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The Being and Value of Health

A Dispositional Account

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A thesis submitted in partial fulfilment of the requirements
for the degree of Doctor of Philosophy

University of Warwick
Department of Philosophy
November, 2014

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Acknowledgements

First and foremost I would like to acknowledge the expert guidance provided by my two supervisors, Professor Keith Ansell Pearson and Doctor Matthew Broome. Their advice throughout, their continuous encouragements, their patience and confidence in my abilities, and their thoughtful reading of sketches and drafts have been indispensable for bringing this project to completion in its current form.

I am also indebted to my internal and external examiners, Professor Miguel de Beistegui and Professor Simon Glendinning, for their penetrating questions, comments, and advice.

Further acknowledgements are due to my friend Martin Lipman, who was there when the idea of writing this thesis first arose. He inspired me to venture into areas of philosophy previously unfamiliar to me and provided detailed comments on everything I wrote. For this, as well as the countless hours of brainstorming and the unflagging support in periods where the going got tough, I am very grateful.

I also wish to thank my good friend and comrade Andrew Tyler. His own doctoral research has been a major source of inspiration to me, and I have benefitted greatly from his incisive questioning of the central claims defended in this thesis during the many lively discussions we have had in London's parks and gardens over the years. He provided insightful comments on early drafts and read most of the final version with an astonishing eye for detail and grammatical accuracy.

Special thanks also to Matthew Dennis for the many animated discussions on the depth of Nietzsche's psychological insights, for

suggesting corrections to several chapters, for sharing the joys and woes of organising a conference on ethical self-cultivation, and for his support and friendship during the latter stages of the writing process.

Mention must also be made of the help I received from Senthuran Bhuvanendra in fine-tuning the sections on Christine Korsgaard. He read these sections with great care, corrected a number of minor mistakes, and drew my attention to several larger issues.

I must also express my debt to all the patients I had the opportunity to work with during my years in physiotherapy, who trusted me with their minds and bodies, hopes and fears—and whose personal stories, in one way or another, have found their way into this thesis. I'm also indebted to Institute van Ham for hiring me year after year, and making it possible for me to pursue an academic path.

When my own health unexpectedly faltered during the writing of this thesis, I was very fortunate to receive the love and support of family and friends. For this I wish to express my deepest gratitude, especially to Femke Middelhoff, Anne Poorta, Eugenia Boutylkova, Sjoerd van der Zande, Martijn van Zwam, Adrian de Groot Ruiz, Thessy Garganese, Caroline Scheltes-van Slooten, Sebastian Schindler, Christopher Halls, Carly Attridge, Christina Mathikoloni, Fanny Estoppey, Rob Peters, my brother Tim, to my father for driving me back to my home soil—but most of all to my mother, without whose care and dedication I would have never been able to recover and complete this thesis.

Finally, I wish to thank the Arts and Humanities Research Council and the Graduate School of The University of Warwick for funding my research for the majority of its duration.

Declaration

I hereby declare that this thesis is the result of original research carried out by me while in candidature for a doctoral degree at the University of Warwick; that I am the sole author and researcher and that the work presented herein is entirely my own; that no portion has been submitted for a degree or qualification at this or any another university; and that all source materials have been clearly and adequately acknowledged and cited. I also declare that some of the material contained in Chapter One and Chapter Two has appeared in a different and abbreviated form in a paper entitled “Life and Objective Norms: Canguilhem in the Context of Contemporary Meta-ethics,” in *The Care of Life: Transdisciplinary Perspectives in Bioethics and Biopolitics*, edited by Miguel de Beistegui and Giuseppe Bianco and Marjorie Gracieuse (London: Rowman and Littlefield, 2014), and produced during the course of the preparation of this thesis.

Abstract

The principle aim of this thesis is to provide an account of the nature of health. The starting-point is that health is a normative concept: health implies a standard or norm in relation to which an organism's state is evaluated. Many philosophers take this to imply that health must be defined in subjective terms. They either think health consists in a certain type of subjective experience (e.g. Canguilhem, Fulford), or that health is relative to subjective values and goals (e.g. Nietzsche, Korsgaard, Nordenfelt). I argue that subjective definitions of health fail to capture the essential properties of health and attempt to show that health is something normative and yet entirely objective. This would imply that there are normative facts in the world, and to support this claim I turn to debates in contemporary meta-ethics. I develop a meta-ethical theory according to which a subset of non-moral goods is grounded in objective features of living beings, and argue that this meta-ethical theory opens the possibility for an objective account of health.

I then proceed to develop a theory of health that aims to capture what it means for any living to be healthy. I argue that the concept of health latches onto organisms' capacities (or dispositions): the greater an organism's range of capacities (or quantity of dispositions), i.e. the more it is capable of doing, the healthier it is. The norm relative to which an organism's range of capacities is measured in evaluations of health, I go on to argue, is the maximum range of capacities possible for the species. Accordingly, an organism is healthy if it is capable of performing all species-specific activities. A closer analysis of this claim yields the formal definition that health consists in a multiplicity of potential activity vis-à-vis factual limitations set by the species. This definition of health is defended against various objections and potential counter-examples. In the context of human health, I attempt to show this definition of health captures both physical and mental dimensions of health; that it establishes a direct link between health and individual autonomy; and that it supports a Nietzschean account of 'the great health' — the idea that being able to give up the concern for one's health constitutes a superior kind of health. In the conclusions, I reflect on whether this conception of health could function as an ethical ideal, and consider the form that a health-based ethics could take.

Introduction

1. Health as a Philosophical Question

Although health is something close and familiar to us all—something that we constantly and unthinkingly talk about, invest in, assign value to, and presume we understand well enough in a common and everyday way—health is at the same time quite distant and removed from us, something that constitutes a silent background condition for all our actions, that makes itself conspicuous only in its absence, and that escapes our grasp whenever we reflect on it and try to understand what it means to be healthy. Ask any number of people for a definition or general characterisation of health—even medical professionals, psychologists, public policy makers, health insurers, and people in rehabilitation who invest all their energy into the restoration of their health—and it will become clear that health is taken to mean a wide variety of things and that the concept is used with little consistency or consideration. Behind the countless health development programs around the world, the trillions spent and earned in the global healthcare industry, and the daily efforts that most of us make to preserve our own health, lurks the unsettling truth that the nature of health itself is clouded in obscurity and that we do not have a shared or coherent conception of it. The central ambition of this thesis is to provide an account of the nature of health, both its physical and mental aspects, and to render transparent what it means for a human being, or any other living being, to be healthy.

The question what health is and what its most central features are is a conceptual question that philosophy can make important contributions to; it is not, in any case, a purely empirical question, best left to the empirical sciences. Health and disease, as well as related concepts like illness, disability, disorder, and dysfunction, are of course the subject-matter of well-established and rapidly advancing sciences like biology, physiology, medicine, psychology, epidemiology, etc. But we cannot simply go out into the world, do experiments on a class of beings, and discover what health itself consists in, in the way that it is possible to discover that a heart attack is an injury to the heart muscle following a blockage of coronary arteries, or that Hesperus is Phosphorus, or that water is H₂O. Health is a more fundamental concept, the meaning of which must be *presupposed* by empirical disciplines to determine the mechanisms and causal pathways by which it is lost and gained—but a meaning that cannot be *discovered* by any such empirical means. Determining the nature of health is a more fundamental project, which, in a sense, precedes the empirical study of the processes and mechanisms that influence it.¹

¹ Heidegger describes the philosophical task of determining the meaning of such basic concepts rather well: “Basic concepts determine the way in which we get an understanding beforehand of the area of subject-matter underlying all the objects a science takes as its theme, and all positive investigation is guided by this understanding. Only after the area itself has been explored beforehand in a corresponding manner do these concepts become genuinely demonstrated and ‘grounded’. But since every such area is itself obtained from the domain of entities themselves, this preliminary research, from which the basic concepts are drawn, signifies nothing other than an interpretation of those entities with regard to their basic state of being.” Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper San Francisco, 1962), 30/10.

We could of course wonder whether we really need a more rigorous and theoretically justified conception of health, as medical and psychiatric practice seems to get by just fine without one. Our everyday understanding of health seems sufficiently clear to guide many different kinds of health development programs, it is specific enough to identify the most loathsome health injustices in the world, and it seems to be concrete enough to know whether we ourselves are healthy or ill. What, then, is there to be gained by analysing our notion of health and calling into question our everyday conceptions of it? Is health not a concept that is simply 'spoken of in different ways' and better left that way?

This question touches on the most important incentive for the present enquiry and draws attention to the real-life significance of its subject-matter. The influence and consequences that beliefs about health have—not just on medical and psychiatric practice, but also on society at large and the way we go about living our lives—are not to be underestimated. Without a clear, scientifically informed, and rigorous understanding of the nature of health, the domain of health runs the risk of becoming a free-for-all where healthcare professionals, state institutions, religious and political groups, pharmaceutical and insurance companies, corporations, and the advertising industry can designate acts, behaviours, and conditions as healthy or unhealthy in ways that further their own interests in maximising power and profit. The most famous examples of cases in which health-related terminology has been abused are politically motivated disease categories like 'drapetomania' (a 'disease' causing black slaves to flee from captivity) and categories used in the Soviet Union like "sluggish schizophrenia"

and “reformist delusions.”² But poorly informed beliefs about health can also be damaging in more subtle and concealed ways, especially once they are internalised and subconsciously exert an influence on our ways of thinking, valuing, and acting. In the course of this thesis I will attempt to demonstrate that several common and widely held ideas about health are not just distorted and misguided, but even *harmful* to our health if we act on the basis of them—if, that is, the alternative theory of health I will develop is indeed plausible and, at least in outline, accurate. The motivation for analysing the nature of health and questioning our everyday conceptions is therefore not merely a matter of striving for theoretical clarity and exactness, but first and foremost an effort to promote the development and enrichment of human health itself—inside as well as outside medical contexts.

The conceptual task must nevertheless take the diverse, inchoate, and potentially self-undermining intuitions that we have about health as its starting-point. This raises important methodological questions, however, for how can we move from common-sense intuitions and everyday conceptions of health to the most important and essential features of health itself?—especially if the aim is also to criticise several key aspects of our common-sense intuitions about health and to displace a number of wide-spread beliefs about it.

Here I should emphasise that this thesis does not contain a conceptual analysis of our ordinary concept of health. In traditional ways of doing conceptual analysis, common-sense intuitions about a concept function as a kind of non-negotiable data. The conceptual

² K.W.M. Fulford, A.Y. Smirnov and E. Snow, “Concepts of disease and the abuse of psychiatry in the USSR,” *The British Journal of Psychiatry* 162 (1993): 801.

analysis consists in devising the best and most coherent interpretation of this data, and leaves little space for criticising the intuitions that are being analysed. The method of analysis that I will employ, by contrast, takes ordinary conceptions and intuitions as—what some have called—“defeasible guides” for the identification of the most important and central features of health.³ On this alternative method of analysis, ordinary conceptions and intuitions serve merely as tools for bringing the subject-matter into view so that a more theoretically and scientifically informed understanding can be developed of it. Intuitions and ordinary conceptions of health will therefore guide the analysis, but may also be discarded if they lead nowhere interesting and criticised if they conflict with a more rigorous and theoretically adequate notion of health. So even though counter-examples will be used to undermine existing definitions of health, they are not immediate disproofs of these definitions, but rather, defeasible reasons to think that the definitions do not latch onto the properties we should be interested in.

The most paradigmatic cases for health and unhealthiness can of course be found in the medical domain. Since the clearest cases of health-loss are the disease categories of medicine and psychiatry, it is these categories that will function as the main guides to the essential features of health. Because disease categories form such paradigmatic cases of unhealthiness, I shall also begin by looking at theories of health and disease derived from such cases, i.e. the theories of health put forward in the philosophy of medicine and psychiatry.

³ I have taken guidance here from the methodological remarks included in: Laurie A. Paul and Ned Hall, *Causation: A User's Guide* (Oxford: Oxford University Press, 2013), 2-4 and 24-38.

A final methodological point is that although examples and common-sense intuitions serve only as defeasible guides for identifying the properties constituting an organism's health, there are limitations to how many common-sense intuitions and examples can be discarded and left unaccounted for. A theory of health must still remain recognisable as a theory of health, and not unwittingly end up becoming a theory of some other phenomenon. Certain paradigmatic cases of health and unhealthiness must be agreed with and, for the most part, remain non-negotiable. So even though the chosen method of analysis allows for a more critical engagement with common-sense intuitions and ordinary conceptions of health, especially compared to traditional forms of conceptual analysis, there are limitations to how critical a theory of health can be *while* remaining a theory of health. This is all to say, that I will not just investigate common-sense intuitions and everyday usages of the concept health, and that the analysis will not be limited by these intuitions and usages—but that the investigation still aims to identify the essential features of *our* concept of health.

2. The Objective Turn

One theme that runs as a constant thread through this thesis and to which it returns time and time again, is the question whether health is an objective property of living beings or whether health is inherently tied to subjective experience, attitudes, and desires. The idea this thesis opposes most strongly is the increasingly common belief that health is a

subjective notion and something that in its very being depends on individual and cultural values. A few comments are required to place this central concern in a larger context, and to clarify in advance which contribution this thesis seeks to make.

From the 1960's onwards there has been a growing awareness that medical and psychiatric classifications are not merely descriptive of people's conditions, but that diagnostic categories also contain a normative dimension. Diagnosing someone with a medical or psychiatric disorder, or simply judging people to be unhealthy, means making a value-judgement about their state of being—a value-judgement based on implicit norms of how someone *should* be. Critics considered this to be deeply problematic, especially in the context of mental health. Anti-psychiatrists were quick to accuse psychiatry of being nothing other than a form of behavioural police and an instrument of social control, and criticised it for infringing on individual freedom and rights to self-determination. Although this normative dimension was exposed and problematised first in the context of psychiatry, by now there seems to be a more widely shared recognition that all medical categories contain a normative aspect. When attention is drawn to the normativity of diagnostic categories and judgements about health, this is usually done with the intention to caution healthcare practitioners not to impose values and ideas about how someone should be onto their patients, and instead, attend to the desires and wishes of the patient him or herself. As a result, however, the meaning of health and illness has slowly but steadily been subjectified and relativised to people's subjective feelings, desires, and values.

Even though critics were right to dispel the presumed value-neutrality of diagnostic categories and medical practice more generally, and successfully brought to light the moral and political dimensions that have shaped past and present healthcare practices, the idea that *subjective* values determine what health is, is most problematic and something that, by now, is itself in need of critique. Subjective values and desires are shaped and influenced by a wide variety of factors, including market forces, cultural traditions, religious beliefs, beauty ideals, and so on—factors that aren't necessarily conducive to human health. Once health is viewed as essentially dependent upon individual values and desires, we deprive ourselves of the more objective point of view from which these values and desires could themselves be judged as conducive or inimical to health. The urgency of the critique of the subjectification of health does therefore not consist in purely theoretical motives (although the subjective view is also theoretically untenable), and certainly not in any perceived necessity to restore authoritative and paternalistic forms of healthcare, but instead, and above all, in the need to establish a grounding determination of health by which the manifold and often contradictory, and indeed often erroneous and self-defeating practices of health can begin to orient themselves. The ambition of this thesis is not to return to any value-free and naïvely scientific ideas of health, however, but to look ahead and explore whether health can be conceived of as at once normative and objective, in such a way as to constitute a standard against which all subjective values and desires, including subjective accounts of health itself, can be assessed in terms of their health-promoting or health-inhibiting properties.

3. The Ethical Significance of Health

Another aspect of the thesis worth drawing attention to from the outset is its attempt to expose and examine the ethical significance of health. On the one hand, health seems to be an entirely medical affair: we lose it when we fall ill and regain it when we recover, either with the help of medical interventions or due to our own powers for recovery. On the other hand, care for our health also plays an important role in our everyday life and often influences our beliefs about how we should act, also without there being any signs of illness—think for instance of hygiene measures, the preparation and consumption of foods, cleaning oneself, getting enough sleep, wearing warm enough clothes, and so on. These practices may hardly be ‘ethical’ in any meaningful sense, but if we take mental health into consideration, a much larger portion of our choices and activities appears to be governed by a concern for health—and with an expansive view of mental health virtually all our actions are in some way related to, if not directly aimed at, our health. Health is not *just* the subject-matter of medicine and psychiatry, then, but also plays an important role in practices of, and our thoughts about, *living well*.

The idea that the concept of health has ethical significance—not just in terms of fair and equal distributions of healthcare, but actually as part of a conception of how to live a good life—may strike us as rather strange, in part because we have become accustomed to speaking about health only in medical contexts. In antiquity, by contrast, it wasn’t strange at all to think that cultivating physical and mental health was an integral part of ethical life. We could think for instance of Aristotle’s

remarks about good health being a requirement for eudaimonia, or the central argument of Plato's *Republic* that it is profitable to exercise justice because virtue is "a kind of health and beauty and good condition of the soul."⁴ But the ethical importance of health was recognised more widely by the ancient Greeks and ingrained in their culture. In *Mirage of Health*, René Dubos points out that the Greeks had multiple gods of health: Asclepius, Hygeia, and Panakeia.⁵ While Asclepius personified the medical and curative dimension of health and Panakeia the healing power of drugs, Hygeia symbolised good health more generally, and represented the virtues of a sane life—a life lived according to reason. These gods correspond to three different dimensions of health: health as *recovery* from disease; health as healing with the help of *drugs*; and health as *a way of living wisely*. Dubos writes:

For the worshipers of Hygeia, health is the natural order of things, a positive attribute to which men are entitled if they govern their lives wisely. According to them, the most important function of medicine is to discover and teach the natural laws which will ensure to man a healthy mind in a healthy body. More sceptical or wiser in the ways of the world, the followers of Asclepius believe that the chief role of the physician is to treat disease, to restore health by correcting any imperfection caused by the accidents of birth or of life.⁶

⁴ Plato, *Republic*, in *Plato, The Collected Dialogues*, ed. Edith Hamilton and Huntington Cairns (Princeton, New Jersey: Princeton University Press, 2005), 444e.

⁵ René Dubos, *Mirage of Health: Utopias, Progress, and Biological Change*. (New Brunswick, New Jersey: Rutgers University Press, 1987), 129-131.

⁶ Dubos, *Mirage of Health*, 131.

Dubos points out that also in antiquity the cult of Hygeia progressively gave way to that of Asclepius, relegating Hygeia to a more subordinate role.⁷ Hygeia was eventually depicted as Asclepius's daughter, sister, or wife, but always as subservient to him. The reason why Asclepius dethroned and supplanted Hygeia, and the reason why the ethical dimension of health that Hygeia represented finally waned altogether (and why 'hygiene' now means little more than 'cleanliness'), Dubos suggests, is that "men as a rule find it easier to depend on healers than to attempt the more difficult task of living wisely."⁸

Nowadays, the concept of health is confined almost entirely to its medical usage, and has completely cast off the ethical dimension that Hygeia symbolised. At the same time, the idea that health implies rules of behaviour and a way of living is still very much alive. In fact, we currently seem to be more concerned about our health than ever before. We can't seem to get enough of all the information about diets, exercise regimes, the right posture, required supplements, how much to rest and sleep, but also about which positive thoughts to entertain, how to cope with emotional set-backs, and so on—all with an eye to maintaining our physical and mental health. Yet, despite this near obsession with being healthy, it is still a predominantly medical and therapeutic notion of health that informs and governs our practices of health. That is to say, living a healthy life nowadays means nothing more than avoiding, almost at all costs, the possibility of falling ill—and in the event we do so after all, to recover as quickly and efficiently as possible.

