experiences of living with disease (symptoms), and which can thus neutralize the threat of apparent contradiction from theories about well-being in illness. As I have pointed out in Sections 6. 2. and 6. 3., a view which distinguishes between signs and symptoms is better equipped to account for the fact that biomedical parameters such as hormonal levels or bone density exist and could be examined at any time, but only acquire the status of pathological signs within the context of examination, where they become objects of scrutiny. (Section 6. 2.); it would also be better equipped to account for conditions which do not present any observable signs upon examination, such as those instances of ‘mental’ illness which are

⁴⁵¹ Both of which were introduced early on in Chapter 2 as part of the bid against the ‘deficit’ perspective often adopted by physicians.

currently still thought to lack distinct physical manifestations in spite of being accompanied by subjective symptoms (Section 6.3.).

Section 6. 4. has explained the distinction between signs and symptoms further, while Section 6. 5. has cemented it by introducing criteria for determining whether a certain subjective experience constitutes a symptom, as well as by presenting useful philosophical applications of the distinction, e.g. the reactive nature of symptoms in '*mental illness*', where they are sometimes construed by specialists as maladjustment to extreme circumstances, or as a subconscious form of defence against unacknowledged feelings of guilt, fear, discomfort, or anger.

Section 6. 6. has summarized the conclusions of Sections 6. 1. to 6. 5. and used them to construct what I consider to be an appropriate and functional hybrid account of disease relying on the following criteria: 1) ... that the patient exhibit clinical signs of deviation from her own usual health parameters (as opposed to clinical signs of deviation from a statistically defined average) that cannot be explained with growth, pregnancy, or aging, and did not result from a conscious choice to make such changes (as in the case of weight loss by liposuction or dieting, the case of low or nonexistent sperm count due to vasectomy, or the case of anovulation due to oral contraception) ; 2) ... that the patient consider her symptoms as obstacles to her physical and emotional integrity and comfort, or to her participation in society. This account's naturalist element can be observed in the first condition, which operates on the assumption that clinical signs of deviation from one's usual health parameters could point to a pathological state; this naturalist element has been successfully combined with normativist and phenomenological ones, as shown by the second condition's focus on subjective experiences and evaluative judgments. Insofar as the account has incorporated all these approaches, it can be considered an example of hybridism. In the sense that it also meets the requirements specified in the beginning of this thesis (Chapters 1 and 3), it represents an optimized version of hybridism, designed to reflect the phenomenon of 'biological normativity', bridge the communication gap between patient and practitioner, and, last but not least, present disease in rhetorically neutral terms which capture its complex

multidimensional nature without explicitly relying on negative stereotypes (such as the traditional associations with ‘harm’, ‘failure’, ‘incapacitation’, ‘deficiency’, or ‘defects’).

Instead of stopping there, in Chapter 7 I have proceeded to check how this version of hybridism applies to the context of ‘*mental illness*’, especially in relation to a few very problematic types of bias in disease classification, such as the false dichotomy mental illness-somatic illness or the underrepresentation of ‘*mental illness*’ in our intellectual schema of ‘prototype diseases’ (Section 7. 1.). As a follow-up on that, Section 7. 2. has introduced the related issues of a) drawing the line between ‘normal’ and ‘abnormal’ behaviour, and b) identifying the ‘proper’ objectives of psychiatric treatment.

Just like the problem of defining disease, both of these issues require a great deal of flexibility on our behalf: they need fair and ‘objective’ solutions, yet have been found to be highly context-sensitive. Therefore, I have tried to show that any attempt to tackle them could benefit from the optimized hybrid account of health/disease I have proposed near the end of Chapter 6, along with an improved philosophical understanding of the diagnostic roles played by the categories of signs and symptoms in clinical judgment. As the procedure of psychiatric diagnosis tends to rely predominantly on an assessment of symptoms rather than signs, I have also had to shed some light on the problems that could arise from conflating the two categories and granting all symptoms with the status of ‘clinical signs’. Thus Sections 7. 3. and 7. 4. have warned against the dangers of excessive pathologization – or the act of artificially extending the diagnostic label of ‘disease’ onto all kinds of ‘abnormal’ behaviour. This phenomenon’s counterproductive consequences for nosography and medical thinking has been pointed out in Section 7. 3., while its undesirable potential effects on society, health care services and justice have been listed in Section 7. 4. The remainder of Chapter 7 has been dedicated to various demonstrations intending to show how the account of disease proposed in Chapter 6 can be expected to contribute to the resolution of such issues.

Section 7. 5. has initiated the ‘test run’ of my account by applying it to the category of ‘stress’, in order to assess the account’s capacity to produce conceptually clear results when

introduced to a vague and loosely defined niche of conditions. After a reassuring result, my focus in next two sections has shifted onto even more challenging targets – I have looked at the medicalization of substance addiction (Section 7. 6.), and the ‘production’ of discursively shaped gendered ‘*mental illnesses*’, like the WWI ‘insanity boom’ among German men or the ‘feminization’ of anorexia (Section 7. 7.). These tasks explore my optimized hybrid account of disease’s potential as a theoretical tool – a sort of epistemic safeguard against bias. While they have not delivered neat and simple conceptual solutions, they have, at the very least, shown that a culturally and psychologically perspicacious approach to philosophical definitions of disease can play an important and productive role in combatting overdiagnosis and unwarranted medicalization. This can be achieved by means of problematizing the manner in which diagnostic labels come into existence, or by means of questioning their applicability and adequacy.

Therefore, I consider my work with the examples from Sections 7. 5. to 7. 7. a success, as it illustrates that my definition is well cut out for identifying controversial categories where the likelihood of misapplication is high; for highlighting and counteracting clinical preoccupation with non-medical issues, and for escaping the traps that unconscious bias and social stigmatization create for disease classification. Sections 7. 5. to 7. 7. have shown how the hybrid account I proposed in Chapter 6 can be expected to increase our chances of detecting and resisting biased interpretations, as well as artificially imposed diagnostic criteria and labels meant to function as undercover forms of coercion, political control, or social oppression. I have thus been successful in demonstrating the practical applicability and usefulness of my account of disease, which has a potential of expanding our conceptual arsenal against a wide array of philosophical, social and political problems.

Bibliography:

Ackernecht, E. H., *A Short History of Psychiatry*, Hafner, New York, 1959/1968

'Acute Stress Disorder Symptoms', *Psych Central*, available at <http://psychcentral.com/disorders/acute-stress-disorder-symptoms/>, last accessed on 20 November 2013, 19:19 h.

Adshead, G., 'Murmurs of discontent: treatment and treatability of personality disorder' in *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, pp. 172-188

Adshead, G. et al, 'Personality disorder in adolescence' in Sarkar, J. and Adshead, G. (Eds.), *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, pp. 118-137

Adshead, G. and Sarkar, J., 'The Nature of Personality Disorder' in *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, pp. 3-21

Agich, G. J., 'Chronic Illness and Freedom' in *Chronic Illness from Experience to Policy* (Eds. S. K. Toombs, D. Barnard, R. A. Carson), Indiana University Press, Bloomington, 1995, pp. 129-152

Alexander, F., *Psychosomatic Medicine: Its Principles and Applications*, W. W. Norton & Company, New York, 1965

Amundson, R., 'Against normal function', *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences*, 2000, Vol. 31, No. 1, pp. 33-53

Bakuwa, J., 'The Role of Laypeople in the Governance of Science and Technology', *International Journal of Humanities and Social Science*, March 2014, Vol. 4, No. 5 (1), pp. 144-150

Baron, R. J., 'An introduction to medical phenomenology: I can't hear you while I'm listening', *Annals of Internal Medicine*, 1985, Vol. 103, pp. 606-611

Bayer, R., *Homosexuality and American Psychiatry: The Politics of Diagnosis*, Princeton University Press, Princeton, 1987

Beam, Alex, *Gracefully Insane: The Rise and Fall of America's Premier Mental Hospital*, PublicAffairs, New York, 2001

Bean, S. J., 'Emerging and continuing trends in vaccine opposition website content', *Vaccine*, 2011, Vol. 29, pp. 1874-1880

Bean, William B., 'Changing Patterns of Ideas about Disease' in Rotschild, Henry R. (Ed.), *Biocultural Aspects of Disease*, Academic Press, Orlando, 1981, pp. 25-50

Berg, K. C., 'Overgeneralization of Conditioned Fear as a Pathogenic Marker of Anorexia Nervosa', study verified by University of Minnesota and the Clinical and Translational Science Institute in December 2014, available online at <http://psychcentral.com/cgi-bin/ct.cgi/show/NCT02148042?term=anorexia&%20=11>, last accessed on 30 May 2015, 13:59 h

Bernard, C., *An introduction to the study of experimental medicine*, translated by H. C. Greene, digitized by the Internet Archive in 2014, available online at https://archive.org/stream/b21270557/b21270557_djvu.txt, last accessed on 12 December 2016, 04:39 h.

Bernard, C., *La Science Expérimentale*, J.-B. Baillière, Paris, 1878

Bliss-Moreau, Eliza et al, 'Neonatal Amygdala Lesions Result in Globally Blunted Affect in Adult Rhesus Macaques', *Behavioural Neuroscience*, December 2011, Vol. 125, No. 6, pp. 848-858

Bonafini B, Pozzilli P., 'The Three Graces: Canons of Beauty or Disease Repulsion', *International Journal of Cardiology*, 22 February 2013, pp. 234-239

Boorse, C., 'A Rebuttal on Health' in Hunter, J., and Almeder, R. (Eds.), *What is disease?*, Humana Press, Totowa, pp. 1-134

Boorse, C., 'A Second Rebuttal on Health', *The Journal of Medicine and Philosophy*, December 2014, Vol. 39, No. 6, pp. 683-724

Boorse, C., 'Health as a Theoretical Concept', *Philosophy of Science*, December 1977, Vol. 44, No. 4, pp. 542-573

Boorse, C., 'On the Distinction between Disease and Illness', *Philosophy and Public Affairs*, Autumn 1975, Vol. 5, pp. 49-68

Brandon, Nicholas J., and Sawa, A., 'Linking neurodevelopmental and synaptic theories of mental illness through DISC1', *Neuroscience*, 2011, Vol. 12, pp. 707-722

Bromley, D.B., *Personal Descriptions in Ordinary Language*, William Clowes & Sons Limited, London, 1977

Brown, I. and Brown, Roy I., *Quality of Life and Disability: An Approach for Community Practitioners*, Jessica Kingsley Publishers Ltd., London, 2003

Bruch, H., *Eating Disorders: Obesity, Anorexia Nervosa, and the Person Within*, Routledge, London, 1974