⁷ Dubos, *Mirage of Health*, 130.

⁸ *Ibid.*

In addition to the attempt to establish a grounding notion of health, this thesis explores the question whether healthiness could function as a kind of ethical ideal, and whether a more accurate and potentially richer understanding of health could take us beyond the cult of Asclepius and Panakeia to which we still belong. These wider ethical concerns remain peripheral to most of the investigation, however, since they should not convolute the task of establishing an account of health that is defensible on its own terms—one that is not shaped and informed, in any case, by an anticipation of any potentially interesting or desirable ethical consequences. It is therefore not until the concluding sections, when all the relevant terms have been grounded, that the ethical significance of health—or the relative lack thereof—will be addressed and examined.

4. The Role of Nietzsche

Although this thesis follows its own trajectory of enquiry and freely engages with all the philosophical traditions, sub-disciplines, and texts it considers relevant to its own progression, the philosopher whose work occupies a more central place, and to whom reference is made on multiple occasions, is Friedrich Nietzsche. In the tradition of Western philosophy there have been few for whom the question of health was as important as for Nietzsche, and few who thematised health as a subject of philosophical enquiry as persistently or profoundly as he did.⁹ His

⁹ There has nevertheless been a remarkable lack of interest in Nietzsche's thoughts about health, also in specialist Nietzsche scholarship—the only notable exception

numerous aphorisms on health support several of the chief claims defended in this thesis, but also contain some of the most forceful objections to them—making it a natural and in many ways obvious choice to employ him as the main interlocutor.

Nietzsche makes four important contributions to the thesis. First, he demonstrates the full consequences of affirming the normativity of health while at the same time taking all values to be projections of subjective attitudes—*viz.* that health itself becomes something entirely relative to subjective attitudes and values, in such a way that we end up with an irreducible plurality of conditions referred to as health. The unsustainability of this view provides the main motivation for rejecting the idea that all values are rooted in subjective attitudes, and forms the incentive to develop an alternative theory of values. Second, Nietzsche also provides important clues for how to overcome value subjectivism, *viz.* by suggesting that life gives rise to values, in such a way that things can be of value for living beings without the mediation of subjectivity. Third, Nietzsche provides powerful arguments against the idea that health can be defined as absence of pain and suffering, or as the experience of pleasure and happiness—a definition of health that, as we shall see, continues to receive wide support. And fourth, Nietzsche argues that giving up the concern for one’s future health results in a superior state of health, better known as ‘greater health’. These four aspects of his thought will prove to be very instructive and play an important role in the direction this work ultimately takes.

being Mark Letteri, “The Theme of Health in Nietzsche’s Thought,” *Man and World* 23 (1990): 405-417.

That said, this thesis does not contain a systematic exposition of everything that Nietzsche has to say about health, or about any other topic for that matter. Usage of his work will be highly selective and intentionally neglects parts of his corpus that could oppose, further qualify, or even contradict what is said in the aphorisms that are being singled out. The aim is not to reconstruct or defend Nietzsche's philosophy of health; but rather, to use specific elements of his work to support the claims I think we have good reasons to accept also without his consent. Given that Nietzsche refers to his own work as "an inexhaustible well into which no bucket descends without coming up filled with gold and goodness," I hope the reader is willing to forgive me for using his work so selectively and for pulling up only a few lumps of gold.¹⁰

Perhaps one point of interpretation needs to be added here, as I shall not have the opportunity to return to it in the main body of the text. Some commentators consider Nietzsche's frequent allusions to health and disease merely as metaphorical expressions of his generally unsupported normative views, and understand them as symptomatic of the biologism that dominated the intellectual climate in late 19th-century Europe. Gregory Moore, for instance, writes that "Nietzsche's recourse to biological and medical idiom is both a reflection and an ironic distortion of this pervasive biologism, and can only be truly appreciated once the contemporary force and significance of his metaphor is

¹⁰ Friedrich Nietzsche, *Ecce Homo: How One Becomes What One Is*, trans. Walter Kaufmann (New York: Random House, 1967), preface §4. Translation modified.

reconstructed.”¹¹ I take the direct opposite line of interpretation and treat Nietzsche’s employment of medical terms, and health especially, as literally as hermeneutically permissible. I understand Nietzsche’s focus on health to be a direct consequence of his efforts “to translate man back into nature”¹² and to “‘naturalise’ humanity in terms of a pure, newly discovered, newly redeemed nature.”¹³ Nietzsche pioneered the idea that moral values and practices oppose what is in fact most valuable for human life, namely qualities like health, strength, and self-mastery. He thought this catalogue of ‘life-affirming’ values could be supported by a careful study of our natural constitution. I therefore take him to be dead serious when he writes that “every table of values, every ‘thou shalt’ known to history [...] needs a critique on the part of medical science,”¹⁴ and that “the sciences of physiology, medicine, sociology” are “to construct anew the laws of life and action” and to provide “the foundation stones of new ideals.”¹⁵ We would sell ourselves short by reading these passages merely as metaphorical expressions of an outdated biologism, and miss out on the important contribution that Nietzsche’s texts can make to our understanding and appreciation of the value of health.

¹¹ Gregory Moore, *Nietzsche, Biology and Metaphor* (Cambridge: Cambridge University Press, 2002), 1.

¹² Friedrich Nietzsche, *Beyond Good and Evil: Prelude to a Philosophy of the Future*, trans. Walter Kaufman (New York: Random House, 1966), §230.

¹³ Friedrich Nietzsche, *The Gay Science*, trans. Walter Kaufmann (New York: Random House, 1974), §109.

¹⁴ Friedrich Nietzsche, *On the Genealogy of Morals*, trans. Walter Kaufmann and R. J. Hollingdale (New York: Random House, 1967), §1.17.

¹⁵ Friedrich Nietzsche, *Daybreak: Thoughts on the Prejudices of Morality*, trans. R. J. Hollingdale (New York: Cambridge University Press, 1982), §453.

5. Outline of the Thesis

The thesis is divided into six chapters that together aim to provide a comprehensive theory of health. The opening chapter examines existing definitions of health and by exposing their deficiencies aims to create the space for a better account. The second chapter engages with meta-ethical issues and prepares the ground for an objective theory of health. The third chapter gradually builds up a novel theory of health, which is defended against a number of potential objections in the fourth chapter. The fifth chapter draws out the implications for human health more specifically, and the final chapter aims to show the merits of my theoretical proposals in light of two alternative conceptions of health that share several important features.

Chapter One examines five theories of health (those of Christopher Boorse, Jerome Wakefield, Bill Fulford, Georges Canguilhem, and Friedrich Nietzsche), which together cover the full spectrum from purely objective to purely subjective definitions of health. I argue that each of the definitions fails to capture the defining properties of health, and go on to formulate desiderata for a more adequate account. The central problem I identify in the chapter is a fundamental assumption held by each of the authors, *viz.* that norms are essentially subjective—which implies that if health is a normative concept, it must be defined, at least in part, in subjective terms. The chapter shows, on the one hand, that health is clearly a normative concept, while on the other hand, that the more health is defined in subjective terms the harder it becomes to provide an adequate definition of it. This has two implications: first, that we need a definition of health that captures both its normativity

and its objectivity, and hence, second, that we must reject the assumption that all norms are rooted in subjectivity and instead begin to take seriously the meta-ethical possibility of objective, mind-independent norms.

Chapter Two takes up this latter challenge and presents a realist theory of value that allows health to be regarded as at once normative and objective. Via a close engagement with the work of Peter Railton, Philippa Foot, and Christine Korsgaard, the chapter builds up a theory of values according to which one subset of values is grounded in the constitution of living beings. I argue that the functional organisation of living beings gives rise to normative differentiations, so that certain values are indeed grounded in objective features of life. Although this theory offers a way of thinking about normativity that breaks with the subjectivist tradition, it also places a requirement on health, *viz.* that health must be defined without recourse to subjective factors. It therefore not only enables a normative and objective theory of health, it simultaneously requires one.

Chapter Three draws the desiderata of the first two chapters together and develops a universal theory of health on the basis of these criteria. It begins by advancing a critique of probably the most obstinate conception of health, the idea that health consists in conditions for self-preservation. Out of this critique emerges my proposed account, the idea that the concept of health latches onto an organism's range of capacities (or dispositions). After making a case for the *prima facie* plausibility of a capacity approach to health, the approach is further specified, resulting in a formal definition of health: 'a multiplicity of

potential activity vis-à-vis factual limitations'. This definition of health is then analysed in piecemeal fashion, not only to show its naturalistic status (for which I briefly survey the metaphysics of dispositions), but mainly to support the principal claim that the concept of health, indeed, latches onto the multiplicity of dispositions of organisms: a multiplicity that is diminished in the event of disease and reduced to zero at the moment of death, but also a quantity that in the absence of disease permits of increase, signifying 'positive health'.

Chapter Four addresses five objections to the proposed theory of health. In addition to providing rejoinders to each objection, the chapter seeks to apply the theory of health to the domains from which the objections derive their force in order to further demonstrate its conceptual strength. This exercise is carried out by means of a series of thematic excursions into the role of pain and suffering in health, the impact that processes of specialisations have on health, the (in)significance of wealth and social advantage for health, and the relationship between health and technology.

Chapter Five draws out the consequences of the proposed account for human life and attempts to provide a first, general characterisation of human health. The chapter is organised around three distinctive features of human beings: the limitlessness of human potential, individual autonomy, and our ability to pursue final goods. The main claims of the chapter are that human beings can never be fully or completely healthy (it is always possible to become healthier); that a high degree of individual autonomy implies a greater level of health; and that the ability to adopt and pursue final goods is of crucial

importance to human health. The chapter ends with a reflection on a Nietzschean paradox, *viz.* that being able to give up on one's future health constitutes a superior kind of health—'the great health'.

Chapter Six offers a reconstruction of two alternative capacity approaches to health: Lennart Nordenfelt's 'action-theoretic approach' and Amartya Sen and Martha Nussbaum's 'capabilities approach'. I argue that Nordenfelt's account is both incoherent and inadequate, and show how my own account avoids the problematic consequences of his view. With regard to Sen and Nussbaum's capabilities approach, I highlight the most important commonalities and divergences, and make a suggestion as to how their approach could benefit from some of my theoretical proposals.

In the conclusion I provide a summary overview of the main claims defended in the thesis and develop several themes further, including, and most importantly, the ethical ramifications of the thesis. I sketch out the general contours of a possible future health-based ethics, clarify the necessary limitations of its claims, and consider to what extent it might be construed as a rehabilitation of the eudaimonic ethics of the ancient Greeks.

Chapter 1

From Purely Objective to Purely Subjective Theories of Health

1. Normative and Descriptive Theories

A central concern in the philosophical literature on health is the question whether health and illness are descriptive concepts or normative concepts. Bill Fulford has called this the “values in/values out debate.”¹ As we shall see, a crucial assumption amongst philosophers of medicine and psychiatry is that if health and illness are normative concepts they cannot be defined in objective and scientific terminology alone and a subjective element of one kind or another becomes indispensable in their definition. The core assumption in debates over health, shared by virtually all contributors, is that if health and illness are normative notions their definition must involve subjective factors like feelings, desires, preference, goals, social norms, etc. If health and illness are descriptive concepts, on the other hand, descriptive of some part of empirical reality, then it is standardly presumed they can be objectively defined, i.e. without any dependency on, or reference to, subjective and cultural factors.

¹ K.W.M. Fulford, “Nine Variations and a Coda on the Theme of an Evolutionary Definition of Dysfunction,” *Journal of Abnormal Psychology* 108:3 (1999): 412.

This chapter discusses five theories of health prominent in the philosophical literature. In presenting these accounts of health together with their most important shortcomings, I aim to show a progression towards subjectivism and ultimately scepticism directly following from the recognition that health and illness contain a normative element. Objective accounts of health and disease are criticised in the literature, rightly so, for relying on norms without admitting so. When health and illness are understood as containing a normative element, however, in combination with the assumption that values are subjective, health and illness themselves become something essentially subjective, i.e. concepts that must be defined at least partially in subjective terms. When the subjectivist view is pushed to its logical extreme, however, health and illness become subjective a way that renders them wholly undefinable. The logical progression I aim to bring out is therefore one of increasing subjectification of health and illness: a subjectification that follows from the recognition that health and illness are normative concepts; a subjectification that is inevitable if all normativity is considered a matter of subjective preference; and a subjectification that, when followed to its logical extreme, leads to the point of scepticism where health and illness become wholly undefinable.

I will open this discussion with the account of health defended by Christopher Boorse, who argues that health can be defined in strictly objective and naturalistic terms, excluding all normative language. Criticisms of Boorse's account have led to the formulation of hybrid theories, like those defended by Jerome Wakefield and Bill Fulford, which refer to facts and values as distinct ingredients in the meaning of

health and illness. Problems with these hybrid theories naturally lead to the account of health formulated by Georges Canguilhem, who thinks health and illness are entirely normative concepts and therefore definable only in terms of qualitative subjective experience. The final account of health I shall consider is the one advanced by Friedrich Nietzsche in his so-called middle period. In this period of writing Nietzsche argues that health is nothing but a normative ideal and therefore undefinable in any form of generality.

In presenting these five accounts of health the ambition is not to conclusively prove one theory to be false or another to be correct, but rather to create the space for an alternative and better theory of health. In the course of this thesis I shall return to the theories of health presented here and further demonstrate why they fall short compared to the alternative account that I shall develop. This chapter mobilises several important accounts of health, renders their presuppositions explicit, and highlights their most important problems—all of which serves to define, specify, and delimit the problem-horizon for the rest of the thesis. And this problem-horizon will consist of two fundamental questions: first, whether there can be objective truth about normative matters, especially in the context of health and illness—and if so, what grounds such objective normative truths; and second, what the nature of health is, especially given the problems inherent to the accounts of health discussed in this chapter. Presenting the respective theories of health as a progression from purely objective to purely subjective accounts aims to illustrate how these two questions are interrelated and must be addressed in conjunction.

2. Boorse: The Bio-Statistical Theory of Health

Christopher Boorse is best known for defending the thesis that health and disease are descriptive concepts. What constitutes health and illness, he argues, can be understood in naturalistic and purely scientific terminology alone.² By means of a reductive analysis Boorse attempts to define health and disease in strictly naturalistic and value-free terms, or “theoretical” terms as he prefers to call them.³ If this reduction can be executed successfully then all the traditional scientific virtues pertain to judgements about health and disease: assessing health and illness will be a strictly empirical matter; judgements can be falsified or supported by empirical observation alone; and medical diagnoses would be objective and universally valid. In a series of papers published in the 1970’s Boorse defines health positively as “normal functioning” and negatively as “absence of disease.”⁴ These two definitions are intended to be equivalent, as ‘disease’ is itself defined by Boorse as ‘functional abnormality’, and ‘absence of functional abnormality’ is of course definitionally equivalent to ‘functional normality’.

² For the discussion of Boorse’s views I rely on the following sources: Christopher Boorse, “On The Distinction Between Disease and Illness,” *Philosophy and Public Affairs* 5 (1975): 49-68; Christopher Boorse, “What a Theory of Mental Health Should Be,” *Journal for the Theory of Social Behavior* 6 (1976): 61-84; Christopher Boorse, “Health as a Theoretical Concept,” *Philosophy of Science* 44:4 (1977): 542-573; Christopher Boorse, “A Rebuttal on Health,” in *What is disease?*, ed. James M. Humber and Robert F. Almeder (Totowa, New Jersey: Humana Press, 1997), 1-134.

³ Boorse, “Theoretical Concept,” 542.

⁴ Boorse, “Theoretical Concept,” 542; 550.

Whether this account of health succeeds in being a value-free account of health depends on how Boorse defines the notions 'normality', 'abnormality', and 'function'. 'Normality' is defined by Boorse in statistical terms, whereby some central region of a distribution of functional outcomes of an internal part is demarcated and designated as normal. A 'function' is defined by Boorse as matter organised in such a way that it contributes to the realisation of a goal, whereby the functions of organs and body parts of living organisms are "contributions to individual survival and reproduction."⁵ When the definition of normality and functions of organs are combined we get a definition of 'normal function': "the statistically typical contribution by it [each internal part] to individual survival and reproduction."⁶ And if disease is the analytic opposite of normal functioning, the definition of disease is "[a kind of internal state that] reduces one or more functional abilities below [statistically] typical efficiency."⁷ And finally, if health is the absence of disease, health is a state in which internal parts function at normal efficiency, so that each internal part gives its statistically typical contribution to individual survival and reproduction.

Boorse is adamant that normative elements play no role in this set of interrelated definitions. In his papers from the 1970's Boorse argues that values only come 'in' at the level of illness, which he defines as a state in which a disease, as defined above, comes to have effects that are subjectively experienced as incapacitating and distinctively bad.⁸

⁵ Boorse, "Theoretical Concept," 556.

⁶ Boorse, "Theoretical Concept," 555.

⁷ Boorse, "Theoretical Concept," 562.

⁸ Boorse, "Distinction Disease and Illness," 61.

Twenty years later, however, he revisits this claim and argues that illnesses are just systemic diseases and therefore equally value-free notions.⁹ In either case, health and disease are claimed to have been defined in strictly value-free terms.

Over the last three decades philosophers and medical theorists have criticised Boorse's theory for a wide variety of reasons, some of which he addressed in an extensive rebuttal.¹⁰ The three concepts on which the bio-statistical theory hinges—'normality', 'functions', and 'efficiency'—have all been criticised for involving values and falling short in adequately distinguishing health from disease.

Beginning with the problems to do with 'normality', Kingma has drawn attention to the fact that normality of functioning only applies within a specific reference class, for instance someone's age or sex.¹¹ This is a key aspect of the biostatistical account of health and Boorse explicitly endorses it in all his papers.¹² A high heart rate may be normal for teenagers but pathological for elderly, just as some blood values are normal for women but abnormal for men: the reference class determines what is normal and abnormal and so whether someone is healthy or diseased. Problems emerge with the determination of the relevant reference classes, as Kingma points out. She argues that there are no empirical facts that determine what should count as a reference class other than prior value-judgements about what indeed constitutes an

⁹ Boorse, "Rebuttal on Health," 11.

¹⁰ Boorse, "Rebuttal on Health," 16-99.

¹¹ Elselijn Kingma, "What is it to be healthy?" *Analysis* 67 (2007): 128-133.

¹² See e.g. Boorse, "Theoretical Concept," 555.

appropriate reference class.¹³ Identifying a reference class must *precede* judgements about health and disease if Boorse's bio-statistical theory is to hold up, but Kingma points out that the only way to determine the relevant reference classes is on the basis of a value-laden pre-understanding of what should count as health and disease in the first place—which, she argues, renders the theory both circular and dependent on values after all. Someone is unhealthy when an internal part functions abnormally vis-à-vis a reference class, but the reference classes themselves are set by prior values that ultimately still determine when an internal part is functioning normally or abnormally, and so whether one is healthy or diseased.

Kingma's concern is therefore that the fixing of reference classes proceeds on the basis of prior normative commitments. If we take a step back, however, we can recognise that the very set-up of Boorse's account is normative in a more straightforward way. For a concept or judgement to be normative is for it to evaluate something relative to a norm or standard: normative concepts, by definition, measure the proximity to or distance from a norm. The norm, on Boorse's theory, is normality—or more precisely, a region demarcated as normal. The mere description or measurement of some functional outcome does not tell whether one is in a state of health or disease, also not on Boorse's account; it is the comparison of the measurements vis-à-vis a *norm*, i.e.

¹³ She wonders why being female counts as a reference class for Boorse whereas being myopic or being a heavy drinker does not. Against a reference class of myopic people being myopic would be normal, just as against a reference class of heavy drinkers liver problems wouldn't be abnormal. The fact that we choose our reference classes shows that prior intuitions about what is healthy are effectively still doing the work, instead of statistical deviance vis-à-vis a reference class.

the region demarcated as normal, that determines whether an organ is functional or dysfunctional and whether the organism is healthy or diseased. The fact that on Boorse's account judgements of health are made relative to a norm already renders the bio-statistical account normative: the norm indicates what is good, *viz.* functioning in a statistically normal way. Without going into the details of how the reference classes are fixed, Boorse's theory is straightforwardly normative: it invokes norms and compares states with respect to them.

What Kingma criticises Boorse for, I suspect, is therefore another worry. The real concern she articulates is not just that Boorse's account is normative, but that the relevant norms are dependent on subjective preferences and values. That is, she argues that Boorse's norms are ultimately *subjective* norms. Depending on what one *subjectively* deems healthy the reference classes are fixed, which determines the statistically normal, which sets the norm, and which decides between health and disease but in a way that was already subjectively decided. The problem Kingma identifies is therefore not the normativity of Boorse's account *as such*, but the fact that the norms it invokes ultimately depend on subjective decisions. If the norms in relations to which condition are assessed were objective norms, i.e. norms obtaining independently of such decisions and commitments, I think she would retract her objection and consider the account objective, despite its inherent normativity.¹⁴

¹⁴ This will play an important role in the formulation of the account of health in Chapter Three, which intends to be at once normative and objective. A requirement for such an account is that the norms in relation to which conditions are assessed do not depend on subjective preferences or personal values. This possibility will be further examined in the context of Philippa Foot's work, in §2.4 of Chapter Two.

While Kingma's critique focuses on the normativity of the normal, or rather the subjective values involved in defining what is normal, others have pointed out that normality is inadequate to distinguish health from disease to begin with, regardless of whether normality functions as a norm. A problem with defining disease as statistical abnormality, as Wakefield points out, is that many conditions can be statistically normal while uncontroversially involving a disorder or disease.¹⁵ Wakefield lists conditions like lung irritation from pollution, atherosclerosis and dental caries: conditions that are statistically normal, hence healthy on Boorse's view, although unmistakably disorders. Wakefield drives the point home by imaging the world after a nuclear war: it is possible for all living beings to be diseased after nuclear a war despite the fact that their functions contribute to survival in a statistically normal way.¹⁶ Defining disease as deviance from statistically normal functional outcomes presupposes that normal functional outcomes are by definition healthy. Wakefield's objection is that there is no necessary connection between abnormal functioning and disease, as there are numerous examples of disorders and diseases that are statistically normal whilst being clear-cut disorders and diseases.

A further problem with normality, identified by Nordenfelt, is that diseases like infectious diseases are characterised by symptoms that are statistical and species-normal responses to environmental threats, like viruses and bacteria. Nordenfelt argues that infectious diseases are

¹⁵ Jerome C. Wakefield, "The Concept of Mental Disorder: On the Boundary between Biological Facts and Social Values," *American Psychologist* 47:3 (1992): 377.

¹⁶ Wakefield, "Mental Disorder," 378.

statistically normal responses directed at self-preservation.¹⁷ On Boorse's theory they should therefore not qualify as diseases, as the responses are statistically normal as well as conducive to survival. And since infectious diseases are obviously diseases and instances of lessened health, he deems Boorse's bio-statistical theory inadequate.

And finally, many commentators agree that statistical normality as the defining feature of *mental* health is hugely problematic. The idea that psychopathology can be equated with abnormal behaviour received perpetual criticism throughout the 20th century because of its normative implications, as well as the moral and political incentives that may lie behind this equation. I shall not restate or further elaborate these criticisms, but it is not difficult to see why many have considered it deeply problematic to call someone diseased when mental functions do not produce statistically normal behaviour.¹⁸ Nor is it hard to see why the equation of abnormal behaviour with psychopathology could be used to legitimise political control of social deviancy. In light of these criticisms, someone sympathetic to Boorse's account of health could either endorse a radical discontinuity between mental and physical health, or argue that only gross dysfunctions of cognitive systems are mental disorders, as opposed to the much larger variety of conditions currently recognised as such.¹⁹ Or, indeed, one could follow Thomas

¹⁷ Lennart Nordenfelt, *On the Nature of Health: An Action Theoretic Approach*, 2nd revised & enlarged edition (Dordrecht: Kluwer Academic Publishers, 1995), 31.

¹⁸ See for a recent restatement of these concerns: Stephan James Barlett, *Normality Does not Equal Mental Health: the need to look elsewhere for standards of good psychological health* (Santa Barbara California: Praeger, 2011).

¹⁹ This is Boorse's own view, see: Boorse, "Theory of Mental Health," 61–84.

Szasz and deny the existence of mental health and diseases altogether on the basis of a bio-statistical theory of health and disease.²⁰

In addition to problems related to the theory's reliance on normality, important concerns have been raised about its dependence on *functions*. Boorse recognises that a functional system implies an intention, goal, or purpose for it to be a functional system. But many think that fulfilment of a goal or purpose would be something positive, just as dysfunction, or failure in fulfilling a purpose, would be something inherently negative. *Prima facie* it seems that reducing health and disease to statistically typical *functioning* of internal parts does not reduce normativity in the way Boorse claims it does, precisely because functions imply values. Fulford has argued this point repeatedly in his publications but bases his critique on the linguistic analysis of ordinary usage of the term 'function'.²¹ The argument can also be made independently from ordinary language use, however, by stating that a function just constitutes a source of values. The idea that functions imply values—not just in our ways of speaking but also in the world itself—goes back at least to Aristotle.²² If the function of a knife is to cut,

²⁰ Thomas Szasz, "The Myth of Mental Illness," *American Psychologist* 15 (1960): 113-118.

²¹ Fulford writes for instance, "to describe something as one's purpose while at the same time denying that one evaluates it (in some sense and *mutatis mutandis*) positively would indeed be self-contradictory. Hence evaluation is *prima facie* strictly entailed by 'purpose', it is part of the very meaning of the term." K.W.M. Fulford, *Moral Theory and Medical Practice* (Cambridge: Cambridge University Press, 1989), 106.

²² Aristotle, *Nicomachean Ethics*, in *The Complete Works of Aristotle, The Revised Oxford Translation*, ed. Jonathan Barnes (Princeton, New Jersey: Princeton University Press, 1995), 1097b25-30

its good lies in cutting: it would be a good knife if it were to cut well. Insofar as it is a cutting-thing everything that promotes the knife to cut well is good for the knife. This understanding of the relationship between functions and values has recently been reinvigorated and defended by Christine Korsgaard.²³ She writes that “when something has a function, its good ‘resides’ in its function” and “functional systems, by their very nature, have a good.”²⁴ In Chapter Two (§2.5) I shall return to this aspect of functions and argue in agreement with Korsgaard that functions give rise to values.

Fulford gives two further arguments for the idea that functions are not value-free.²⁵ The first is that he thinks value-free explanations must be *causal* explanations. There is a contrast between causal explanations and functional explanations, and Fulford insists that only the former are properly value-free. Fulford claims that only explanations in the form of a web of chemical interactions—without functions, goals, and levels of efficiency—are properly value-free; but from this level one cannot derive a meaningful conception of health and illness. Boorse, on the other hand, retorts that function statements are value-free because biological explanations often utilise functional explanations, at micro- and macro-level: genes are understood and explained by reference to

²³ Christine M. Korsgaard, “Aristotle’s Function Argument,” in *The Constitution of Agency* (Oxford: Oxford University Press, 2008), 128-150.

²⁴ Korsgaard, “Function Argument,” 144; Christine M. Korsgaard, “On Having a Good,” *Philosophy: The Journal of the Royal Institute of Philosophy* 89: 3 (2014): 20. Accessed March 12, 2014. doi: 10.1017/s0031819114000102. Page numbering refers to web-version.

²⁵ K.W.M. Fulford, “Teleology without Tears: Naturalism, Neo-Naturalism, and Evaluationism in the Analysis of Function Statements in Biology (and a Bet on the Twenty-first Century),” *Philosophy, Psychiatry, & Psychology* 7:1 (2000): 77-94.

the proteins they encode for, the heart is explained by pointing to its role in the blood-circulation, hands are explained in terms of their capacity to grab and hold things, and so on. We should note, however, that biology's use of functional explanations only implies that functions are naturalistic: they figure in scientific explanations. This does not necessarily imply they are value-free. Recently philosophers have argued that there is no reason why value-laden terms cannot figure in our best scientific explanations.²⁶ Fulford's argument, I suggest, can therefore be maintained in light of the fact that biology uses functions in its explanations.

The second argument Fulford provides is that variations in functioning do not necessarily lead to the idea of a *dysfunction*, only to the idea of *different* functionings.²⁷ Even if talk of functions were free of values, 'dysfunction' implies a value judgement. Fulford points out that there is an intelligible difference between 'merely altered' and 'reduced' functioning, just as there is a difference between 'statistically diverging functioning' and 'failure in function'. The boundary between normal and pathological on a distribution of functional outcomes is not

²⁶ In recent meta-ethical debate some have argued that values figure in our best explanatory theories and should therefore be considered as real, mind-independent properties of things and acts. The main proponent of this view is Nicolas Sturgeon. See especially: Nicolas Sturgeon "Moral Explanations," in *Essays on Moral Realism*, ed. G. Sayre-McCord (Ithaca, New York: Cornell University, 1988), 129-255; Nicolas Sturgeon, "Harman on moral explanations of natural facts," *Southern Journal of Philosophy*, 24 (1986): 69-78; and Nicolas Sturgeon, "What difference does it make whether moral realism is true?" *Southern Journal of Philosophy* 24 (1986): 115-42.

²⁷ Fulford, "Teleology without tears," 82. Fulford coins the term '*diff*function', as opposed to '*dys*function' to express the difference between merely different functioning and dysfunction.

determinable via mathematical calculations, Fulford insists, but depends on the goals that are being served by functions, goals that bring in the valuative element. Survival and reproduction, I think Fulford is driving at, are the values on which Boorse's account of health and disease ultimately rests; those are the purposes of all organic functions and hence the positive values imported into the theory of health and illness. And again, Fulford seems to be right about this.

A theory of health that remains relatively close to Boorse's bio-statistical theory but that contains an explicit valuative element is the hybrid account developed by Wakefield. While Wakefield retains the alleged objective elements of Boorse's theory, values are incorporated into the definitions of health and disorder as well. In doing so, however, Wakefield also inserts a subjective element into the definition of health and disease, which will prove to be most problematic.

3. Wakefield: Harmful Dysfunctions and Teleology

Although Wakefield does not make any explicit claim on the nature of health, he appears to concur with Boorse that health consists in an absence of disease. But unlike Boorse, Wakefield takes disorder, disease and illness to be *hybrid* concepts: concepts comprising a valuative component and a descriptive component. The descriptive component in his account of disease, disorder and illness is 'dysfunction' and the value-laden component is 'harm': disorders, diseases, and illnesses are defined as *harmful dysfunctions*. Wakefield focuses his analysis on

mental disorders, but his claims pertain equally to physical disorders, as well as disease and illness more generally.

The descriptive element of a disorder is a ‘dysfunction’, which, like Boorse, Wakefield thinks is “a purely factual scientific concept” and free of values.²⁸ But rather than statistical deviance from normal functioning, Wakefield thinks dysfunctions must be defined on the basis of evolution theory. Dysfunctions are by definition a failure of a mechanism to perform a particular function. The particular function an organ is meant to perform, Wakefield argues, is “what it is naturally supposed to perform,” or, as he writes, “the functions they were designed to perform.”²⁹ The function an organ is naturally supposed to perform and for which it was ‘designed’, he continues, is the function the organ was selected for in the course of evolution. So he thinks a dysfunction is a failure of a naturally selected mechanism; that is, a mechanism that increased the survival and reproductive success of organisms under selective pressures.

Wakefield claims that evolution theory not only makes it possible to determine the ‘natural’ function of an organ—the failure of which would render it dysfunctional—he also thinks evolution theory makes functional accounts of disorders qualify for *causal* explanations. Recall Fulford’s critique of Boorse that functional explanations of disease are not descriptive and value-free explanations because they fall short in

²⁸ Wakefield, “Mental Disorder,” 383.

²⁹ Ibid. See also Jerome C. Wakefield, “Aristotle as Sociobiologist: the ‘function of a human being’ argument, black box essentialism, and the concept of mental disorder,” *Philosophy, Psychiatry, & Psychology* 7:1 (2000): 20.

being causal explanations.³⁰ Wakefield picks up on Fulford's challenge and argues that evolution theory provides a *teleological* explanation of functions, which he thinks constitutes a genuinely causal explanation. Put simply, in teleological explanations a thing's existence is causally explained by its effects.³¹ In Wakefield's words, in teleological explanations "a description of an effect of a mechanism is cited in explaining that kind of mechanism."³² Evolution theory can help explain the existence and persistence of particular mechanisms in organisms on the basis of the effects these mechanisms have and how these effects proved advantageous under pressures of natural selection. Wakefield therefore argues that "an explanation of a mechanism in terms of its natural function may be considered a roundabout way of referring to a *causal* explanation in terms of natural selection."³³ The way in which teleological explanations of natural functions are causal explanations is of course not in the physico-chemical and narrow materialistic sense that Fulford demanded for a strictly value-free and causal biology. Nevertheless, Wakefield thinks teleological explanations of natural functions are causal explanations and that their status as causal explanations reinforces the idea that functions and dysfunctions are value-free and descriptive notions.

³⁰ Fulford, "Teleology Without Tears," 79.

³¹ For a formal definition of teleology we may turn to Kant: "we find ourselves capable of subsuming the idea of the effect under the causality of its cause as the underlying condition of the possibility of the former." Immanuel Kant, *Critique of the Power of Judgment*, ed. Paul Guyer, trans. Paul Guyer and Eric Matthews (Cambridge: Cambridge University Press, 2000), 5:367.

³² Wakefield, "Aristotle as Sociobiologist," 21.

³³ Wakefield, "Mental Disorder," 383. Emphasis added.

In addition to failures of naturally selected mechanisms Wakefield thinks a second criterion is required for disorders, as he recognises that there can be failures in naturally selected mechanisms without amounting to a disorder. Conditions like albinism, reversal of heart position, and fused toes are dysfunctions but not *harmful* and therefore not a disorder.³⁴ To be considered a disorder the dysfunction must cause harm, which he defines as “a deprivation of benefit to the person as judged by the standards of the person’s culture.”³⁵ Wakefield says surprisingly little about the harm requirement other than stipulating that it is a necessary condition for disorder. But it is unmistakably clear that the moment the valuative element explicitly enters his account of health, i.e. the moment a dysfunction is *harmful*, he thinks cultural values and standards come into play. Wakefield presupposes that the relevant values are social and cultural standards rather than values arising out of emotions, subjective experience, personal preference, practical rationality, or any other possible source of value. As a result, Wakefield accepts that a dysfunction can be a disorder in one society and fail to be one in another. And, importantly, this is a substantive claim on the nature of disorders itself, rather than an empirical observation on how disorders are identified differently across cultures: this is what Wakefield claims disorders *are*. Cultural variation in the identification of disorders is therefore *legitimate* and *justified* on Wakefield’s view. Cultural relativity is incorporated into the nature of disorder itself, and by the same token, into the nature of health.

³⁴ Wakefield, “Mental Disorder,” 384.

³⁵ *Ibid.*

Criticisms of Wakefield's account of disorder generally come in three different forms. The first point of criticism is similar to the argument that Fulford levelled against Boorse and that I already endorsed: dysfunctions imply values. Fulford himself has published a detailed linguistic analysis of Wakefield's use of dysfunction and concludes once again that the concept dysfunction has valuative meaning.³⁶ More recently, McNally writes—clearly echoing Fulford's concerns—that “to say that a mechanism is dysfunctional is not only to specify its state. It also implies that things are not as they ought to be, and ought-statements are inescapably normative. [...] Statements about dysfunction imply departures from a normative standard, and these involve values as well as facts.”³⁷ So the objection put forward by Fulford, McNally, and others is that ‘dysfunction’, like ‘disorder’ on Wakefield's view, should be considered a hybrid concept.

A second form of criticism is directed at Wakefield's claims that an organ's natural function is the function evolution selected it for and that *only* failures of this particular function constitutes a disorder (when deemed harmful by society). Various commentators have pointed out that many useful features of organs and body parts have arisen as side-

³⁶ Fulford, “Nine Variations,” 412-420. Sadler and Agich argue for similar reasons that Wakefield's use of dysfunctions remains essentially valuative. See: John Z. Sadler and George J. Agich., “Diseases, functions, values and psychiatric classification,” *Philosophy, Psychiatry, and Psychology* 2:3 (1996): 219-31. For Wakefield's reply, see Jerome C. Wakefield, “Dysfunction as a Value-Free Concept: A Reply to Sadler and Agich,” *Philosophy, Psychiatry, and Psychology* 2:3 (1996): 233-246. As few new ideas and insights are added in Wakefield's reply, I shall not discuss it further.

³⁷ Richard J. McNally, “On Wakefield's harmful dysfunction analysis of mental disorder,” *Behaviour Research and Therapy* 39 (2001): 313.

effects of the functions they were originally selected for in the evolution, side-effects that often proved adaptively advantageous only later on. Stephen J. Gould and Elisabeth Vrba dubbed these side-effects “exaptations.”³⁸ In their influential paper, Gould and Vrba write that while adaptations are features selected for their current role, exaptations are “features that now bestow fitness but were not built by selection for their current role.”³⁹ Gould and Vrba give the example of feathers, which originally evolved for insulation and only later enabled the evolution of flight.⁴⁰ Lilienfeld and Marino use this notion of exaptation to criticise Wakefield for restricting natural functions of parts and organs to the functions they were *originally* selected for, even though they may now serve altogether different functions.⁴¹ So their objection is that, for instance, feathers are also dysfunctional when they fail in fulfilling their function in flight, not just when they fail in their thermoregulatory function—even though the latter is the function the mechanism was originally selected for and thus their ‘natural’ function on Wakefield’s score. Nevertheless, Murphy and Woolfolk point out that Wakefield’s account could be saved from this criticism fairly easily, *viz.* by restricting Wakefield’s thesis to “the most recent action of natural selection.”⁴² ‘Natural function’ would then refer to the function that

³⁸ See Stephen J. Gould and Elisabeth S. Vrba, “Exaptation — a missing term in the science of form,” *Paleobiology* 8:2 (1982): 4-15.

³⁹ Gould and Vrba, “Exaptation,” 4.

⁴⁰ Gould and Vrba, “Exaptation,” 7.

⁴¹ Scott O. Lilienfeld and Lori Marino, “Mental disorder as a Roschian concept,” *Journal of Abnormal Psychology* 104:3 (1995): 411-420.