- Bruch, H., *The Golden Cage: The Enigma of Anorexia*, Open Books, Wells, 1978
- Buchwald, G., *Vaccination: A Business Based on Fear*, Books on Demand, Norderstedt, 1994
- Burke, N. H. M., 'Some aspects of the inter-relation between bodily and mental disease' in *British Journal of Medical Psychology*, 1926, Vol. 6, pp. 110-120
- Burns, C. R., 'Diseases vs. Healths: some legacies in the philosophies of Modern Medical Science' in Engelhardt, H. Tr., and Spicker, S. F. (Eds.), *Evaluation and Explanation in the Biomedical Sciences*, D. Reidel Publishing Company, Dordrecht, 1975, pp. 29-47
- Bury, M., 'Chronic illness as a biographical disruption' in *Sociology of Health and Illness*, 1991, Vol. 4, pp. 167-182
- Buss, Arnold H., *Personality: Temperament, social behaviour, and the Self*, A Simon & Schuster Company, Needham Heights, 1995
- Cadden, J., *Meaning of Sex Difference in the Middle Ages: Medicine, Science and Culture*, Cambridge University Press, Cambridge, 1993
- Calnan, M. and Williams, S., 'Images of Scientific Medicine' in *Sociology of Health and Illness*, 1992, Vol. 14, pp. 233-254
- Cameron, Norman A., *The Psychology of Behaviour Disorders: A Biosocial Interpretation*, Houghton Mifflin Company, Boston, 1947
- Canguilhem, G., *The Normal and the Pathological*, Zone Books, New York, 1991
- Cannon, W. B., *Bodily Changes in Pain, Hunger, Fear and Rage*, Appleton & Company, New York, 1915
- Cannon, W. B., 'Stresses and strains of homeostasis', *American Journal of the Medical Sciences*, January 1935, Vol. 189, No. 1, pp. 13-14
- Cannon, W. B., 'The Role of Emotions in Disease', *Annals of Internal Medicine*, 1 May 1936, Vol. 9, pp. 1453-1465
- Carel, H., 'Can I Be Ill and Happy?', *Philosophia*, 2007, Vol. 35, pp. 95-110
- Carel, H., *Illness*, Acumen Publishing, 2008
- Carel, H., 'Phenomenology and its application in medicine', *Theoretical Medicine and Bioethics*, 2011, Vol. 32, pp. 33-46
- Carel, H., 'The Philosophical Role of Illness', *Metaphilosophy*, January 2014, Vol. 45, No. 1, pp. 20-40

Carson, D. and Heginbotham, Ch., 'Therapeutic Jurisprudence and Psychopathy' in Heginbotham, Ch. (Ed.), *Philosophy, Psychiatry and Psychopathy: Personal identity in mental disorder*, Ashgate Publishing Ltd, Aldershot, 2000, pp. 131-145

Carter, K. C., *The Rise of Causal Concepts of Disease: Case Histories*, Routledge, New York, 2003

Cartwright, N., 'Do the Laws of Physics state the Facts', *Pacific Philosophical Quarterly*, 1980, Vol. 61, pp. 75-84

Cassell, E. J., *The Nature of Suffering and the Goals of Medicine*, Oxford University Press, New York, 2004

Cassel, J., 'Against medical ethics: Opening the can of worms', *Journal of Medical Ethics*, 1998, Vol. 24, pp. 8-12

Castillo, R. J., *Culture and Mental Illness*, Brooks/Cole Publishing Company, Pacific Grove, 1997

Cecchinato, G., 'Form and Colour in Kant's and Fichte's Theory of Beauty' in Breazeale, D. and Rockmore, T. (Eds.), *Fichte, German Idealism, and Early Romanticism*, Rodopi, Amsterdam, 2010, pp. 63-83

Chapman, L. J., Chapman, J. P., and Raulin, M. L., 'Scales for physical and social anhedonia', *Journal of Abnormal Psychology*, 1976, Vol. 85, No. 4, pp. 374-382

Coggon, J., and Miola, J., 'Autonomy, Liberty, and Medical Decision-Making', *The Cambridge Law Journal*, November 2011, Vol. 70, No. 3, pp. 523-547

Coolidge, F. et al, 'The Heritability of Gender Identity Disorder in a Child and Adolescent Twin Sample', *Behavior Genetics*, Vol. 32, No. 4, pp. 251-257

Cooper, R., 'Aristotelian Accounts of Disease: What are they good for?', *Philosophical Papers*, Vol. 36, No. 3, pp. 427-442

Cooper, R., 'Disease', *Studies in History and Philosophy of Biological and Biomedical Sciences*, 2002, Vol. 33, pp. 263–282

Cooper, R., *Psychiatry and Philosophy of Science*, Routledge, New York, 2007

Crile, G. W., 'A Mechanistic View of Psychology', *Science*, New Series, 29 August 1913, Vol. 38, No. 974, pp. 283-295

Crile, G. W., *Origin and nature of emotions*, Saunders, Philadelphia, 1915

Crisp, A. H., *Anorexia Nervosa: Let Me Be*, Academic Press, London, 1980

Crookshank, E. M., 'Science and health' in Marvin, F. S. (Ed.), *Science and Civilization*, Oxford University Press, London, 1923, pp. 247-278

Deacon, H., 'Racism and Medical Science in South Africa's Cape Colony in the Mid- to Late Nineteenth Century' in *Osiris*, 2000, Vol. 15, Nature and Empire: Science and the Colonial Enterprise, pp. 190-206

Detre, T. P., and Jarecki, H. G., *Modern Psychiatric Treatment*, Lippincott, Philadelphia, 1971

Detre, T. P., et al., 'The Future of Psychiatry as Clinical Neuroscience', *Academic Medicine*, April 2009, Vol. 84, Vol. 4, pp. 446-450