⁴² Dominic Murphy, Robert L. Woolfolk, “The Harmful Dysfunction Analysis of Mental Disorder,” *Philosophy, Psychiatry, & Psychology* 7:4 (2000): 243.

most recently proved selectively advantageous and adaptive. Rather than the original function organs and body parts were selected for, Murphy and Woolfolk argue that Wakefield's revised theory should state that the function organs and body parts *currently* have in survival and reproduction constitutes their natural function. Failure of this current role in survival and reproduction would then constitute a dysfunction—which, together with the harmfulness requirement, would make for a disorder and thus a reduction of health.

More problematic, however, are functions of parts and organs that have no adaptive advantage at all, in the past or the present. In another influential paper, Stephen J. Gould and Richard Lewontin compare non-adaptive functions and traits to the spandrels arising as architectural by-products when domes are mounted on rounded arches—spaces that were subsequently used for artistic purposes.⁴³ Traits and functions that are not adaptive but merely creative utilisations of available parts have subsequently been called 'spandrels': "adventitious by-products of the development of other traits, but [that] themselves have never possessed any adaptive function."⁴⁴ Murphy and Woolfolk criticise Wakefield's thesis by arguing that also failures in spandrels could give rise to disorders and pathology.⁴⁵ Not just failures in natural functions—

⁴³ Stephen J Gould, and Richard C. Lewontin, "The Spandrels of San Marco and the Panglossian Paradigm: A critique of the Adaptationist Programme," *Proceedings of the Royal Society, London, Series B* 205: 1161 (1979): 581-598.

⁴⁴ Murphy and Woolfolk, "Harmful analysis of Mental Disorder," 243. Or in the words of Gould and Lewontin: "a secondary epiphenomenon representing a fruitful use of available parts, not a cause of the entire system." Gould and Lewontin, "The Spandrels of San Marco," 584.

⁴⁵ *Ibid.*

functions that are adaptive or exaptive—but also failures in functions that never had any selective advantage at all can constitute a mental or physical disorder, they argue. In reply to this objection Wakefield insists that “failed spandrels in and of themselves, when they do not imply any failure of designed function, do *not* imply disorder.”⁴⁶ Wakefield claims no single example can be pointed to that would exemplify a mental disorder following a failed spandrel. And if there were examples of disorders constituted by spandrel failure, he predicts they will inevitably be by-products of failures in naturally selected functions. Yet, I suggest that if we look at physical organs, like human hands for instance, we can observe that Murphy and Woolfolk’s objection holds and indeed undermines Wakefield’s thesis. Human hands can fulfil many functions: gripping, holding, manipulating, breaking, inspecting, touching, supporting, exploring, and so on. First of all, it is not clear how to identify which function human hands were selected for, either in our distant evolutionary past or under more recent selective pressures. But supposing we could identify one or more functions as the ‘natural function’ of human hands, e.g. gripping, it is indefensible to claim that *only* when hands fail in their gripping function (and deemed harmful by a society) we can speak of a disorder. Our hands also have a great number of spandrels, including playing the piano, typing on a keyboard, buttoning up shirts, and so on. If a concert pianist were not able to play the piano due to phalangeal inflammations, or if a writer could no longer type or hold a pen as a result of uncontrollable tremors,

⁴⁶ Jerome C. Wakefield, “Spandrels, Vestigial Organs, and Such: Reply to Murphy and Woolfolk’s ‘The Harmful Dysfunction Analysis of Mental Disorder,’” *Philosophy, Psychiatry, & Psychology* 7: 4 (2000): 255.

as long as their hands could fulfil their ‘natural’ gripping function the incapacities would not amount to disorders on Wakefield’s thesis—no matter how debilitating they are. Examples like these, I suggest, show that Murphy and Woolfolk are correct in their claim that failure in spandrels could be genuine disorders and health-reductions. Not just failure in adaptive or exaptive functions, but also failure in spandrels can constitute a disorder.⁴⁷

The third and final line of criticism states that the harmful dysfunction analysis underpinned by an evolutionary account of functions does not apply straightforwardly to mental functions and psychopathology, despite the fact that the approach was developed precisely for this end. Murphy and Woolfolk point out that Wakefield assumes that “the mind is a collection of discrete, multifarious mechanisms that make distinctive contributions to overall functioning”: mechanisms that have been favoured by natural selection “for generating useful behaviours in response to environmental challenges.”⁴⁸ Murphy and Woolfolk question whether we can identify mechanisms in such an atomistic fashion, especially without an established evolutionary science of the mind. And *even if* mental mechanisms could be identified, how could we determine their natural

⁴⁷ The reason why Murphy and Woolfolk have not provided any concrete examples of spandrel failures that are recognised as disorder, and why Wakefield can criticise them for failing to do so, is because they focus on *mental* disorders rather than physical disorders. But as the next point of critique shows, the difficulty of finding examples of spandrels that underpin mental disorders follows from the difficulty of differentiating adaptive and exaptive mental functions from mental spandrels in the first place, not because there are no spandrels in the mental domain of which the failure would constitute a dysfunction.

⁴⁸ Murphy and Woolfolk, “Harmful Analysis of Mental Disorder,” 242.

function in such a way that when it fails we can speak of a psychological dysfunction? Murphy and Woolfolk argue that in Wakefield's theory pathological and non-pathological behaviour are still identified and differentiated by common sense, but supplemented with the *a-priori* conviction that evolutionary psychology, once complete, will vindicate our distinctions and common-sense judgements and demonstrate that, indeed, our judgements were based on failures in neatly isolated and purpose-designed mental functions. Murphy and Woolfolk argue that Wakefield's account involves at best an enormous empirical bet, but at worst simply presumes an evolutionary vindication of most, if not all, value-laden prejudices that inform our understanding of psychopathology. And, even worse, as they point out, the problem of spandrels also applies to the mental realm: why would only the mental functions selected by evolution be candidates for disorders, supposing we could indeed isolate and identify them, especially since it is so evident that the spandrels of our mental functions have so much value for us, thoroughly shape our lives, and in many ways make human beings what they are?

Although these three criticisms dominate the literature on Wakefield's harmful dysfunction account of disorder, they exhibit a remarkable lack of concern about the way that Wakefield thinks social and cultural standards, and *only* these standards, determine the 'harm' factor. Apparently commentators deem it uncontroversial that if some culture or society does not recognise a major and deeply incapacitating dysfunction as a disorder, it is indeed, as a matter of fact, not a disorder. Wakefield's account implies that dysfunctions *should* not be recognised as disorders if social standards indicate they should not be identified as

such. He makes an ontological claim about what a disorder *is*: dysfunctions *are not* disorders if a culture does not recognise them as such, and hence one *is* not diseased and just healthy if a society does not recognise one's dysfunctions as a disorder. To pick an unfortunately all too common example: if a society does not recognise post-traumatic stress after sexual assault as a genuine disorder, people suffering from mental and physical dysfunctions after such a trauma simply have no disorder on Wakefield's view and should be judged as healthy. Commentators are evidently concerned about spurious claims to objectivity—more so, in any case, than scrutinising the implications of a relativistic account of disorder and health. But a definition of health and disorder with cultural relativity built into it is extremely problematic and could be criticised with countless paradigmatic counter-examples. If a culture regards lung-cancer as a normal cause of death rather than a genuine disorder, lung-cancer would be no disorder and individuals suffering from it would be healthy. The moment cultural relativity is built into the definition of disorder, disease, and health itself, the objective point of view is abandoned from which it can be determined whether someone is healthy or not, regardless of social and cultural standards. Recognising disorders, disease, and health as partly informed by social norms, drives Wakefield towards a cultural relativism that is, especially in paradigmatic cases of unhealthiness, unsustainable. Yet, there are theorists who proceed even further along this path and who think that, since dysfunctions also imply norms, subjective factors must also play a role in the determination of when an organ or functional part is dysfunctional, thereby rendering health and illness relative to subjective factors in an even stronger sense. One of those theorists is Bill Fulford.

4. Fulford: The Two Feet Principle and Ordinary Doing

Fulford argues for an even greater importance of values in the meaning of medical concepts: all medical concepts contain a valuative and descriptive component, he claims, including the notion of a dysfunction. As we could already infer from his critique of Boorse and Wakefield, Fulford thinks that values pervade the medical and psychiatric vocabularies all the way down, only to stop at the level of brute, physical, cause-effect relations—i.e. the level of chemistry and physics. Even when we think we describe a certain medical condition or state of health without passing value judgements—when diagnosing a heart-attack or bone fracture for instance—Fulford claims values are still involved; they are just ‘hidden’ and ‘implicit’ since everyone would simply *agree* that a cardiac arrest or a broken clavicle means being in a bad state.⁴⁹ Only when values diverge do we become aware of their presence, Fulford argues, which he thinks is more likely to occur in psychiatric practice than during orthopaedic surgery—hence his suggestion that psychiatry can lead the way in exposing the normative dimension of medical concepts and practice.⁵⁰

Whereas Wakefield posits ‘dysfunction’ as the factual component of the hybrid concept ‘disorder’, Fulford asserts that *all* medical

⁴⁹ For the idea that agreement settles descriptive meaning of value terms, see: Fulford, *Moral Theory and Medical Practice*, 54 and 61; K.W.M. Fulford, “Fact/Values: Ten Principles of Value Based Medicine,” in *The Philosophy of Psychiatry; a companion*, ed. Jennifer Radden (Oxford: Oxford University Press, 2007), 210. For the claim that heart attacks are considered bad by everyone, see: Fulford, “Open Letter to Boorse,” 82.

⁵⁰ Fulford, “Teleology without Tears,” 89-91.

concepts contain valuative and descriptive components. But these two components cannot always be disentangled and separated in linguistic form; value-laden terms cannot always be split up into value terms and non-value terms. Fulford follows R.M. Hare in the belief that all value terms, also the most generic like 'good' and 'bad'—'thin' ethical concepts, as Bernard Williams would say—convey factual information as well as valuations. Fulford's idea is that illness, disease, dysfunctions, as well as all medical and psychiatric diagnoses express values together with facts in a way that can be logically but not always linguistically disentangled. Fulford calls this the "two foot principle": the idea that in medicine and psychiatry "all decisions stand on two feet, on values as well as on facts, including decisions about diagnosis."⁵¹

Dysfunction is typically used as the most rudimentary concept in medical theory, as we saw in Wakefield and Boorse. If functions and dysfunctions are valuative, Fulford thinks all the other concepts based on the notion of a dysfunction are equally valuative. Fulford speaks of a 'cascade' of medical concepts, running from dysfunction, to disorder, to disease, to illness—in ascending order of how overtly value-laden the concepts are. If the dysfunctions are already valuative, the other concepts further down the cascade are bound to be valuative as well.

Although Fulford acknowledges that dysfunctions are *causally* primary in the cascade towards illness, he argues that illness comes "*logically* primary" in the cascade and that "logically" the cascade runs the other way, that is, from illness to disease, to disorder, to

⁵¹ Fulford, "Ten Principles," 208.

dysfunction.⁵² What Fulford means precisely by ‘logical primacy’ is not easy to pin down, but what he subsequently calls the ‘reverse view’ plays a pivotal role in how he thinks evaluations of health are to be conducted. The logical primacy of illness, the most overtly value-laden term, over other concepts is often spelled out by Fulford in terms of certain epistemic order; we generally *know* we are ill first and discover the underlying diseases and dysfunctions only later.⁵³ But Fulford’s claim is stronger: he actually claims that the *meaning* of disease and dysfunctions depends on that of illness; or to be more precise, he claims the meaning of disease and dysfunctions is “derived” from the meaning of illness.⁵⁴ The stronger point Fulford makes is that the meaning of the concepts dysfunction, disorder, and disease depends on the meaning of illness; he claims that the meaning of disease and dysfunction depends on a directly accessible experience of something being wrong, i.e. *feeling* ill. Without the experiential element of feeling ill we fail to properly understand the meaning of disease or dysfunction, as these concepts ultimately derive their meaning from the experience of illness, Fulford thinks. So although dysfunctions *causally* give rise to disease and to illness, what it means for a dysfunction *to be* a dysfunction is for it to be something that gives rise to the experience of illness. And what makes a dysfunction something *bad* is for it to give rise to the concrete feeling of something going bad, i.e. the feeling of being ill. Fulford’s ‘reverse view’

⁵² Fulford, *Moral Theory and Medical Practice*, 70.

⁵³ Fulford writes for instance that “knowledge *that* something is wrong normally precedes the question *what* is wrong, let alone questions about possible *causes* of what is wrong.” Ibid.

⁵⁴ Ibid.

implies that dysfunctions should not be recognised as dysfunctions if they never give rise to an experience of illness. He writes that dysfunctions and diseases first have to be “*marked out* as illnesses by the value judgement expressed by ‘illness’.”⁵⁵ And this marking out of the relevant conditions occurs at the level of experience: we must become aware of it as something bad in our subjective experience first.

The way Fulford employs the ‘reverse view’, if I understand him correctly, is by taking illness as a gateway criterion for all the other medical concepts, in meaning as well as in diagnostic practice. Only when someone feels ill, or is likely to feel ill in the future, can we ‘mark out’ the conditions that causally give rise to illness and consider those conditions as diseases or dysfunctions. Rather than detecting dysfunctions and diseases independently from the experience of illness, Fulford’s guiding thought is that there must be illness first, or at least an expectation of illness, before we can even speak of underlying dysfunctions and diseases—let alone legitimately diagnose and treat them. The logical primacy of illness therefore has important practical implications: the subjective point of view and actual experience of feeling ill must be given priority in diagnostic and therapeutic practice.⁵⁶

Crucial in Fulford’s analysis is therefore the meaning of illness itself, as illness is posited as the ‘root concept’ in medicine and what I have called the ‘gateway criterion’ for all other medical concepts. Fulford argues that illness consists in the experience of a particular kind

⁵⁵ Fulford, *Moral Theory and Medical Practice*, 68. Emphasis added.

⁵⁶ Fulford calls this the ‘patient perspective principle’: “[the] ‘first call’ for information is the perspective of the patient or patient group concerned in a given decision.” Fulford, “Ten Principles,” 213.

of failure, *viz.* the failure of what he calls “ordinary doing.”⁵⁷ He writes that “illness is indeed no less than the *experience* of failure of ‘ordinary’ doing in the absence of obstruction and/or opposition.”⁵⁸ Fulford specifies ordinary doing in terms of “intentional doing” (reflexes and tremors do not count); “latent full doing” (one does not feel it as there is no obstruction); and as what one “expects” one can do (not being able to do something one didn’t expect to be able to do does not make one feel ill).⁵⁹ Fulford thinks that a failure in doing something one would “ordinarily just get on and do” constitutes the meaning of illness and the bearer of negative value.⁶⁰ *Only* if there is an experience of failure in ordinary doing—or presumably, when this experience of failure is likely to occur in the future—is someone ill and would medical professionals be allowed to proceed with the identification of the underlying diseases and dysfunctions that are causally responsible.

Healthiness and what is positively valuable, I think we can safely infer from this, consists in the *continuation* of ordinary doing—or more precisely, an *experience* of such continuation. The latent full performance of ordinary acts and ‘just getting on’ implies the absence of illness and therefore constitutes the meaning of health, on Fulford’s view.

From these conceptual claims Fulford derives a number of practical implications in his more practice oriented papers. From the idea that medical concepts contain a valuative and descriptive content

⁵⁷ Fulford, *Moral Theory and Medical Practice*, 109.

⁵⁸ Fulford, *Moral Theory and Medical Practice*, 120. Emphasis added. Rather than the failure of ordinary doing as such it is explicitly the *experience* of such a failure that Fulford identifies as the essence of illness.

⁵⁹ Fulford, *Moral Theory and Medical Practice*, 115-117.

⁶⁰ *Ibid.*

Fulford concludes that evidence-based medicine (EBM) should be employed in tandem with value-based medicine (VBM).⁶¹ The latter consists of a number of principles directed at drawing attention to the values involved in diagnosis and treatment, and instructs a prioritisation of the subjective values of the person whose health is being assessed and influenced. Fulford claims that “values differ widely and *legitimately*, from person to person, for the same person in different contexts or at different times, from culture to culture, and at different historical periods.”⁶² He stipulates that diversity of human values is irreducible and legitimate, which he takes to imply that we should give priority to the “*actual values of particular individuals*” in diagnosis as well as treatment.⁶³

Fulford’s analyses and practical instructions reveal several important assumptions that need to be brought to the surface. The first is that he thinks values are rooted in subjective experience. Illness *qua* value term refers to subjective experience of a certain kind, *viz.* experiencing failure of ordinary doing, and insofar as disease and dysfunctions are valuate they too derive their meaning from this subjective experience. Fulford is therefore a subjectivist about values: rather than objective features of things or people it is subjective experience, and subjective experience *alone*, that renders conditions good or bad. The second assumption is value relativism. What is valuable can differ per person and culture, he claims, and this diversity is considered to be *legitimate*. And the third assumption consists in an

⁶¹ Fulford, “Ten Principles,” 208.

⁶² Fulford, “Ten Principles,” 213.

⁶³ Fulford, “Ten Principles,” 215.

unreserved liberalism: people's personal values are to be given priority over all other values—and, we should add, *whatever* they may be.

Fulford's work has not received many direct and targeted criticisms as far as I am aware, but a number of problems are worth pointing out. The first is a striking inconsistency between, on the one hand, his claim that illness consists in failure of ordinary doing and that the negative value of medical concepts derives from an experience of precisely this failure; and on the other, that individual values must be attended to and given priority in diagnostic practice and treatment. This creates an ambiguity, as failure of ordinary doing can be established objectively and independently from people's values and preferences. The idea that all medical concepts are partly normative does not entail that distinctly *personal* values and preferences are relevant, let alone that personal values should enjoy any priority in diagnosis or treatment, especially since the source of negative value that Fulford himself identifies, failure of ordinary doing seems to be determinable independently from any such personal or cultural values. Fulford jumps from the recognition that medical concepts are valuative to the conclusion that subjective values and preferences are of the utmost importance in medical practice, even though his own analysis identifies the experience of failure of ordinary doing as the source of negative value in medical concepts. This ambiguity makes it difficult to criticise Fulford's position: do the values in medical judgements relate to failures in ordinary doing or is it personal and individual values that are ultimately decisive? Especially the latter view gives rise to numerous counter-examples and has hugely problematic implications, but the

ambiguity of Fulford's position makes it difficult to level them against him, as he could retort that the counter-examples do not necessarily involve failure in ordinary doings.

A second point of critique, which will prove very important for the theory of health I will develop in Chapter Three, targets Fulford's claim that *only* failures in ordinary doings constitute illness and function as a gateway to other medical concepts. Although an experience of failure in ordinary doing may *reveal* and *confront* a subject with a problem and limitation to her health, this does not imply that obstructions and disabilities that do not result in an experience in failures of ordinary doing cannot be constitutive of dysfunctions or diseases. If one has an exceptionally lazy and generally under-challenging life-style, one may not feel ill and experience no breakdowns in ordinary doing at all, while still suffering from severely debilitating diseases or dysfunctions. Denying the reality of diseases and dysfunctions because they do not result in an experience of failure in ordinary doings, seems too strong to maintain. Moreover, if Fulford were right, changing one's ordinary doings and adapting one's expectations could, by itself, bring about a changeover from illness to health. A tennis player with a chronic knee injury who decides to expel playing tennis from his ordinary doings and expectations will no longer experience any failure in ordinary doing, hence no longer be ill, and hence no longer have a dysfunctional knee! The experience of a failure in ordinary doing is therefore simply too constrictive to mark out genuine health-reductions.

A third criticism relates to Fulford's vision of evidence-based medicine (EBM) next to value-based medicine (VBM). If all medical concepts are already partly valuative, and especially if these values depend on personal preferences and values, what remains of EBM? Which facts are still available and relevant in judgements on health, in diagnosis as well as treatment? All mental and physical disorders and function statements are value-laden on Fulford's analysis, which makes them relative to subjective values and preferences—if, indeed, values are personal and legitimately diverse rather than derived from failure in ordinary doing. Stating that the fact/value distinction converts into an EBM/VBM distinction oversimplifies his own analysis considerably and neglects the fact that all diagnostic categories in EBM already contain valuative dimensions. It is therefore insufficient to suggest EBM and VBM can be positioned side by side as two complementary and co-productive methods of diagnosis and treatment. Fulford's recognition that all medical concepts are value-laden combined with the assumption that all values are ultimately subjective and legitimately diverse, effectively *undermines* EBM in ways that he does not seem willing to recognise and acknowledge. His vision of an unaffected and fully objective EBM balanced out in practice by the maxims of VBM appears therefore most problematic and implausible.

A fourth criticism is directed at Fulford's claim about the logical primacy of illness and the derivative nature of dysfunctions and disease. If his claim is simply that we typically know we are ill before we know what causes it, this merely expresses a temporal order of knowing that is completely irrelevant to the meaning of the respective

concepts. Knowing that a shop is closed only after I check whether it is closed does not make my checking logically primary to the shop's being closed, nor does my checking have any bearing on what it means for a shop to be closed. The stronger claim that Fulford makes is that illness restricts the extension of the other concepts so that dysfunctions *aren't* dysfunctions *unless* they result in an experience of illness at some moment in time. Problems with this stronger claim are, first, that dysfunctions and diseases are then limited to creatures that can indeed have the relevant subjective experiences (organisms without a nervous system could not be dysfunctional or diseased, if Fulford's is right), and second, dysfunctions that do not lead to the *experience* of illness would not be dysfunctions, also within the human domain. There are, however, plenty of diseases and dysfunctions that do not cause an experience of illness, most obviously dysfunctions and diseases that are instantly fatal. Dysfunctions immediately resulting in death do not result in an experience of illness but surely should be regarded as dysfunctions—even as the worst of their kind. The reliance on a subjective experience of a certain kind makes Fulford's account prone to counter-examples of dysfunctions and diseases that clearly are dysfunctions and diseases without ever giving rise to the *experience* of failure in ordinary doing.

The latter three points of criticism can perhaps best be illustrated with an example. Consider a person who meets all criteria for schizophrenia, including relatively 'hard' associated phenomena like a demonstrable loss of grey matter in the temporal and frontal lobes. Consider further that this person has not experienced any significant

failures in ordinary doing due to rich social support and the fact that he has an undemanding daily occupation. On Fulford's view this person does not meet the conditions for illness, and because illness is logically primary the person cannot be said to have schizophrenia. Nevertheless, if all objective criteria for schizophrenia are present, medically sound judgement should probably yield the diagnosis of a well-functioning schizophrenic, or, perhaps, a schizophrenic who happens to enjoy great social support. Denying the reality of schizophrenia seems to disregard the significance of the objective factors and the limitations in functioning that actually obtain, even though they are not exposed and experienced as breakdowns of ordinary doing. Restricting dysfunctions and diseases to conditions in which a failure of ordinary doing is experienced seems too strong a claim to maintain and shows how EBM is effectively subordinated and undercut by Fulford's values-first approach. The idea that values must come first causes an inherent instability in Fulford's account, it seems to me, since facts and objective determinations of someone's condition are subordinated to subjective values and experience. As long as someone does not experience a failure of ordinary doing there is no illness: the 'value foot', then, presses too heavily on the 'fact foot', effectively disabling the 'fact foot' to come off the ground in cases where it quite clearly should.

To recap, in Fulford's hybrid theory of medical concepts values take on a more prominent role than in Wakefield's account. And in this acknowledgement of a greater role of normativity we witness that medical concepts become more subjectified. Not only are medical conditions 'marked out' by subjective experience, the plurality of values

also makes the application of medical concepts dependent on subjective experience of failure in ordinary doing, or, indeed, relative to subjective values and preferences more generally. At the same, time Fulford tries to retain a factual element: facts involved in the meaning of medical concepts and EBM in the practice of medicine and psychiatry. What the relevant facts are and how EBM can be preserved in light of the subjectification and relativisation of medical concepts remains mysterious. Insofar as Fulford's more valuative theory of health and illness indeed purports to be a hybrid theory, it proves to be an unstable hybrid, practically as well as conceptually, as the valuative dimension overrides and suppresses the factual dimension, giving it the character of an 'all normative' view.

One way to resolve the instability of Fulford's two feet principle is by taking one foot away and defining health and illness indeed wholly in valuative terms. Instead of seeing facts and values as two necessary conditions jointly sufficient for health and illness and all the other medical concepts, the idea would be to define health *just as* meeting certain norms and illness *just as* a departure from these norms. Assigning an even greater importance to normativity in the definition of health and illness, however, especially in combination with the presupposition that values are essentially subjective, will inevitably draw health and illness further into the sphere of subjectivity. This double move—health and illness becoming wholly valuative as well as entirely subjective—can be witnessed most clearly in the work of Georges Canguilhem.

5. Canguilhem: Normality and Organic Silence

Even though Canguilhem's work does not follow chronologically from the theories in philosophy of medicine and psychiatry discussed so far, there is an important sense in which it makes for the next logical step given the shortcomings and instability of the hybrid accounts we have looked at.⁶⁴ Canguilhem develops an account of health and pathology in opposition to the account advanced by the French 19th century physiologist and historian Claude Bernard. In Canguilhem's words, Bernard thought that "disease is the exaggerated or diminished expression of normal functioning."⁶⁵ The account of health Canguilhem criticises is therefore similar in form to Boorse's bio-statistical theory, though preceding it by almost a century. Prefiguring Fulford's work, Canguilhem questions whether "the concept of disease [is] a concept of an objective reality accessible to quantitative scientific knowledge?"⁶⁶ Like Fulford, Canguilhem's answer is negative, precisely because quantitative scientific analysis omits the normativity he deems essential to health and pathology. He claims that health "is a normative concept defining an ideal type of organic structure and behaviour; in this sense

⁶⁴ Sadly, Canguilhem's work is largely ignored in the contemporary Anglophone literature in the philosophy of medicine and psychiatry. Notable exceptions are a paper by Victoria Margee, "Normal and Abnormal: Georges Canguilhem and the Question of Mental Pathology," *Philosophy, Psychiatry, & Psychology* 9:4 (2002): 299-312, and a double volume of *Economy and Society* 27: 2-3 (2002), devoted entirely to Canguilhem's work.

⁶⁵ Georges Canguilhem, *The Normal and the Pathological*, trans. Carolyn R. Fawcett and Robert S. Cohen (New York: Zone Books, 1991), 75.

⁶⁶ Canguilhem, *Normal and Pathological*, 76.

it is a pleonasm to speak of good health because health *is* organic well-being.”⁶⁷ Canguilhem claims that health and illness are entirely normative concepts: any scientific facts are merely derivative from what is essentially a good or bad state of organic being.

We have to be more precise here though, as it is one thing to claim that health is a normative concept but quite another to claim that it cannot be reduced to non-normative facts about an organism. Boorse also thinks that health is something good and desirable, but that health can be reduced to statistical normality of functional outcomes. Canguilhem denies this possibility and thinks health and illness cannot be reduced to naturalistic items: health and illness are *irreducibly* normative. He writes:

A simple summary of quantities, without biological value, a simple fact or system of physical and chemical facts [...] cannot be called health or normal or physiological. Normal and pathological have no meaning on a scale where the biological object is reduced to colloidal equilibria and ionized solutions.⁶⁸

The irreducibility of the normativity of health and illness comes out clearest in the way Canguilhem thinks about normality. He claims it is not just inadequate to distinguish health from pathology on the basis of what is statistically normal, but that statistical normality is itself normative. He states that “to define the abnormal as too much or too

⁶⁷ Canguilhem, *Normal and Pathological*, 137.

⁶⁸ Canguilhem, *Normal and Pathological*, 110.

little is to recognise the normative character of the so-called normal state.”⁶⁹ In other words, the normal is normative in the sense that it expresses particular organic norms. We could say, therefore, that Canguilhem inverts Boorse and Bernard’s account of the relationship between health and normality: “the norm is not deduced from, but rather expressed in the average.”⁷⁰ Instead of reducing normativity to normality, normality and statistical averages are viewed as an expression of an irreducible normativity. Canguilhem’s claim is therefore identical to the argument I levelled against Boorse: the normal functions as the norm, i.e. the normal is itself normative.

This is not the only inversion we can find in Canguilhem’s work. He argues that health is not characterised by normality at all but by an ability to *diverge* from normality, averages, and constants. “What characterizes health,” he writes, “is the possibility of transcending the norm, which defines the momentary normal, the possibility of tolerating infractions of the habitual norm and instituting new norms in new situations.”⁷¹ Canguilhem’s conception of health is therefore one that is characterised by flexibility, malleability, adaptability, and the power to recover from illness. He calls this “the margin of tolerance” and levels of “biological luxury” that belong to an organism.⁷² “Healthy life,” he writes in a later essay, “is a life of flexion, suppleness, almost softness.”⁷³

⁶⁹ Canguilhem, *Normal and Pathological*, 56.

⁷⁰ Canguilhem, *Normal and Pathological*, 161.

⁷¹ Canguilhem, *Normal and Pathological*, 126.

⁷² Canguilhem, *Normal and Pathological*, 197; 199.

⁷³ Georges Canguilhem, “The Living and Its Milieu,” in *Knowledge of Life*, ed. Paola Marrati and Todd Meyers, trans. Stefanos Geroulanos and Daniela Ginsburg, (New York: Fordham University Press, 2008), 113.

Pathology, on the other hand, is the kind of process that decreases the ‘margins of tolerance’ and levels of ‘biological luxury’—or as we might call it now, the degree of ‘plasticity’—and makes an organism dependent on normal functioning in a stable and familiar environment. As one commentator notes: “only when the organism can no longer react creatively to new elements of its surroundings, when it loses its potential to set new norms, does it falter. At that point it loses its order and turns into chaos—which, for the organism, implies death.”⁷⁴

This characterisation of health and pathology could still be considered objective and descriptive: there are facts about whether an organism can cope from environmental infractions and changes, and more generally, whether it can function in an abnormal way without losing its internal integration and coherence. If health consists in ‘the margins of tolerance’, Canguilhem too would have reduced health to a set of natural facts. This is clearly not the case however, as what renders the margins of tolerance characteristic of health, and what *ultimately* grounds the distinction between health and pathology on Canguilhem’s view, are *qualitative experiences* of a certain kind. Canguilhem asserts that “the life of the living being, were it that of an amoeba, recognizes the categories of health and disease *only on the level of experience*, which is primarily a test in the *affective* sense of the word, and not on the level of science.”⁷⁵ So rather than the margins of tolerance and ability to diverge from normality, it is on the level of qualitative experience that health is to be differentiated from illness. When Canguilhem writes that

⁷⁴ Annemarie Mol, “Lived Reality and the Multiplicity of Norms: a critical tribute to Georges Canguilhem,” *Economy and Society* 27: 2-3 (2002): 275.

⁷⁵ Canguilhem, *Normal and Pathological*, 198. Emphases added.

“pathology implies *pathos*, the direct and concrete feeling of suffering and impotence, the feeling of life gone wrong,” what he means is that pathology is *essentially* a matter of the concrete feeling of suffering and impotence: this feeling is the necessary *and* sufficient condition of pathology.⁷⁶ He writes unequivocally that “the origin of pathology must be sought in the *experience* men have in their relations with the whole of their environment.”⁷⁷ And similarly, that “it is particularly the sick man’s point of view which forms the basis of truth.”⁷⁸

If pathology is essentially a feeling of suffering and impotence in relation to a certain environment, then health is bound to consist in a qualitatively different kind of experience and to be distinguished from pathology precisely in terms of such experiences. To characterise this different kind of experience Canguilhem turns to a saying of the French surgeon René Leriche, who defines health as “life lived in the silence of the organs.”⁷⁹ Canguilhem adopts this definition as the most basic definition of health. Health is thus reduced to a qualitative experience of a certain kind, an experience of “organic silence,” which he defines as “a state of unawareness where the subject and his body are one.”⁸⁰ Health is defined as an experience of not being opposed and impeded in one’s activities; a state where one is not aware of one’s body as material object but where the body functions silently, without resistance; a state where one’s body directly answers to one’s wants and intentions.

⁷⁶ Canguilhem, *Normal and Pathological*, 137.

⁷⁷ Canguilhem, *Normal and Pathological*, 88. Emphasis added.

⁷⁸ Canguilhem, *Normal and Pathological*, 93.

⁷⁹ Canguilhem, *Normal and Pathological*, 91.

⁸⁰ *Ibid.*

Canguilhem's account of health therefore shows strong similarities with Fulford's view that health consists in 'latent full ordinary doing'. But given that Canguilhem's theory is 'all normative', this is what the concept health can be reduced to: there is nothing more to health, or over and above it, than an experience of organic silence. Fulford, by contrast, insists on defending a hybrid view according to which health and illness are reduced to the experience of latent full ordinary doing in addition to certain physical facts about one's being.

In any case, 'the margins of tolerance' and 'levels of biological luxury' are ultimately indicative of health because they generate the kind of experience that Canguilhem identifies as the essence of health. Canguilhem writes that "man does not feel in good health—which is the definition of health—except when feeling not only normal—adapted to one's milieu and its demands—but normative, capable, that is, of pursuing new norms of life."⁸¹ So the ability to diverge from the normal, to cope with environmental infractions, and to institute new norms in new environments is indicative of health, ultimately, because they give rise to a particular kind of positive subjective experience. In short, plasticity and adaptability are characteristic of health because they enhance the *experience* of organic silence and the *feeling* of being more than normal.

The moment health and pathology are taken as wholly normative, then, we can witness that these concepts are drawn completely into the sphere of subjectivity. The reason why Canguilhem considers it impossible to define health in terms of physical and chemical facts, like

⁸¹ Canguilhem, *Normal and Pathological*, 200.

Fulford, is because it neglects the experiential dimension that makes health something good and illness something bad. Canguilhem's thesis that the goodness of health and badness of pathology require subjective experience as their ground reveals that he thinks goodness and badness have their source in subjective experience. Rather than tying health to social standards, as Wakefield does, Canguilhem agrees with Fulford that the goodness of health and badness of illness rely on a subjective experience of a specific kind: frustration, irritation, suffering, impotence in the case of illness; and organic silence and unity between mind and body in the case of health.⁸²

There is relatively little critical literature on Canguilhem's account of health. Commentators mainly celebrate Canguilhem's work for its anti-reductionist account of health, his emphasis that health and pathology are grounded in the experiential dimension of lived reality rather than in objective science, and his argument that a capacity to be abnormal characterises health more than its opposite. Nevertheless, it is obvious where its weakness lies, since we already found the same weakness in Fulford's account. The weakness of Canguilhem's account is that numerous conditions can be pathological without giving rise to an experience of irritation, frustration, and suffering—just as one can experience complete organic silence while actually subsisting in a deeply pathological condition. In Chapter Four (§1.3) I shall provide a

⁸² In Chapter Two (§2.3) I will draw attention to another aspect of Canguilhem's meta-ethical claims and commitments, one that will prove extremely helpful and insightful. For now it should be recognised that the categories of goodness and badness, and therefore the categories of health and illness, can only be identified at the level of subjective experience in Canguilhem's view.

more comprehensive critique of the idea that pathology can be defined in terms of an experience of pain and suffering and that health consists in an absence of pain and suffering. In short, and just by way of anticipation, the main problem is that pathological conditions like chronic obstructive pulmonary disease, cancers, and even a fatal heart attack do not necessarily involve an experience of suffering, irritation, resistance, and feelings of mind-body discord. With the help of pharmaceuticals one could even eradicate all subjective experience of suffering and impose a lasting experience of organic silence, without, however, thereby making someone healthy. And conversely, one can suffer for a great number of reasons while actually being relatively healthy. Once health and illness are defined wholly in subjective terms, the objective point of view from which people can be judged healthy and unhealthy regardless of their subjective experience has been closed off. Although Canguilhem may be right that a state of health is generally *accompanied* by a silence of the organs and that pathology usually involves an experience of suffering and frustration. But making these experiences their defining features is inadequate in light of clear-cut pathological conditions that do not give rise to the relevant feelings and all instances of good health in which there are experiences of suffering or frustration present.⁸³

One further step can be made on the continuum from purely objective to purely subjective accounts of health. Although Canguilhem

⁸³ One could of course deny that conditions are clear-cut pathologies if they are not accompanied by experiences of suffering. This would be quite a radical claim however, especially given the kind of conditions one would not be able to consider pathological anymore, and one I think we should therefore resist.

reduces health to the having certain types of subjective experience, he thinks the relevant subjective experiences can still be generally characterised: being healthy means for every human being to have *the same* kind of qualitative subjective experience. From this idea, however, it is a relatively small step to assert that health and illness are *merely* subjective notions and undefinable in any form of generality. Health and illness would then be entirely relative to whatever a subject or culture deems healthy and unhealthy. This latter claim we find defended by Nietzsche. Although Nietzsche's work falls well outside the contemporary debates in the philosophy of medicine and psychiatry, there is an important sense in which several of his aphorisms, when grouped together, amount to a position that completes the progression from purely objective to purely subjective accounts of health. In a few aphorisms Nietzsche shows the most extreme consequences of recognising health and illness as normative concepts while supposing that normativity is rooted in subjective experience and individual preference; *viz.* complete scepticism about the very possibility of defining health and illness.

6. Nietzsche: Scepticism and Individualism

Tuning to Nietzsche's thoughts on the nature of health and illness immediately presents a hermeneutical dilemma. Nietzsche's published works and notebooks contain a great number of claims on what he deems beneficial and detrimental to human health, many of which I will

return to and explore further in the course of this thesis. These claims suggest that Nietzsche operates with a concept of health that is at least somewhat unified and stable across individuals and cultures. Nevertheless, in the passages where he explicitly discusses the nature of health he claims the notion is undefinable, relative to individuals, and irreducibly pluralistic. That is, in those passages Nietzsche provides a *critique* of the very idea of 'health': a good purported to be similar for everyone and that can be characterised in general terms.⁸⁴

Here I shall not attempt to harmonise both aspects of his thinking into a larger systematic whole. But in order to do justice to both aspects of his thinking about health I shall distinguish between, what I will call, Nietzsche's 'official view' and his positive assertions about health more generally. The 'official view' is the critical view we find in the passages where he explicitly discusses the nature of health and denies it can be defined in any way, i.e. the sceptical view.⁸⁵ In the published works it can be found most clearly in a passage from *The Gay Science*:

⁸⁴ This discrepancy results in part from Nietzsche's own philosophical development. In his so-called 'middle period' Nietzsche is heavily invested in promoting human diversity, which makes him criticise the forces that constrain the variety of ways in which we think we can live—whether they are moral restrictions, cultural constraints, or indeed conceptions of health. In his later and better known works the idea of 'will to power' increasingly comes to dominate his thinking and is introduced as the essence of all living beings—rendering health, the state in which life goes well, automatically a matter of greater power. The only point where he thematises the nature of health *as such*, however, is in the middle-period; hence my focus on this period of his work.