Donard, J. W., 'Disability and the persistence of the "Normal"' in *Chronic Illness from Experience to Policy* (Eds. S. K. Toombs, D. Barnard, R. A. Carson), Indiana University Press, Bloomington, 1995, pp. 154-175

Downie, R. S. and Macnaughton, J., *Clinical Judgement: Evidence in Practice*, Oxford

University Press, Oxford, 2000

Duden, B., 'Medicine and the History of the Body: The Lady of the Court' in (Eds.) Lachmund, J. and Stollberg, G., *The Social Construction of Illness*, Franz Steiner Verlag, Stuttgart, 1992, pp. 39-53

Dunbar, Helen F., *Mind and Body: Psychosomatic Medicine*, Random House, New York, 1947

Durbach, N., "'They Might As Well Brand Us": Working-Class Resistance to Compulsory Vaccination in Victorian England', *Social History of Medicine*, 2000, Vol. 13, No. 1, pp. 45-63

Engelhardt, H. Tr., 'The disease of masturbation: values and the concept of disease', *Bulletin of the History of Medicine*, Summer 1974, Vol. 48, pp. 234-248

Ereshefsky, M., 'Defining "health" and "disease"', *Studies in History and Philosophy of Biological and Biomedical Sciences*, September 2009, Vol. 40, No. 3, pp. 221-227

Eriksen, T. E., Kirkengen, A. L. et al, 'The medically unexplained revisited', *Medicine, Health Care and Philosophy*, August 2013, Vol. 16, No. 3, pp. 587-600

Fahim, Cherine et al, 'Brain activity during emotionally negative pictures in schizophrenia with and without flat affect: An fMRI study', *Psychiatry Research: Neuroimaging*, October 2005, Vol. 140, Part 1, No. 30, pp. 1-15

Fairman, C. M., 'The case against banning the word "retard"', *Washington Post*, 14 February 2010

Feinstein, A., *Clinical Judgment*, The Williams and Wilkins Company, Baltimore, 1967

Fernando, S., *Mental Health, Race and Culture*, The MacMillan Press, London, 1991

Fissell, M. E., 'The Marketplace of Print' in Mark Jenner and Pat Wallis (Eds.) *Rethinking the Medical Marketplace*, Palgrave, London, 2007, pp. 108-132

- Foucault, M., *Madness and Civilization*, Vintage Books, London, 2006
- Foucault, M., *The Birth of the Clinic: An archaeology of medical perception*, Routledge, London, 2003
- Foulds, G. A., *Personality and Personal Illness*, Tavistock Publications, London, 1965
- Foulds, G. A., *The Hierarchical Nature of Personal Illness*, Academic Press Inc. (London) Ltd., New York, 1976
- Frank, A. W., *At the Will of the Body: Reflections on Illness*, Houghton Mifflin Company, Boston, 1991
- Freud, S., *The Problem of Anxiety*, W. W. Norton, Inc., New York, 1936
- Fulford, K. W. M., "What is (mental) disease?": an open letter to Christopher Boorse', *Journal of Medical Ethics*, 2001, Vol. 27, pp. 80-85
- Gabe, J. et al. (Eds.), *Challenging Medicine*, Routledge, London, 1994
- Gadamer, H. G., *The Enigma of Health*, Polity Press, Cambridge, 1996
- Garfield Tourney, 'Eugen Bleuler. Autistic undisciplined thinking in medicine and how to overcome it', *Journal of the History of the Behavioral Sciences*, 1973, Vol. 9, No. 4, pp. 414-416
- Gerard, Donald L., 'Chiarugi and Pinel considered: Soul's Brain/Person's Mind' in *Journal of the History of the Behavioural Sciences*, Fall 1997, Vol. 33, No. 4, pp. 381-403
- Gibbs, A., *Understanding mental health*, Consumers' Association and Hodder & Stoughton, London, 1986
- Giddens, A., *Beyond Left and Right*, Polity Press, Cambridge, 1994
- Goffman, E., *Stigma: Notes on the Management of Spoiled Identity*, Touchstone, New York, 1986
- Goldenberg, M. J., 'Public Misunderstanding of Science? Reframing the Problem of Vaccine Hesitancy', *Perspectives on Science*, 2016, Vol. 24, No. 5, pp. 552-581
- Gur, Raquel E. et al, 'Flat Affect in Schizophrenia: Relation to Emotion Processing and Neurocognitive Measures', *Schizophrenia Bulletin*, 2006, Vol. 32, No. 2, pp. 279-287
- Guyatt, G. H. et al., 'Evidence-Based Medicine: Principles for Applying the User's Guides to Patient Care', *Journal of the American Medical Association*, 13 September 2000, Vol. 284,

No. 10, pp. 1290-1295

Halbwachs, M., *Les causes du suicide*, Puf, Paris, 2002

Halliday, J. L., *Psychosocial Medicine: A Study of the Sick Society*, William Heinemann, London, 1948

Hamilton, R. P., 'The concept of health: beyond normativism and naturalism', *Journal of Evaluation in Clinical Practice*, 2010, Vol. 16., No. 2, pp. 323-329

Hari Kumar K., Baruah M. M., 'Nutritional Endocrine Disorders', *Journal of Medical Nutrition and Nutraceuticals*, 2012, Vol. 1, pp. 5-8

Harrington, A., *Psychopaths*, Simon and Schuster, New York, 1972

Harrison-Chirimuuta, R. J., 'AIDS from Africa: Western science or racist mythology?' in Cunningham and Andrews (Eds.), *Western Medicine As Contested Knowledge (Studies in Imperialism)*, Manchester University Press, Manchester, 1997, pp. 46-68