⁸⁵ Calling this the 'official view' is just a shorthand way to refer to what he actually writes about the nature of health. This does not delegitimise or discredit the possibility of deducing a Nietzschean conception of health from his various claims

There is no health as such, and all attempts to define a thing that way have been wretched failures. Even the determination of what is healthy for your *body* depends on your goal, your horizon, your energies, your impulses, your errors, and above all on the ideals and phantasms of your soul. Thus there are innumerable healths of the body; and the more we allow the unique and incomparable to raise its head again, and the more we abjure the dogma of the 'equality of men', the more must the concept of *normal* health, along with a normal diet and the normal course of an illness, be abandoned by medical men. Only then would the time have come to reflect on the health and illness of the soul, and to find the peculiar virtue of each man in the health of his soul. In one person, of course, this health could look like its opposite in another person.⁸⁶

This passage reveals why Nietzsche takes a sceptical view towards health and why he considers all attempts to define it as 'wretched failures': people are not sufficiently equal and similar in the relevant respects. People have different goals, horizons, ideal, and thoughts about what is valuable. Since health is a kind of ideal, Nietzsche presumes it must be relative to the vicissitudes of individual goals, horizons, energies, and values. Nietzsche sees health not as an ideal over and above individual values and goals, or as a good independent of such values and goals, but as a good that is instrumental to the

about what he thinks is beneficial and harmful to health. In many ways, the theory of health I will develop in Chapter Three is a Nietzschean conception of health.

⁸⁶ Nietzsche, *Gay Science*, §120.

realisation of one's own goals and ideals. The last sentences of the quoted passages suggest Nietzsche thinks that health consists in finding and realising one's unique virtues—which, given the presumed variety and inequality of people, will result in quite different forms and ways of being healthy. Defining health as the same state for everyone should therefore be resisted; individual values, goals, and virtues determine what health is for each individual and what it is not.

Nevertheless, at a higher level of abstraction, the concerns Nietzsche expresses could quite easily be overcome. If health were defined as an ability to realise one's goals, for instance, or an ability to optimise one's energies and impulses, or to find and cultivate one's unique virtue, people could be radically different and live entirely differently lives while, in fact, being healthy in terms of the same notion of health. What is healthy would differ per person, but that would not challenge the more abstract claim that being healthy means precisely the same thing for everyone. In order to maintain that health itself cannot be defined and that all attempts to do so are wretched failures, Nietzsche would therefore need a stronger argument. In his notebooks of the same period we find Nietzsche arguing the same point:

Health cannot be defined as something fixed [*fest*]. An ideal of the state in which everyone can do best what he likes to do most: but a wild person, or salon hero [*Salonheld*] or intellectual will wish entirely different states!⁸⁷

⁸⁷ Friedrich Nietzsche, *Friedrich Nietzsche: Sämtliche Werke. Kritische Studienausgabe in 15 Bänden*, ed. Giorgio Colli andazzino Montinari (Berlin: de Gruyter, 1988), §9.8 [62]. My translation.

In this passage Nietzsche affirms health both as an ideal and again as a state that cannot be defined due to differences between individual types. But he also suggests a simple definition of health that would transcend individual diversity and capture health in a unitary form: a state in which people can do what they would like to do. Although this definition is obviously over-simplistic and inadequate as an account of health, it would incorporate individual diversity and apply equally to everyone, including the different types that he lists. Despite this, in a note from a few months later Nietzsche writes:

It is only sensible to speak of 'health' and 'illness' with an eye to an ideal that has to be reached. But the ideal is always something most changing, even in the individual (compare that of a child to that of a man!)—and the knowledge necessary to reach it is almost entirely absent.⁸⁸

This passage contains a better reason for Nietzsche's scepticism. Not only is health a normative ideal and therefore, on his view, relative to individual goals, desires, and ideals—the very goals, desires, and ideals are *changeable*, also within the lifetime of one and the same individual. If we cannot know what people's goals and ideals are—not even our own—we also cannot know whether we are healthy or not. Although health could still abstractly be defined as, say, having the ability to identify and pursue one's goals, values, and peculiar virtue—we cannot know whether we are healthy or not and so scepticism would ensue.

⁸⁸ Nietzsche, *KSA*, §9.11 [112]. My translation.

The subjectivist view taken to its logical extreme, therefore leads to the nihilistic view: the idea that there is no such thing as health, just a plurality of conditions that are called 'health' that have very little, if anything, in common. When recognising the normativity of health and illness, Fulford and Canguilhem argue health and illness must be rooted in subjective experience, but *qua* experience they think both concepts can be characterised in universal form. When Nietzsche recognises health and illness as normative notions, he thinks their meaning becomes subjective not just in an experiential sense; health *itself* is seen as relative to individual desires, goals, and values. As desires, goals, and values diverge widely between people, and because we often cannot know our own goals and values, we end up with a general scepticism concerning the nature of health. The only remaining possibility would be to follow in Nietzsche's footsteps and criticise the very idea of a unitary notion of health and to reproach anyone who attempts to define it that way.

With Nietzsche's scepticism we have completed the logical progression from purely objective to purely subjective accounts of health and brought out the most extreme consequences of affirming health and illness as normative concepts. I shall not engage in a critique of Nietzsche's view here, as the next chapters are, in a sense, nothing other than an attempt to overcome the sceptical impasse that Nietzsche manoeuvred into.

7. Desiderata: Two Main Challenges

The increasing importance assigned to subjective factors in the definitions of health directly results from the recognition that health and illness are normative concepts and the widespread assumption that all normativity is rooted in subjectivity: according to Wakefield values depend on social and cultural standards; Fulford claims values depend either on experiences of latent full ordinary doing and/or on whatever people personally deem valuable; Canguilhem argues that values depend on absence or presence of suffering; and Nietzsche claims that values depend on people's own goals, ideals, and unique virtues—at least in the passages I considered.

The assumption that there is no truth about values outside of what subjects experience as valuable is probably as old as philosophy itself and, as we could see, deeply influences philosophical debates on the nature of health. Boorse makes the painstaking effort to construct a strictly value-free theory of health and illness *precisely* because of the fear that if he were to accept that health and illness are normative concepts he would have to allow culture- and subject-relative elements into his definitions and thus give up on the objectivity of disease categories and health-evaluations more generally.

The assumption that all values are rooted in subjective feelings, personal preferences, or cultural standards can also itself be called into question, however, and as I will try to demonstrate, *should* be called into question when reflecting on the nature of health. If—and this is just hypothetical, for now—there are values and norms that do not depend

on subjective feelings, or preferences, or desires, i.e. if there were *mind-independent* norms and values, the possibility arises to recognise the normativity of health without having to define health in terms of, or as essentially dependent upon, or as relative to, those subjective factors. That is, if the norms inherent to health and illness do not depend on subjective feelings, individual values, cultural standards, and so on, then health would not have to be defined in those terms and the problematic counter-examples to the definitions given above could be avoided—while, at the same time, endorsing the normativity of health and illness, about which the subjectivists appear absolutely right.

If the norms inherent to health and illness are indeed objective, this would break down the whole debate presented above. Fulford's critique of Boorse's bio-statistical theory would not amount a critique at all: exposing the normative aspects of definitions of health and illness would not have any bearing on their correctness, objectivity, or universal applicability. It would allow for a conception of health that is normative but that avoids the problematic consequences of cultural and subjective relativism that I pointed out in the context of Wakefield's and Fulford's definitions: whether people are healthy or ill would not depend on cultural standards, experience of failure in ordinary doings, or personal preferences, but instead, be an objective normative fact about their condition. Given the clear benefits of such a theory, the most important desideratum of the debate described above is unmistakable: we need a theory of health that does justice to the normativity of health and health-related concepts as well as to their objectivity; i.e. we need a theory of health that is *at once* objective *and* normative.

Now, the idea of objective normative facts is of course deeply controversial and the possibility of such facts is intensely debated in contemporary meta-ethics. It is within the context of these meta-ethical debates, and therefore at a higher level of abstraction, that I think we must assess whether there is indeed a coherent and plausible way of thinking that certain norms and values are objective. Many philosophers, including Nietzsche, argue this to be fanciful. Values and norms, they insist, are nothing other than subjective responses to an objective and value-free world. If value-subjectivism is indeed the only viable meta-ethical option, then the hypothetical option I just sketched would be unavailable; a definition of health would have to include a reference to subjective experiences, feelings, preferences, goals, and so on, if it aims to affirm its normative dimension. If value-subjectivism is false, however, and a coherent and plausible account can be given of objective values and norms—at least for the values and norms relevant to health—the possibility arises for a normative theory of health that is simultaneously objective. That is, it would open the possibility for making a claim on what is a good state for organisms to be in (health) without this being dependent on, or being relative to, subjective or cultural factors. Correct evaluations of health would then, indeed, amount to normative facts about living beings. The first major challenge, then, which I will address in the next chapter, is the meta-ethical question—or rather, the ‘meta-normative’ question (it is the status of norms that is examined, not that of ethics)—whether normative statements can be objectively true, and if so, on what grounds.

Questioning whether the normativity inherent to health and illness is objective, and if so how, does not yield an answer to the question what health is and how it can best be defined. If the norms relevant to health are objective, this would only *enable* the formulation of an objective and normative account of health; that is, it would only provide the conditions of possibility for such a theory. The central question what health actually is, i.e. what health consists in and what its essential features are, must still be answered. This will make for the second fundamental challenge, which I will address in Chapters Three to Five. In the course of formulating and defending an alternative theory of health, I shall refer back to the accounts of health discussed above, steer away from the criticisms that were levelled against them by the various commentators as well as by myself, and in general, make an attempt to improve on each.

Chapter 2

Life and Normative Realism

1. The Sceptical Challenge

The previous chapter showed how the assumption that values and norms are essentially subjective obstructs the formation of an adequate account of health. Given that health and illness clearly contain a normative component, linking norms with subjectivity inevitably renders health itself relative to subjective factors. When the subjectivist view of health is followed to its logical extreme, we end up with the sceptical view that there is no such thing as health and the conclusion that the concept of health cannot be defined or further specified. In order to avoid the sceptical view and untenable implications of subjective accounts of health more generally, and so to create the possibility for a better account of health, this chapter will call the assumption into question that all values are essentially subjective.

The assumption reaches far outside the contours of philosophy of health, however, and has been defended by philosophers in all traditions and ages. Even though the reasons for thinking that values are not objective vary widely, it seems to me there is one particular thought that underlies most permutations of value subjectivism, *viz.* the idea that values are not part of the objective world, the world as it is

'out there', independent of human responses to it. This idea, proclaimed already by David Hume and Thomas Hobbes, has most clearly been formulated and defended by John Mackie and equally figures in a large number of Nietzsche's aphorisms. I will turn to Mackie and Nietzsche first in an effort to formulate the sceptical challenge more clearly and rigorously. In the second part of this chapter I will turn to the work of several normative realists and with their help propose a way of thinking that overcomes value subjectivism—which, if coherent and plausible, would create the condition of possibility for an objective yet normative theory of health.

1.1 Mackie's Error Theory

Despite the large variety of reasons why philosophers think norms and values are subjective it seems to me there is one underlying idea that unites them all. And that idea is formulated most explicitly and succinctly by John Mackie: values, he famously writes, are not "part of the fabric of the world."¹ Mackie's claim is ultimately rather simple: when we seek to support normative claims, the world lets us down as there are no objects or properties in the world that could back up and validate our normative assertions.

Denying objectivity to values in this manner relies on a realist conception of objectivity: the view that only things existing ontologically independent from us and our ways of knowing them are objective; or alternatively, as Mackie puts it, only objects and properties that exist "prior to and logically independent of" our means to

¹ John Mackie, *Ethics: Inventing Right and Wrong* (London: Penguin Books, 1990), 22.

acquiring knowledge about them are objective.² Because Mackie thinks value judgements categorically fail to meet the realist criterion, he concludes that values are merely subjective responses to reality instead of properties woven into the fabric of reality itself.

Mackie offers two arguments for his claim that values do not meet the realist criterion for objectivity. The first is that of queerness: if value-properties were to exist in the world they would be *odd* or *queer* properties, unlike everything else we take to be existing.³ It would be strange to think that next to an object's mass, size and shape, it has value properties or aesthetic qualities. The second argument is the argument of relativity (or variety): the fact that people in different times and cultures recognise different values is evidence for the claim that values do not exist in the world 'out there' and cannot be discovered as such.⁴ Realism therefore also implies universality on Mackie's view; things are only real if they obtain cross-culturally and trans-historically. Failing the realist criterion, Mackie thinks we could understand value judgements better as expressions of an 'attitude' or 'subjective response' to what is itself a natural thing or event.⁵ Values, he concludes, are projections of human attitudes and sentiments on a mind-independent world—or, referring back to use Hume's often-quoted phrase, values result from the propensity of the human mind "to spread itself on external objects."⁶

² Mackie, *Ethics*, 30.

³ Mackie, *Ethics*, 38-42.

⁴ Mackie, *Ethics*, 36-38.

⁵ Mackie, *Ethics*, 41.

⁶ Quoted in Mackie, *Ethics*, 42.

Mackie concludes that we commit a fundamental error each time we make a normative claim or judge something as valuable, *viz.* the metaphysical error of referring to properties that do not exist. The comparison with secondary qualities is easily made here. Every time we say that something is red or blue we make a mistake in some fundamental sense, as the thing referred to, on the traditional view of secondary qualities at least, is in itself, without mediation of subjectivity, not red or blue. The same would be true for values of all possible kinds on Mackie's score: actions may seem right or wrong, states of affairs may seem good or bad, but in objective reality actions and states of affairs are neither. Independent of our perceptions and attitudes they are just what they are: some value-free, factual state of affairs onto which we project our valuative attitudes and sentiments. Mackie's view has become well-known as the 'error theory': every time we make a value claim we commit an error, an error that renders value judgements categorically false.

1.2 Nietzsche's Error Theory

Although Nietzsche's meta-normative commitments are a topic of intense debate in recent scholarship, there are good reasons for thinking that Nietzsche endorses an error-theory similar to Mackie's.⁷ In *Human, All Too Human* Nietzsche writes for instance:

⁷ Hussein makes a good case for attributing an error theory to Nietzsche. See: Nadeem J. Z. Hussein, "Nietzsche and Non-cognitivism," in *Nietzsche, Naturalism, and Normativity*, ed. Christopher Janaway and Simon Robertson (Oxford: Oxford University Press, 2012), 111-132; and Nadeem J. Z. Hussein, "Honest Illusion:

Because we have for millennia made moral, aesthetic, religious demands on the world, looked upon it with blind desire, passion or fear, and abandoned ourselves to the habits of bad logical thinking, this world has *become* so marvellously variegated, frightful, meaningful, soulful, it has acquired colour—but we have been the colourist: it is the human intellect that has made appearance appear and transported its erroneous basic conceptions into things.⁸

In this passage Nietzsche also makes a comparison between values and secondary qualities, claiming that ‘the human intellect’ imports values into things, in such a way that our value judgements are fundamentally and categorically erroneous. In the same text Nietzsche writes that when we call things good and bad we are “committing the same error as that by which language designates the stone itself as hard, [and] the tree itself as green”—again making the comparison with secondary qualities and stating that we are in error each time our speech suggests anything to be *really* good or bad.⁹

The idea that values are human attitudes projected onto a value-free world and categorically erroneous insofar as they purport to describe this world, surfaces throughout Nietzsche’s oeuvre.¹⁰ Although

Valuing for Nietzsche’s Free Spirits,” in *Nietzsche and Morality*, ed. Brian Leiter and Neil Sinhababu (Oxford: Oxford University Press, 2007), 157-191.

⁸ Friedrich Nietzsche, *Human, All Too Human: A Book for Free Spirits*, trans. R. J. Hollingdale (New York: Cambridge University Press, 1986), §16.

⁹ Nietzsche, *Human all too Human*, §39.

¹⁰ Other instances where Nietzsche clearly commits to error-theory claims are Friedrich Nietzsche, *Twilight of the Idols*, trans. R. J. Hollingdale (London: Penguin

most of Nietzsche's error-theoretic claims pertain specifically to *moral* judgements, i.e. claims on how human beings ought to act, rather than value judgements more generally, in *The Gay Science* we get a clear indication that Nietzsche considers all values to be human projections:

Whatever has *value* in our world now does not have value in itself, according to its nature—nature is always value-less, but has been *given* value at some time, as a present—and it was *we* who gave and bestowed it. Only we have created the world *that concerns man!*¹¹

Given Nietzsche's conviction that values are mental states bestowed onto a value-free world, it is not surprising that he thinks that health, *qua* value concept, depends on whatever individuals experience valuable or indeed choose to find valuable. Since health judgements are valuative judgements, they involve projections of subjective attitudes and must be considered erroneous when taken as anything other than projected subjective attitudes; hence Nietzsche's claim that all attempts to describe health *as such* are wretched failures.

Books, 1968) §7.1; Nietzsche, *Daybreak*, §308; Nietzsche, *Beyond Good and Evil*, §108; and a note from 1888, published in Friedrich Nietzsche, *The Will to Power*, ed. Walter Kaufmann, trans. Walter Kaufmann and R. J. Hollingdale (New York: Random House, 1967), §428. Clarke and Dudrick's thesis that Nietzsche holds an error theory of values only in *Human, All Too Human*, and later replaces it with perspectival notion of objectivity, therefore opposes the textual evidence. See Maudemarie Clark and David Dudrick, "Nietzsche and Moral Objectivity: the Development of Nietzsche's Meta-Ethics," in *Nietzsche and Morality*, ed. Brian Leiter and Neil Sinhababu (Oxford, Oxford University Press, 2007), 192-226.

¹¹ Nietzsche, *Gay Science*, §301.

1.3 Error Theory and Value Scepticism in General

Earlier I suggested that error theory underlies other reasons why people think values and norms are subjective, and therefore poses the most fundamental challenge to an objective yet normative account of health. A few words should help to at least clarify this claim.

Error theory is often contrasted with emotivism, expressivism, and other strands of non-cognitivism. Emotivists like Ayer also explain values in terms of emotions or affective responses towards value-neutral states of affairs, but differ from error-theorists in that they take normative judgements to be non-cognitive attitudes. That is, non-cognitivists endorse the *semantic* theory that normative statements do not set a requirement on the objective world to start with and are therefore neither true nor false—hence also not categorically false. According to emotivists and other non-cognitivists, normative claims only express our emotive attitudes to the objective world, essentially not different from growling, smiling, or frowning. Although much has been made of the difference between error-theory and emotivism in the meta-ethical literature, it seems to me the difference is ultimately rather faint. Central to emotivism remains the claim that values are not part of the fabric of the world and *therefore* cannot be objectively true. The only difference with error theory is that value judgements are not considered to be truth-apt and therefore not categorically erroneous, but we should wonder how significant this distinction really is.¹²

¹² Moreover, emotivism has been criticised for the fact that simple *modes ponens* inferences can be constructed with normative assertions. Normative assertions function logically and grammatically similar to factual assertions. This undermines the non-cognitivist claim that normative assertions are not genuine assertions and

A completely different approach to values subjectivism, one that falls entirely outside of contemporary meta-ethical debate, but one that is nonetheless worthwhile considering, is an existentialist-type of critique towards the idea of normative truth. Phrased very loosely, and referring to a tradition more than any particular philosopher, a historic-existential critique of normative truth could be that with the collapse of the most important meta-narratives during the 20th century the valuing human subject has been thrown back onto itself, so to speak, and is now confronted with the bare activity of its own valuing—an activity exposed for what it is, now that it operates without authoritative ideology, dominant religion, or supposed rational ground. On this account, subjectivism would be a time-bound and uniquely modern experience, resulting from historical events such as the successes of natural science and the dissipation of the major political ideologies. All that remains is the sobering existential realisation that we are, and always have been, the architects of values, leaving us solely with a sense of responsibility, but without grounds to justify any value-judgement, as any ground or standard would also merely be of our own making.

Now, if historical dynamics indeed confront us with a realisation of this kind, that does not imply that there are no objective values or that value-judgements can never express any truth. We could be having this historic realisation also if there were mind-independent valuative truths. A further claim must be made to arrive at the genuinely sceptical

merely expressions of emotions. This problem is known as the Frege-Geach problem, which strikes me as proving error-theory to be a better version of meta-ethical subjectivism than emotivism. See for further discussion: Alexander Miller, *An Introduction to Contemporary Metaethics* (Cambridge: Polity Press, 2003), 40-42.

position, *viz.* the further claim that there are no objective values or grounds for ethical beliefs to be discovered *on principle*. And this further claim is precisely the thesis expressed in Mackie's and Nietzsche's error theory: nothing outside human thoughts, emotions, or socio-historical dynamics can validate a value-judgement. To put it differently: the idea that human beings subjectively value things is nothing controversial; that this activity is subject to cultural and historical influences is also not startlingly insightful; but from neither observation does it follow that there are no objective values or that truth can never be expressed in value judgements. What I called an 'existentialist' version of meta-normative critique, if indeed construed as a substantive meta-normative position, also rests on the idea that values are not part of the mind-independent world and *therefore* cannot transcend the historical and cultural influences that shape and transform our values.

There are of course plenty more reasons why philosophers endorse a subjectivist position on values, just as there are innumerable positions within the subjectivist camp itself. But what I hope these few remarks show is that meta-normative subjectivism ultimately relies upon, or provides further argumentative support for, the fundamental metaphysical claim that values are not part of the objective world—the way the world is independent of our mental responses to it. Overcoming the sceptical position therefore requires the affirmation that there are values independent of mental projections, and that there is truth about what is valuable independently of our own preferences, sentiments, cultural standards, and ways of knowing the world.

2. Towards a Life-based Normative Realism

2.1 *Criteria for Normative Realism*

The sceptical challenge is clear: since values are not part of the objective world, they must be projections of human attitudes and sentiments onto the objective mind-independent world. Since health judgements are value judgements, these too must be subjective responses of some kind to value-neutral states of affairs. I shall now turn to the work of various normative realists who think this picture is fundamentally mistaken and will attempt to build up a realist account of values. Before doing so, however, it will be helpful to list some criteria for normative realism. Peter Railton and Richard Boyd provide clear criteria, which can be combined and condensed into the following three:¹³

- 1) *Cognitivism*: value-statements are propositions capable of being true and false.
- 2) *Independence*: value-statements are true and false independent from our opinions, preference, sentiments, attitudes, and so on.
- 3) *Feedback*: we can interact with values, and this interaction exerts an influence on our perceptions, thoughts, and actions.

If we can formulate a conception of values that meets these three criteria, or at least isolate a sub-class of values that does so, than these values can be regarded as objective and real.

¹³ See Peter Railton, "Moral Realism," *The Philosophical Review* 95:2 (1986): 172; and Richard N. Boyd, "How to be a Moral Realist," in *Essays on Moral Realism*, ed. Geoffrey Sayre-McCord (Ithaca, New York: Cornell University Press, 1988), 182.

2.2 Railton: Objectified Interests and Non-Moral Value

One of the best known defenders of value realism is Peter Railton. His account opens with the observation that all human beings have ideas about what is in their own best interest. Railton refers to these self-interests with the notion of 'non-moral value'. He does not specify the nature of non-moral value or non-moral goodness beyond saying that it refers to what is desirable or good for an individual him or herself. It is imperative that we get a clearer conception of non-moral goodness, however, to prevent confusion about what is entailed if non-moral goods turns out to be objective.

One way to think of non-moral goodness is the following, which is an adaption of Bernard Williams's conceptualisation of self-interest.¹⁴ Take everything an individual values, favours, or wants to promote and everything one would like to see happen to either oneself, to others, or everything else in the cosmos, in the past, present, and future. From this widest possible set of values, remove everything that does not directly benefit the person herself. So everything that primarily benefits other people, generations, cultures, or species is removed. Strip this narrower set also of any sense of obligations and duty—whether they are legal, moral, or otherwise. What we are left with, is a much narrower set of values than the first set, containing items that are good only for oneself and serving only one's own interests, which would indeed amount to something like 'egoistic' goods. Although this is a very rough and

¹⁴ This strategy is an adaptation of Bernard Williams's account of self-interests. See: Bernard Williams, "The Standard of Living: Interests and Capabilities," in *The Standard of Living: The Tanner Lectures*, ed. Geoffrey Hawthorn (Cambridge: Cambridge University Press, 1985), 95.

schematic way of explicating the idea of non-moral goods, it is one way to reach a conception of goodness independent of duty and obligation. We can conceive of things being beneficial to ourselves without any further claims about reasons for action or sense of duty. Non-moral goods, thus conceived, are also not ethical goods: non-moral goodness can be identified prior to a conception of how to live a good human life and expresses at a more rudimentary level what is good for someone and what is not. Non-moral goods could even apply to non-human organisms, perhaps even to artefacts, and are therefore more elementary than ethical goods (—supposing that ethical goodness does not apply to non-human organisms and artefacts). Although non-moral goods for human beings can certainly play a role in our ethical and moral theorising, the goods themselves can be identified independently of these posterior and more practical concerns. Railton’s argument is primarily directed at establishing the objectivity of these non-moral goods and this will also be my primary objective.¹⁵

Having narrowed the scope of concern to non-moral goods, Railton claims we can be mistaken about what is non-morally good. Being mistaken about what is in our own interest, he writes, can result from “ignorance, confusion, or lack of consideration, as hindsight attests.”¹⁶ The mistakenness is therefore not a categorical wrongness of the kind described by Mackie and Nietzsche, but a mistakenness revealed by the discovery of what was actually in one’s own interest. The way we can arrive at this truth, or begin to make sense of it, Railton

¹⁵ Railton does make an attempt to extend his account of non-moral goods into the moral domain. See Railton, “Moral Realism,” 184-207.

¹⁶ Railton, “Moral Realism,” 173.

suggests, is by imagining a subject with full information about herself and her environment, a subject with “unqualified cognitive and imaginative power, full factual and nomological information about her physical and psychological constitution, capacities, circumstances, history, and so on.”¹⁷ Such a fully informed subject (S+) will end up making different choices than her normal counterpart (S) once S+ is in situations that S is in; choices that will represent the interests of S better. The example that Railton gives illustrates the point well. If S were to suffer from stomach aches after an instance of food-poisoning, S may turn to remedies she remembers to be effective from past experiences, like drinking warm milk, even though they would only worsen the ailment in her present condition. S+, on the other hand, having full knowledge of both S’s physical constitution and the remedial effects of all available substances, would be able to determine objectively what is good for S under these circumstances, e.g. abstaining from dairy products and consuming clear liquids. The idea of complete information and the possibility of improving our ideas about what is in our own interests provide the foundation for Railton’s claim to objective values.

This procedure only amounts to an epistemic account of objectivity, however, and does not meet the independence criterion for normative realism defined above. What S+ deems valuable is still only subjectively valuable, i.e. dependent on one’s own preferences, attitudes, and desires; S+ just has better informed subjective values. The reason why Railton thinks full information can establish objective of values is not just the possibility for improving on what one takes to be

¹⁷ Ibid.

in one's interest. This claim shelters a much stronger claim, one that commits him to a more robust normative realism, *viz.* the claim that bodily properties, and to some extent a person's psychic constitution too (what he calls "wants/interests mechanisms")¹⁸, are themselves factual matters, which, once fully understood, enable one to know what is non-morally good for an individual. Once we have full information of our own body-psychic constitution and the material environment, Railton thinks we can know what is valuable for us. Non-moral values are therefore *grounded* in this combination of facts.

Railton draws a distinction between 'relative' and 'relational' notions in this context, which is of pivotal importance. He claims values are *relational* notions, i.e. non-moral goods and bads are per definition a 'good-for' and 'bad-for'. He writes that "although there is no such thing as absolute goodness—that which is good in and of itself, irrespective of what or whom it might be good *for* or the good *of*—there may be relational goodness."¹⁹ Railton compares the relational nature of values to the relationality of heaviness. Nothing is heavy in itself, or absolutely heavy, but whether one object is heavier than another is still an objective matter. Or, perhaps a better example, the notions 'standing right of the other' and 'standing left of the other' are relational in a three-place way, but the relationality of spatial position does not undermine its objectivity. Railton claims non-moral goods are objective in precisely the same relational way.

¹⁸ Railton, "Moral Realism," 179.

¹⁹ Peter Railton, "Facts and Values," in *Facts, Values and Norms: Essays Toward a Morality of Consequence* (New York: Cambridge University Press, 2003), 48.

Unfortunately, Railton does not work out the distinction between relativity and relationality further. I think it is crucial that we do so if we are indeed to employ the distinction in an argument for the objectivity of non-moral goods. If non-moral values were nothing other than subjective preferences projected onto the objective world in the way that sceptics like Hume, Mackie, and Nietzsche claim they are, then values would also be relational in some sense, *viz.* relational to a valuing subject. I suggest that what distinguishes relationality from relativity is that in the case of relationality both *relata* are objective matters, whereas in the case of relativity one of the two *relata* is a subjective attitude or preference, or some kind of cultural standard. Heaviness is relational rather than relative because the weight of two items does not depend on subjective attitudes, preferences, or one's culture. Similarly, spatial location is relational rather than relative because the items standing in the relation are themselves objective matters; they have the relevant properties independently of anyone's attitudes and preferences. How would this work in the case of non-moral values? I suggest that when values depend on two objective items they are relational, whereas when values depend on subjective attitudes or preferences, they are relative. If there are objective non-moral values, those values express a particular type of relation between objective features of a person and objective features of the external world. In addition to these objective values, there will also remain space for subjective values, which are relative to someone's sentiments, preferences, or cultural standards. What I propose, therefore, is a non-moral value *dualism*: some non-moral values are objective while others are essentially subjective, depending on

whether they are *relative* to subjective preference, sentiment, or cultural standards, or *relational* to (what I shall provisionally call) ‘structural features’ of a person. This proposed dualism creates the possibility that someone’s subjective values oppose and contradict what is objectively valuable for an individual given her structural features.

Even though this proposed dualism goes beyond Railton’s own texts, it is consistent with the way Railton employs the distinction between relationality and relativity. One of Railton’s passages would illustrate this especially well. He writes:

In a naturalistic spirit, we might think of goodness as akin to nutritiveness. All organisms require nutrition, but not the same nutrients. Which nutrients a given organism or type of organism requires will depend upon its nature. [...] There is, then, no such thing as an *absolute* nutrient, that is, something that would be nutritious for all possible organisms. There is only *relational* nutritiveness: substance *S* is a nutrient for organisms of type *T*.²⁰

What renders nutritiveness relational rather than merely relative on the stipulative definitions just provided, is that the digestive system of an organism (the relevant ‘structural feature’) is itself an objective matter. Had the nutritiveness of substances been dependent on whatever subjects or cultures prefer to consider nutritive, then nutritiveness would have been merely relative and subjective. A dining etiquette, for instance, contains norms that depend on the manner in which subjects

²⁰ Railton, *Facts and Values*, 48.

or cultures prefer to consume their food, which renders the norms belonging to a dining etiquette relative and subjective. What is nutritive, on the other hand, is an objective matter, despite its normativity, as the two *relata* (our digestive system and the substances entering into it) are themselves objective items, having their relevant properties independently of our subjective attitudes and preferences.

Railton's account of objective non-moral values is therefore consistent with a reductive naturalism: objective values supervene on facts about the structural features of a person and the properties of the external world.²¹ This supervenience is global: it is impossible for there to be two worlds identical in material constitution whereby the value relations between people and their environment are different. To be clear, Railton's naturalism is not a definitional or analytic reductionism—one whereby the *meaning* of one set of terms, value terms, could be fully captured in a set of descriptive terms. Railton thinks that normative properties are *ontologically* reducible to the natural objects or properties that constitute, or enter into, the particular relation. The reductionist naturalism allows him to claim that all S+ needs to know are facts about the reduction-base (structural features and the totality of the physical environment), which, together with knowledge of the relevant correlations, will enable S+ to infer what is non-morally valuable.

Another conclusion following Railton's reductive naturalism is that similar things are objectively valuable for people insofar as they are similarly constituted. Railton writes, more tentatively than he should,

²¹ Railton, "Moral Realism," 183.

that “people with similar personal and social characteristics will tend to have similar values; and that there will be greater general consensus upon what is desirable in those areas of life where individuals are most alike in other regards.”²² Railton should have probably said that for similarly constituted people the same things *are* objectively valuable, since whether people consent or not is of no relevance.

On Railton’s view, and the way I have tried to extend it, non-moral values therefore come in two metaphysical variations, subjective and objective, depending on whether they are relative to subjective preference and sentiments or relational to structural features of our being. The latter variation, i.e. objective non-moral goods, Railton recognises, are those that help to promote “physical or psychological well-being or to escape physical or psychological ill-being.”²³ In other words, objects and events are objectively good if they are grounded in our constitution and promote our *health*—on Railton’s view.

This claim should not really come as a surprise. In Chapter One we arrived at the conclusion that an account of health is required that is at once normative and objective. In order to create the possibility for such an account, I suggested we need a theory of values according to which at least some values are objective and not merely projections of our mental states onto a value-free world. And what we find in the work of one of the better known meta-normative realists is an account of values according to which *precisely* the objects and states that are

²² Railton, “Moral Realism,” 182.

²³ Railton, “Moral Realism,” 178. Although I freely equate health with well-being in this paragraph, I will propose a way of thinking about the difference between ‘well-being’ and ‘health’ in Chapter Six (§1.2).

conducive to health are viewed as objectively good. The values involved in health judgements, as well as the positive value of things promoting our health, on Railton's view, do not derive from subjective sentiments, personal preferences, or cultural standards projected over the objective world, but are grounded in the structural features of our being, so that complete information of these features would make it possible for us to know what is objectively good for us. Railton's meta-normative theory is therefore itself premised on the idea that health is entirely objective; in short, objectively valuable items are those that promote our health.

Railton introduces the idea of values being objective in a relational sense—which, I suggested, requires two *relata* that are both objective—and the idea that with complete knowledge of these two *relata* we can know what is of non-moral value. A further question this raises, however, is what is so special about human beings that make us and our structural features enter into specifically *valuative* relations. The table and chair in front of me are also two objective items with supervenient relational properties like spatial location, being heavier than, and so on—but they do not stand in a discernible valuative relation to each other. A human organism in relation to nutrition, on the other hand, does stand in a valuative relation: nutrition is distinctively good for us while poison is distinctively bad. Although Railton provides the basic realist framework for a subclass of non-moral values that I will adopt, there are two further questions I will pursue. The first question is *which* beings indeed have things that are good and bad for them, and the second question is *why* they do so. With these two questions in mind I will turn to the work of other realists.

2.3 Canguilhem: *Life as Dynamic Polarity*

In an effort to determine which beings stand in non-moral valuative relations, I will briefly return to Canguilhem's work. This may seem an odd choice, as in Chapter One (§5) it became apparent that Canguilhem grounds normativity in subjective experience. There is another dimension to his thought on normativity, however, which I ignored in that earlier discussion. Together with the claim that normativity is grounded in subjective experience, Canguilhem argues that *life* generates norms and differentiates between positives and negatives; that is, Canguilhem claims that the beings for which things can be good and bad are *living beings*. He writes: "we do not ascribe a human content to vital norms but we do ask ourselves how normativity essential to human consciousness would be explained if it did not in some way exist in embryo in life."²⁴

Canguilhem goes as far as to argue that it is an *essential* property of living beings that 'for-them' the world is differentiated into things that are good for them and those that are not. He claims that "there is no life whatsoever without norms of life."²⁵ So "even for an amoeba, living means preference and exclusion."²⁶ Living beings establishing valuative differentiations is what Canguilhem calls life's "polarity", or "dynamic polarity."²⁷ The dividing line between beings that have non-moral goods and those that do not, according to Canguilhem, then, is therefore the same line that divides the animate from the inanimate.

²⁴ Canguilhem, *Normal and Pathological*, 127.

²⁵ Canguilhem, *Normal and Pathological*, 228.

²⁶ Canguilhem, *Normal and Pathological*, 136.

²⁷ Canguilhem, *Normal and Pathological*, 128.

If Canguilhem is right about this claim it would enable us to move beyond Railton's views. In an important sense, Railton's account of objective non-moral goodness was developed out of, and therefore still tied to, the idea that a *subject* with full information can determine what is in her own best interest, thereby retaining a subjective element in what he calls, tellingly, "objectified subjective interest."²⁸ According to Canguilhem, *all* living beings generate norms and stand in valuative relations to their environment, so that non-moral values are entirely independent from human mental states. If Canguilhem is right, we could also claim that organisms without a nervous system, incapable of reflecting on their own interests, have things that are objectively valuable to them, which could be determined with full information of their constitution and environment. Rather than reducing values to projections of mental attitudes, as subjectivists do, Canguilhem advances the idea that "*life* is polarity and thereby even an unconscious position of value; in short, life is in fact a normative activity."²⁹

Canguilhem's thesis is *prima facie* plausible: gasses and rocks do not stand in any valuative relations to each other, just as tables and chairs do not have things that are good for them, also not in a non-moral sense, whereas objects and events can be good for living beings. In what follows I will therefore pursue Canguilhem's thought further that living beings—by which I mean the *complete* manifold of life, including unicellular and the most basic forms of life—indeed polarise their environments and stand in distinctly valuative relations.

²⁸ Railton, "Moral Realism," 173.

²⁹ Canguilhem, *Normal and Pathological*, 126.

An important reason why Canguilhem's claim that only living beings have things good and bad to them is plausible, is because 'health' can be predicated over all living beings and not over inanimate objects. If, as Railton claims, objective non-moral goods are essentially the kind of goods that promote the health of a being, it makes sense to presume that all living beings have things that are non-morally good for them, since all living beings seem *prima facie* able to expand and diminish their health. If things could only be non-morally good for human beings or 'higher' animals, we would effectively preclude the possibility of 'lower' animals, including plants, to be in a state of health or ill-health. The fact that health can improve or weaken also in 'non-conscious' regions of life means that also organisms without subjective experiences have things that are objectively good and bad for them, despite there being no awareness of things being good or bad. I will therefore consider the hypothesis that objective non-moral goods are grounded in the structural features of *life* rather than an *awareness* of what is good.