Haslanger, S. and Saul, J., 'Philosophical Analysis and Social Kinds', *Proceedings of the Aristotelian Society, Supplementary Volumes*, 2006, Vol. 80, pp. 89-143

Henderson, L. J., *The Fitness of the Environment*, Nabu Press, Charleston, 2010

Herman, M. A., and Roberto, M., 'The addicted brain: understanding the neurophysiological mechanisms of addictive disorders', *Frontiers in Integrative Neuroscience*, 2015, Vol. 9, Article 18

Herzlich, C., *Health and illness: a social psychological approach*, Academic Press, New York, 1973

Hesslow, G., 'Do we need a concept of disease?', *Theoretical Medicine*, 1993, Vol. 14, pp. 1-14

Hilgard, E. R., 'Human motives and the concept of the self', *American Psychologist*, September 1949, Vol. 4, No. 9, pp. 374-382

Hill, D., 'Depression: disease, reaction, or posture?', *The American Journal of Psychiatry*, October 1968, Vol. 125, No. 4, pp. 445-457

Holdorff, B., 'The fight for 'traumatic neurosis', 1889-1916: Hermann Oppenheim and his opponents in Berlin', *History of Psychiatry*, December 2011, Vol. 22, No. 88, Part 4, pp. 465-476

Howe, M. J., *George Sand: The Search for Love*, Kessinger Publishing LLC, Whitefish, 2005

Husserl, E., *Ideas Pertaining to a Pure Phenomenology and to a Phenomenological Philosophy, First Book: General Introduction to a Pure Phenomenology*, Martinus Nijhoff Publishers, The Hague, 1983

Hwang, W. C., *Culturally Adapting Psychotherapy for Asian Heritage Populations: An Evidence-Based Approach*, Academic Press, San Diego, 2016

Imrie, R., 'Space, place and policy regimes: the changing contours of disability and citizenship' in Soldatic, K., Morgan, H., and Roulstone, A. (Eds.), *Disability, Spaces and Places of Policy Exclusion*, Routledge, New York, 2014

Jackson, M. (Ed.), *The Routledge History of Disease*, Routledge, New York, 2016

Jackson, M., *The Age of Stress: Science and the Search for Stability*, Oxford University Press, Oxford, 2013

Jewson, N. D., 'The disappearance of the sick-man from medical cosmology', *International Journal of Epistemology*, 11 May 2009, Vol. 38, pp. 622-633

John, S., 'Why "Health" is not a Central Category for Public Health Policy', *Journal of Applied Philosophy*, April 2009, Vol. 26, No. 2, pp. 129-143

Jones, D. G., *Valuing People: Human Value in a World of Medical Technology*, Paternoster Press, Carlisle, 1999

Kant, I., *Critique of Judgment*, Simon & Schuster, New York, 1985

Kata, A., 'Anti-vaccine activists, Web 2.0, and the postmodern paradigm – An overview of tactics and tropes used online by the anti-vaccination movement', *Vaccine*, 2012, Vol. 30, pp. 3778-3789

Kata, A., 'A postmodern Pandora's box: Anti-vaccination misinformation on the Internet', *Vaccine*, 2010, Vol. 28, pp. 1709-1716

Katz, J., *The Silent World of Doctor and Patient*, Johns Hopkins University Press, 2002

Kendell, R., 'The concept of disease and its implications for psychiatry', *British Journal of Psychiatry*, 1975, Vol. 127, pp. 305-315

Kidd, I. J., 'Can Illness Be Edifying?', *Inquiry – Interdisciplinary Journal of Philosophy and Social Sciences*, 2013, Vol. 55, No. 5, pp. 496-520

Kidd, I. J., 'Transformative Suffering and the Cultivation of Virtue', draft version on www.academia.edu, last accessed on 25 November 2013, 15:01 h.

Kilby, R. J., 'Critical Thinking, Epistemic Virtue, and the Significance of Inclusion: Reflections on Harvey Siegel's Theory of Rationality', *Educational Theory*, August 2004, Vol. 54, No. 3, pp. 299–313

King, L., 'What is disease?', *Philosophy of Science*, 1954, Vol. 21, pp. 193-203

Kingma, E., 'What is it to be healthy?', *Analysis*, 2007, Vol. 67, No. 294, pp. 128-133

Kirkengen, A. L., 'Encountering Particulars: A Life in Medicine', *The Permanente Journal*, Summer 2005, Vol. 9, No. 3, pp. 19-22

Lacan, J., 'Feminine sexuality in psychoanalytic doctrine' (translation by J. Rose) in J. Mitchell and J. Rose (Eds.) *Feminine Sexuality: Jacques Lacan and the école Freudienne*, Macmillan, Basingtoke, 1982, pp. 123-136

Larson, M. S., *The Rise of Professionalism: A Sociological Analysis*, University of California

Press, 1979

Lawrence, C. 'Incommunicable Knowledge: Science, Technology and the Clinical Art in Britain 1850-1914' in *Journal of Contemporary History*, October 1985, Vol. 20, No. 4, pp. 503-520

Lawrence, C., *Medical Theory, Surgical Practice: Studies in the History of Surgery*, Routledge, London, 1992

LeFever, G. B. et al., 'ADHD among American Schoolchildren: Evidence of Overdiagnosis and Overuse of Medication', *The Scientific Review of Mental Health Practice*, Spring/Summer 2003, Vol. 2, No. 1, available online at <http://www.srmhp.org/0201/adhd.html>, last accessed on 6 December 2016, 19:39 h.

Lefever, R., "'Decision Making" in Medical Care: Is It a Consumer Good?', *IEA Health Unit Paper No. 8*, London, The IEA Health Unit, 1990, pp. 64-82

Leonelli, S., *Data-Centric Biology: A Philosophical Study*, The University of Chicago Press, Chicago, 2016

Leriche, R., *Chirurgie de la douleur*, Masson, Paris, 1940

Lerner, P. F., *Hysterical Men*, Cornell University Press, New York, 2003

Lewin, R., 'Is Your Brain Really Necessary?', *Science*, 1980, Vol. 210, pp. 1232–1234

Lichtenfeld, L., 'Book Review – Overdiagnosed. Making people sick in the pursuit of health', *Journal of Clinical Investigation*, 1 August 2011, Vol. 121, No. 8, pp. 2954

Lindsey, E., 'Health within illness: Experiences of chronically ill/disabled people', *Journal of Advanced Nursing*, Vol. 24, pp. 465–472

Locker, D., *Disability and Disadvantage: The Consequences of Chronic Illness*, Tavistock Publications Ltd., London, 1983

MacSween, M., *Anorexic Bodies: a Feminist and Sociological Perspective on Anorexia Nervosa*, Routledge London and New York, London, 1993

Maehle, Andreas-Holger, 'The powers of suggestion: Albert Moll and the debate on hypnosis', *History of Psychiatry*, 2014, Vol. 25, No. 1, pp. 3-19

Malson, H., *The Thin Woman: Feminism, post-structuralism, and the social psychology of anorexia nervosa*, Routledge, New York, 1998

Marvin, F. S. (Ed.), *Science and Civilization*, Oxford University Press, London, 1923, pp. 247-278

Maynard, K. (Ed.), *Medical Identities: Healing, Well-Being and Personhood*, Berghahn Books, 2007

McKeown, T., *The Origins of Human Disease*, Basil Blackwell, Cambridge, 1988

'Measles Cases and Outbreaks', report by the Centers for Disease Control and Prevention, available online at <https://www.cdc.gov/measles/cases-outbreaks.html>, last accessed on 12 June 2017, 12:44 h.

Megone, C., 'Aristotle's Function Argument and the Concept of Mental Illness', *Philosophy, Psychiatry, and Psychology*, September 1998, Vol. 5, No. 3, pp. 187-201

Megone, C., 'Mental Illness, Human Function, and Values', *Philosophy, Psychiatry, and Psychology*, March 2000, Vol. 7, No. 1, pp. 45-65

Megone, C., 'Mental Illness, Metaphysics, Facts and Values', *Philosophical Papers*, 2007, Vol.

36, No. 3, pp. 399-426

Merleau-Ponty, M., *The Phenomenology of Perception*, Routledge, New York, 1962

Micale, M. S., 'Charcot and the idea of hysteria in the male: gender, mental science, and medical diagnosis in late nineteenth-century France', *Medical History*, October 1990, Vol. 34, No. 4, pp. 363-411

Mishler, E. G., *The Discourse of Medicine: Dialectics of Medical Interviews*, Praeger, 1985

Moore, E., 'Personality disorder: its impact on staff and the role of supervision' in Sarkar, J. and Adshead, G. (Eds.), *Clinical topics in personality disorder*, Bell & Bain Limited, Glasgow, 2012, pp. 188-211

Morris, J., 'Impairment and Disability: Constructing an Ethics of Care That Promotes Human Rights', *Hypatia*, Autumn 2001, Vol. 16, No. 4, Part 1, pp. 1-16

Morris, J., *Pride Against Prejudice: Transforming Attitudes to Disability*, The Women's Press Ltd., London, 1991

Nordenfelt, L., 'The concepts of health and illness revisited', *Medicine, health care, and philosophy*, March 2007, Vol. 10, No. 1, pp. 5-10

Oliver, M., 'The social model of disability: thirty years on', *Disability and Society*, 2013, Vol. 28, No. 7, pp. 1024-1026

Orbach, S., *Hunger Strike: The Anorectic's Struggle as a Metaphor for Our Age*, Faber&Faber, London, 1986

Paget, S., *Ambroise Paré and his times, 1510-1590*, G. P. Putnam's Sons, New York, 1897

Palazzoli, M. S., *Self-starvation: From the Intrapsychic to the Transpersonal Approach to Anorexia Nervosa*, Human Context Books, Chaucer Publishing Company, London, 1974

Palm-Meinders, I. et al, 'Structural Brain Changes in Migraine', *Journal of the American Medical Association*, 2012, Vol. 308, No. 18, pp. 1889-1896

Papineau, D., 'Mental disorder, illness and biological dysfunction', *Philosophy*, 1994, Vol. 37, pp. 73-82

Paterson, R. G., 'The Health of Towns Association in Great Britain 1844-1849: An Exposition of the Primary Voluntary Health Society in the Anglo-Saxon Public Health Movement', *Bulletin of the History of Medicine*, 1 January 1948, Vol. 22, pp. 373-402

Pinkard, T., *Hegel: A Biography*, Cambridge University Press, Cambridge, 2000

Porter, R., *Blood and Guts: A Short History of Medicine*, W. W. Norton & Company, New York, 2004

Porter, R., *The Greatest Benefit to Mankind: A Medical History of Humanity from Antiquity to the Present*, Fontana Press, London, 1997

Preamble to the Constitution of the World Health Organization as adopted by the International Health Conference, New York, 19-22 June, 1946; signed on 22 July 1946 by the representatives of 61 States (*Official Records of the World Health Organization*, No. 2, p. 100) and entered into force on 7 April 1948

Radley, A., and Billig, M., 'Accounts of health and illness: Dilemmas and representations', *Sociology of Health and Illness*, March 1996, Vol. 18, No. 2, pp. 220-240

Radley, A. and Green, R., 'Illness as adjustment: a methodology and conceptual framework', *Sociology of Health and Illness*, Vol. 9, No. 2, 1987, pp. 179-207

Ramas, M., 'Freud's Dora, Dora's Hysteria' in C. Bernheimer and C. Kahane (Eds.), *In Dora's Case: Freud, hysteria, feminism*, Virago, London, 1985, pp. 149-180

Ratcliffe, M., 'Varieties of Temporal Experience in Depression', *Journal of Medicine and Philosophy*, Vol. 37, No. 2, pp. 114-138

Reiser, S. J., *Medicine and the Reign of Technology*, Cambridge University Press, Cambridge, 1990

Renan, E., Bert, P., Moreau, A., *L'oeuvre de Claude Bernard*, J. B. Baillièrre et fils, Paris, 1881

Reznek, L., *The Nature of Disease*, Routledge, London, 1987

Rosenthal, M. M., *The Incompetent Doctor: Behind Closed Doors*, Open University Press, Buckingham, 1995

Roulstone, A. and Prideaux, S., *Understanding Disability Policy*, The Policy Press, Bristol, 2012

Russell, D., 'Psychiatric diagnosis and the oppression of women' in *International Journal of Social Psychiatry*, Winter 1985, Vol. 31, No. 4, pp. 298-305

Sathyanarayana Rao, T. S. and Andrade, Ch., 'The MMR vaccine and autism: Sensation, refutation, retraction, and fraud', *Indian Journal of Psychiatry*, April-June 2011, Vol. 53, No. 2, pp. 95-96

Sayers, J., *Biological Politics: feminist and anti-feminist perspectives*, Tavistock, London, 1982

Scheff, T. J., *Being Mentally Ill: A Sociological Theory*, Aldine Transaction, Piscataway, 1984

Sherwin, E. H., 'Measles in Germany: Past, Present, and Future of Outbreaks and

Vaccination', *University of Tennessee Honors Thesis Projects*, 2016

Schott, G. D., 'The Sick Dürer – a Renaissance prototype pain map', article available online at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC535996/>, last accessed on 15 April 2013, 17:36 h.

Showalter, E., *The Female Malady: Women, Madness and English Culture, 1830–1980*, London, 1987

Sedgwick, P., *Psycho Politics*, Pluto Press, London, 1982

Seedhouse, D., 'Against medical ethics: a philosopher's view', *Medical Education*, 1991, Vol. 25, pp. 280-282

Selye, H., 'The General Adaptation Syndrome', *Journal of Clinical Endocrinology*, 1946, Vol. 6, pp. 117-231

Selye, H., *The Stress of Life*, McGraw-Hill, New York, 1956

Sharma, U., *Complementary Medicine Today: Practitioners and Patients*, Routledge, 1991

Sholl, J., 'Putting phenomenology in its place: some limits of a phenomenology of medicine', *Theoretical Medicine and Bioethics*, 2015, Vol. 36, pp. 391-410

Shweder, R. A. and LeVine, R. A. (Eds.) *Culture Theory: Essays on Mind, Self, and Emotion*, Cambridge University Press, Cambridge, 1984

Siegel, H., *Educating Reason: Rationality, Critical Thinking, and Education*, Routledge, New York, 1988

Simon, J. R., 'Medical Ontology' in Fred Gifford (Ed.) *Philosophy of Medicine*, New Holland,

Oxford, 2011, pp. 65-114

Slade, R., *The Anorexia Nervosa Reference Book: Direct and Clear Answers to Everyone's Questions*, Harper and Rowe, New York, 1984

Smedley, B. D. et al, *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*, The National Academies Press, Washington, 2003

Smith, D. W., *Husserl*, Routledge, London, 2007

Snow, H., 'Proclivity of women to cancerous diseases and to certain benign tumours', a lecture delivered at the Cancer Hospital in London on 6 February 1891, available online at https://archive.org/stream/b20397434/b20397434_djvu.txt, last accessed on 15 October 2015, 17:04 h.

Sobo, E. J., and Loustaunau, M. O., *The Cultural Context of Health, Illness, and Medicine*, Praeger, Santa Barbara, 2010

Sontag, S., *Illness as Metaphor*, Farrar Straus & Giroux, New York, 1988,

Spencer, H., *Principles of Psychology*, Longman, Brown, Green, and Longmans, London, 1855, available online at <http://oll.libertyfund.org/titles/1394>, last accessed on 15 October 2015, 17:10 h.

Spitzer, R. L., 'Harmful dysfunction and the DSM definition of mental disorder', *Journal of Abnormal Psychology*, August 1999, Vol. 108, No. 3, pp. 430-432

Sporcken, Paul and ten Have, Henk, 'Heroin Addiction, Ethics and Philosophy of Medicine', *Journal of Medical Ethics*, December 1985, Vol. 11, No. 4, pp. 173-177

Stacey, J., *Teratologies: A Cultural Study of Cancer*, Routledge, London, 1997

Strathern, A. and Lambek, M. (Eds.), *Bodies and Persons: Comparative Perspectives from Africa and Melanesia*, Cambridge University Press, Cambridge, 1998

Strong, P., 'Sociological imperialism and the medical profession: a critical examination of the thesis of medical imperialism', *Social Science and Medicine*, 1979, Vol. 13 A, No. 2, pp. 199-216

Sutte, R., 'The social construction of illness in the Early Modern period' in Lachmund, J. and Stollberg, G. (Eds.), *The Social Construction of Illness*, Stuttgart: Steiner, 1992

Svenaesus, F., 'Anorexia Nervosa and the Body Uncanny: A Phenomenological Approach', *Philosophy, Psychiatry, and Psychology*, March 2013, Vol. 20, No. 1, pp. 81-91

Svenaesus, F., 'The phenomenology of suffering in medicine and bioethics', *Theoretical Medicine and Bioethics*, December 2014, Vol. 35, pp. 407-420

Szasz, T. S. et al, 'Mental Illness as an Excuse for Civil Wrongs', *Journal of Nervous and Mental Disease*, August 1968, Vol. 147, No. 2 , pp. 113-123

Taylor, F. K., 'The medical model of the disease concept', *British Journal of Psychiatry*, 1976, Vol. 128, pp. 588-594

Temkin, O., 'The Role of Surgery in the Rise of Modern Medical Thought', *Bulletin of the History of Medicine*, 1951, Vol. 25, pp. 248-259

Tomes, N., *The Gospel of Germs: Men, women, and the Microbe in American Life*, Harvard University Press, Cambridge (Mass.), 1998

Toombs, S. K., 'The Meaning of Illness: A Phenomenological Approach to the Patient-Physician Relationship', *The Journal of Medicine and Philosophy*, 1987, Vol. 12, pp. 219-240

Trostle, J., 'Anthropology and Epidemiology in the Twentieth Century: A Selective History of Collaborative Projects and Theoretical Affinities, 1920 to 1970', in Janes, C. R. (Ed.), *Anthropology and Epidemiology: Interdisciplinary Approaches to the Study of Health and Disease*, D. Reidel Publishing Company, Dordrecht, 1986, pp. 59-94

Tyreman, S., 'Values in complementary and alternative medicine', *Medicine, Health Care and Philosophy*, May 2011, Vol. 12, No. 2, pp. 209-217

van den Hof, S. et al, 'Measles outbreak in a community with very low vaccine coverage, the Netherlands', *Emerging Infectious Diseases*, 2001, Vol. 7, No. 3, pp. 593-597

Waddington, I., *The Medical Profession in the Industrial Revolution*, Gill & Macmillan, Dublin, 1984

Wakefield, J. C., 'The concept of mental disorder: diagnostic implications of the harmful dysfunction analysis', *World Psychiatry*, October 2007, Vol. 6, No. 3, pp. 149-156

Wakefield, J. C., 'The concept of mental disorder: On the boundary between biological facts and social values', *American Psychologist*, 1992, Vol. 47, No. 3, pp. 373-388

Watzlawick, P., 'Self-fulfilling Prophecies' in O'Brien, J. (Ed.), *The Production of Reality: Essays and Readings on Social Interaction*, Sage Publications Ltd., London, 2011, pp. 392-408

Wear, A., 'Medicine in Early Modern Europe 1500-1700' in Lawrence I. C. et al, *The Western Medical Tradition 800 BC to AD 1800*, Cambridge University Press, Cambridge, 1995

Weisz, G., 'The Emergence of Medical Specialization in the Nineteenth Century', *Bulletin of the History of Medicine*, Fall 2003, Vol. 77, No. 3, pp. 536-574

Wicks, E., 'The Right to Refuse Medical Treatment under the European Convention on

Human Rights', *Medical Law Review*, Spring 2001, Vol. 9, pp. 17-40

Williams, G., 'The genesis of chronic illness: narrative reconstruction' in *Sociology of Health and Illness*, 1984, Vol. 6, No. 2, pp. 175-200

Williams, I., 'Comics and the Iconography of Illness' in Williams, I. et al, *Graphic Medicine Manifesto*, Penn State University Press, 2015, pp. 115-142

Williams, Neil E., 'The Factory Model of Disease', *The Monist*, October 2007, Vol. 90, No. 4, Biomedical Ontologies, pp. 555-584

Williams, S. J. and Calnan, M. (Eds.) *Modern medicine: lay perspectives and experiences*, UCL Press, London, 1996

Wise, P., *Claude Bernard*, available at <http://www.claude-bernard.co.uk/>, last accessed on 14 December 2016, 12:16 h.

Wolf, N., *The Beauty Myth: How Images of Beauty are Used Against Women*, Vintage Books, London, 1991

Wolff, H. G., *Stress and Disease*, Charles C. Thomas Publisher, Springfield, 1953

Wright, H. G., *Means, Ends and Medical Care*, Philosophy and Medicine Series, Vol. 92, Springer, Dordrecht, 2007

Yang, Q. et al, 'Mortality associated with Down's syndrome in the USA from 1983 to 1997: a population-based study', *The Lancet*, 23 March 2002, Vol. 359, No. 9311, pp. 1019-1025

Youngston, R. and Schott, I., *Bad Medicine: True stories of weird medicine and dangerous doctors*, Robinson, London, 2012

Zahavi, D., *Husserl's Phenomenology*, Stanford University Press, Stanford, 2003

Zimmerman, M. et al., 'Is Bipolar Disorder Overdiagnosed?' in *Journal of Clinical Psychiatry*, 2008, Vol. 69, pp. 935-940

Zur, O., 'Rethinking "Don't Blame the Victim": Psychology of Victimhood', *Journal of Couple Therapy*, Vol. 4, pp. 15-36