Canguilhem's suggestion that objective norms are grounded in the particular constitution of living beings together with their environment would help to *demarcate* the kind of beings for which things can be non-morally good and bad, *viz.* living beings. A further explanatory question *why* this is so could still be raised, of course. We could question why things aren't equally good for mountains and riverbanks, or artefacts like tables and chairs, in a way that makes those goods dependent on the material constitution of those natural items. What is so special about the structural features of living beings?

Canguilhem's answer to the explanatory question *why* living beings polarise their environments is deeply dissatisfying, as he identifies life itself with a sphere of subjectivity. Canguilhem writes that "to live is to radiate; it is to organise the milieu from and around a centre of reference."³⁰ And this centre of reference is a distinctly subjective centre of reference for Canguilhem.³¹ Because every living being is conceived of as a subject, or a zone of pre-subjectivity, every living being constitutes a centre from which meanings and values emanate. Rather than objective features, it is life's inherent subjectivity that makes living beings generate norms according to Canguilhem.

If life itself is indeed characterised by an irreducible subjectivity, then normative differentiations turn out to be grounded in subjectivity and affective responses after all, just as subjectivists like Hume, Nietzsche, and Mackie think—a subjectivity that has only been extended outside the contours of specifically human subjectivity. Despite his rather compelling turn to life, Canguilhem ultimately remains a subjectivist about values, such that, he indeed has to claim that even an "amoeba recognizes the categories of health and disease only on the level of experience."³² Although I will continue to explore Canguilhem's thought that all living beings have objects and states objectively that are good and bad for them, I shall reject his claim that life's inherent subjectivity explains why this is so.

³⁰ Canguilhem, "Living and Milieu," 114.

³¹ In an illuminating commentary Alain Badiou writes that for Canguilhem "living is always in some way a pre-subjective aptitude." See Alain Badiou, "Is there a theory of the subject in Georges Canguilhem?" *Economy and Society* 27:2 (1998): 226.

³² Canguilhem, *Normal and Pathological*, 198.

2.4 Nietzsche: *Life as Will to Power*

At this point I should also briefly return to Nietzsche's work. We already saw that Nietzsche defends an error theory of values throughout his oeuvre. At the same time, however, Nietzsche argues that *life* gives rise to certain values and normative differentiations, just as Canguilhem says it does. Especially in his notebooks we find Nietzsche engaging with the idea that certain values, those that he calls "naturalistic values," arise out of the makeup of living beings.³³ In complete agreement with Canguilhem, Nietzsche notes that "'alive': that means already *valuing*."³⁴ And similarly, he notes that "valuations lie in all functions of the organic being."³⁵ Nietzsche may therefore also be of help in our attempt to overcome the sceptical challenge—the challenge that, paradoxically, he himself has provided one of the most forceful articulations of. My concern here is not to reconcile these statements with his error-theoretic claims or outspoken meta-normative subjectivism, or to establish internal coherence between the various aphorisms.³⁶ I will, however, consider Nietzsche's answer to the explanatory question why life gives rise to normative differentiations.

Nietzsche's answer to the question why things can be good or bad for living beings is, of course, "because life simply *is* will to power."³⁷ Especially in his post-Zarathustra works Nietzsche reduces living

³³ Nietzsche, *Will to Power*, §462.

³⁴ Nietzsche, *KSA*, §11.25 [433].

³⁵ Nietzsche, *KSA*, §11.26 [72].

³⁶ An admirable attempt to integrate his various meta-ethical claims into a systematic whole can be found in John Richardson, *Nietzsche's New Darwinism* (New York: Oxford University Press, 2004), 67-131.

³⁷ Nietzsche, *Beyond Good and Evil*, §259.

beings to one basic drive, *viz.* the drive to accumulate and release the greatest possible quantum of power. Other aspects of life, such as self-preservation, nourishment, sensing, thinking, knowing, desiring, and valuing, are viewed by Nietzsche merely as “offshoots” of this most fundamental of drives.³⁸

Nietzsche’s notion of the will to power is hugely complex and multifaceted, however, and does not permit of any short summary or definition. He arrives at the notion of will to power from a number of different angles and interests: it functions as the core explanatory principle of his genealogical account of Judeo-Christian morality;³⁹ it plays a crucial role in his psychological interpretation of our moral beliefs and practices;⁴⁰ he uses it to differentiate and explain different types of pleasures;⁴¹ he introduces it as a metaphysical notion purporting to show us the world as it is “viewed from inside”;⁴² it functions as a rival to Darwin’s theory of adaptation and natural selection;⁴³ and, not least importantly, the will to power functions as the cornerstone of Nietzsche’s attempt at a revaluation of all values.⁴⁴ In addition to these and other motives behind the will to power, there is

³⁸ Nietzsche, *Will to Power*, §658.

³⁹ Nietzsche, *Genealogy of Morals*, §2.13.

⁴⁰ Nietzsche, *Beyond Good and Evil*, §23.

⁴¹ Nietzsche, *Will to Power*, §703.

⁴² Nietzsche, *Beyond Good and Evil*, §36. Various commentators have pointed out that Nietzsche derives his theory of Will to Power from his engagement with the physics of Boscovich. See especially: Greg Whitlock “Roger Boscovich, Benedict de Spinoza and Friedrich Nietzsche: The Untold Story,” *Nietzsche Studien* 25 (1996): 200–220.

⁴³ Nietzsche, *Will to Power*, §647.

⁴⁴ Nietzsche, *Will to Power*, §704.

also a question about whether Nietzsche considers the will to power a *real* fundamental force or whether he used the idea only as a heuristic device, or perhaps even a powerful fiction, to support his psychological interpretations and personally favoured values. For the present purposes, I will leave these interpretative issues aside and just presume that Nietzsche considers the will to power to be the real essence of life.

If life indeed ultimately consists of nothing other than a drive towards the accumulation of power [*Macht*], a force geared towards *expansion, domination, and incorporation* of everything external to it, then everything that promotes life in doing so is bound to be non-morally good for it, while everything obstructing or diverting life from doing so is bad for it. On the basis of the identification of life with the will to power, Nietzsche can succinctly say: “What is good?—All that heightens the feeling of power, the will to power, power itself in man. What is bad?—All that proceeds from weakness.”⁴⁵ The goodness of objects that increase power is not good in an absolute sense, i.e. good without being good *for* anything, nor is it good only on the basis of the projection of human sentiments and attitudes, as we saw Nietzsche claim in the error-theoretic passages quoted above. Whatever increases the power of living beings is good in an objective yet relational sense.⁴⁶

⁴⁵ Friedrich Nietzsche, *The Anti-Christ*, trans. R. J. Hollingdale (New York: Penguin Books, 1968), §2.

⁴⁶ In a recent commentary on Nietzsche’s theory of values, Railton claims that his own meta-ethical position can be attributed to Nietzsche. Railton writes: “[The] notion of value is *relational*, fitting Nietzsche’s rejection of intrinsic, absolute value. It treats value as part of the fabric of lived existence, something we can directly experience and learn through doing. Not all values would be accessible, or intelligible, to all individuals, and in this sense value would not be universal either.

In Nietzsche we therefore find an answer to the question *why* living beings have things that are non-morally good and bad for them in an objective yet relational way and so why living beings can be more or less healthy: life is internally purposive and directed towards a particular end, *viz.* the acquirement of power, so that everything contributing to this end contributes to the realisation of the essence of living beings, which ‘for-it’ is necessarily good. Living beings have goods independently from human preference and cultural standards because of life’s inherent directedness towards power augmentation. To be clear, Nietzsche’s thesis does not imply that it is *morally* good that people strive for ever-greater power or ever-more dominion over their social and material environment, nor that we *ought* to do so—and these two claims should not be confused. Self-reflective beings like ourselves may have good reasons for thinking that an unrestrained accumulation of power is morally bad, and that it would be morally good to endorse principles constraining what is non-morally good for us as living beings; at least, there would be no contradiction in doing so—‘life-denying’ though this may be. If life is will to power, it would follow only that power-accumulation is non-morally good for a living being; moral claims of one kind or another are neither implied nor precluded.

Although Nietzsche provides a clear answer to the question *why* living beings have things that are good and bad for them, I think it

But the various realms of value would be real enough—not just whatever we take them to be.” See Peter Railton, “Nietzsche’s Normative Theory? The Art and Skill of Living Well,” in *Nietzsche Naturalism and Normativity*, ed. Christopher Janaway and Simon Robertson (Oxford: Oxford University Press: 2012), 47.

should be pointed out that it is not a particularly good or compelling answer. A problem internal to Nietzsche's own thinking is that the will to power not only forms the essence of living beings but that it also constitutes the innermost nature of everything else that exists. Not just living beings and organic functions but every entity in world when "viewed from inside" and "determined according to its 'intelligible character'" is claimed to be "will to power and nothing else."⁴⁷ Nietzsche's notebooks make it even clearer that will to power is not restricted to organic being alone. He writes that "there must be an inner nature ascribed to the world, which I refer to with 'will to power', that is, an insatiable longing for display of power; usage of power, exercise of power, the creating drive."⁴⁸ He describes the world itself as "a monster of power, without beginning, without end, a solid, iron magnitude of power [...]."⁴⁹ If not only living beings but practically all substances consists of quanta of power seeking their own magnification, then not just living beings but *all* beings have objects and states good and bad for them. The will to power then loses its ability to explain why *only* living beings have non-moral goods.

Also if the will to power were restricted to living beings alone, however, the idea remains unconvincing, primarily because the animism or vitalism that it commits to has been superseded in contemporary evolution theory and is generally considered to be an outdated mode of understanding life. Moreover, it is hard to suppress the impression that Nietzsche discovered the idea of the will to power

⁴⁷ Nietzsche, *Beyond Good and Evil*, §36.

⁴⁸ Nietzsche, *KSA*, §11.36 [31]. My translation.

⁴⁹ Nietzsche, *KSA*, §11.38 [12]. My translation.

primarily as a psychological principle—one with which he managed to explain much of our behaviour, desires, and thinking, in often quite profound and penetrating ways—but which he subsequently projects into the heart of organic being itself and even into the makeup of the entire universe, effectively ‘psychologising’ all of nature. Finally, and perhaps most importantly, we do not need a psychological principle or claim about the essence of life in order to explain why living beings can be more or less healthy, or in order to identify what these non-moral goods are. It is possible to claim that living beings have states and objects that are good for them independently of how they emotionally respond to them, even if those states indeed consist of heightened power of some kind, without having to accept that life itself is intrinsically, or essentially, a strife for greater power. Although I shall continue to explore the thesis that only living beings have a good-for, I shall not rely on Nietzsche’s metaphysical animism which, if restricted to life, would indeed make for an explanation why this is so.

2.5 Foot: *Life-forms and Natural Goodness*

The next author I will turn to in the quest to understand why it is living beings, and living beings alone, that have non-moral goods in an objective yet relational sense, is Philippa Foot. Late in her career she wrote *Natural Goodness*, in which she documents a radical change in her meta-normative thinking and advocates an altogether “fresh start.”⁵⁰ In this text Foot equally seeks to break with the Humean tradition of reducing values to human projections of their responses, desires, and

⁵⁰ Philippa Foot, *Natural Goodness* (Oxford: Oxford University Press, 2001).

sentiments. She too argues that there is an objective basis for valuative judgements and that this objective basis is to be found in the nature of living beings. In agreement with Railton and the line of thought I have been pursuing so far, Foot thinks that “norms belonging to life” have to be “explained in terms of *facts* about things belonging to the natural world.”⁵¹ Foot therefore belongs to the group of normative realists who think that *life* grounds certain values and that these values can be reduced to objective features of living beings.

Foot nevertheless departs significantly from the meta-normative view built up so far by insisting that we should compare “the basis of *moral evaluation* to that of the evaluation of behaviour in animals.”⁵² She argues that “*moral* defect is a form of natural defect,” and that what is naturally good automatically tells you “what you *ought* to do.”⁵³ She thinks there is therefore “no change in the meaning of ‘good’ between the word as it appears in ‘good roots’ [of trees] and as it appears in ‘good dispositions of the human will’.”⁵⁴ By contrast, we have only been considering the objectivity of *non-moral* goods, and with the help of Railton, Canguilhem, and Nietzsche been exploring the possibility that non-moral goods are grounded in the makeup of living beings. Foot thinks *moral* goods like ‘not harming others’ and even, astonishingly, “keeping faith”, are comparable to the way things are good for plants and animals.⁵⁵ Foot’s claim that moral goodness, together with its

⁵¹ Foot, *Natural Goodness*, 36-37.

⁵² Foot, *Natural Goodness*, 16. Emphasis added.

⁵³ Foot, *Natural Goodness*, 27; 37. Emphases added.

⁵⁴ Foot, *Natural Goodness*, 39.

⁵⁵ Foot, *Natural Goodness*, 53.

archetypical language of ‘oughts’, ‘duties’, and ‘obligations’ relies on a similar sense of ‘good’ as statements about what is non-morally good for any other living being, is one I shall not endorse and think we should, in fact, strongly resist. There is an important difference between claiming that certain objects and states are good for living beings due to their own internal constitution, and proclaiming that human beings have a *duty* or *obligation* to act in accordance with these or any other kind of goods. The latter is an altogether different claim and not entailed by the former.⁵⁶ Why non-moral goods for non-human organisms, like taking in the right nutrients, could become, or indeed *should* become, a moral obligation in human life, and why, therefore, morality can be likened to natural goodness, is not at all clear.

Nevertheless, Foot does provide an answer to the question why living beings have things that are naturally and objectively good for them, and to this answer I shall restrict the present discussion. The reason Foot thinks life stands apart is not by reference to an element of subjectivity or on the basis of a metaphysical animism of some kind, but on the basis of the Aristotelian idea that the goodness for living beings depends on, what she calls, the ‘life-form’ of an organism. The central idea is that “it is the particular life form of a species of plant or animal that determines how an individual plant or animal should be.”⁵⁷ She

⁵⁶ Christine Korsgaard agrees with this diagnosis and thinks the distinction follows from an extension of the open question argument. If it is an independent fact that certain acts are good, then it remains an open question whether one *should* comply with it. Korsgaard states therefore also that “evaluative standards, taken by themselves, do not obligate.” See her “Realism and Constructivism in Twentieth-Century Moral Philosophy”, in *The Constitution of Agency: Essays on Practical Reason and Moral Psychology* (Oxford: Oxford University Press, 2008), 317.

⁵⁷ Foot, *Natural Goodness*, 32.

argues that an individual organism can be evaluated vis-à-vis an Aristotelian 'form', compared to which it can have certain defects and shortcomings. And extremely importantly, given the concerns of the present thesis, Foot believes such evaluations can be conducted independently from our subjective attitudes, desires, and so on:

Evaluation of an individual living thing in its own right, with no reference to our interests or desires, is possible where there is intersection of two types of propositions: on the one hand, Aristotelian categoricals (life-form descriptions relating to the species), and on the other, propositions about particular individuals that are the subject of evaluation.⁵⁸

Recall the way Boorse's bio-statistical theory of health was criticised for involving reference classes, which, on Kingma's view, rendered the theory both circular and normative. I argued that Kingma's true concern was not the normativity of Boorse's theory as such, but her suspicion that the relevant norms were fixed on the basis of subjective values and preferences about what is to count as healthy and pathological. In Foot's account of natural goodness we get an account of an objective norm (a life-form) and an objective reference class (a species). Precisely because the norm and reference class obtain independently of subjective preference or sentiment, we end up with an objective yet normative mode of evaluation. This form of evaluation is therefore one that will have to be preserved in the attempt to formulate an objective yet normative account of health in the next chapter.

⁵⁸ Foot, *Natural Goodness*, 33.

Foot's argument continues further along Aristotelian lines when she argues that life-forms of plants and animals have self-maintenance and reproduction as their natural end, while the life-form of human beings has happiness as its end.⁵⁹ When an organism functions in a way similar to how members of the species characteristically maintain and reproduce their form the organism is in a good state, Foot claims, and everything that promotes the organism in doing so, is naturally good for it. At least in the botanical and zoological world, natural goodness is therefore equated with being in a state of physical health. Also Foot writes that "goodness in respect of *bodily health* [...] is precisely that which fits a living thing for the instantiation of the life form of its species, and [...] this counts as the good of a living thing."⁶⁰ Like Railton, the values that Foot considers objective and grounded in the nature of living beings are *precisely* those corresponding to what promotes the health of living beings. Foot therefore also thinks, or at least presumes, that the being and value of health are objective matters, i.e. existent independently from factors like mental attitudes, preferences, opinions, cultural standards, and so on.

When it comes to human life, however, Foot's account gets more complex, as she claims that the form of human life consists primarily in the pursuit of happiness via the exercise of morally good actions, thereby blending elements of Aristotelian eudaimonsim with features of modern moralism. According to Foot, natural goods for human beings

⁵⁹ She writes that "in plants and non-human animals these things all have to do, directly or indirectly, with self-maintenance [...] and the obtaining of nourishment, or with the reproduction of the individual." Foot, *Natural Goodness*, 31.

⁶⁰ Foot, *Natural Goodness*, 92. Emphases added.

far exceed the concerns of health. As said before, the extension to moral goodness is most problematic; but more importantly, we do not have to rely on it, since we are considering the objectivity of non-moral goods. And Foot also claims that, at least for plant and animal life, it is precisely health-related values that are objective. If moral goods are equally objective, as Foot claims they are, then this would be a bonus and strengthen the position of normative realists more broadly. But it is not a claim we require for our present purposes.

Although Foot's account of natural goodness provides a model for objective normativity, it does not explain why it is *only* living beings that have states and objects that are good for them and why only living beings can be more or less healthy. Aristotle makes no distinction between life and inanimate being in a way that would restrict goodness only to living beings. Aristotle thinks that all substances have a final cause, a *telos*, such that all substances have states and objects naturally good for them. If we are to maintain that *only* living beings have states and objects that are good in an objective yet relational way, as Foot insists as well, then we would have to explain why life-forms are different from the forms of inanimate beings. Foot does not provide the conceptual tools to substantiate the distinction between forms of living and non-living beings, and can therefore not explain why *only* living beings have states and objects that are objectively good for them. Still pursuing the explanatory question why living beings have a good-for and bad-for, I will now turn to Korsgaard's work.

2.6 Korsgaard: *Functional Goods and Having a Sake*

Presenting Korsgaard as a meta-normative realist immediately demands adding an important qualification, however, as she repeatedly distances herself from realists like G. E. Moore and generally describes herself as a constructivist.⁶¹ The value realism that she rejects, however, is a realism according to which things are good and bad independently of anyone or anything for which they would be good or bad. In other words, Korsgaard rejects an absolutist view of values; the same absolutism that Mackie and Nietzsche criticised in their respective error theories. Korsgaard even thinks that the idea of absolute values—things being good or bad without being good or bad for anything or anyone—“should be rejected as unintelligible.”⁶² She does, however, endorse a relational theory of values similar to Railton’s, and equally defends the view that values, *qua* relations, can be objective.

Korsgaard’s ideas about which beings are constituted in such a way that they have states and objects that are good or bad for them are nevertheless much more complex, in part because she distinguishes between two ways in which something can be non-morally good, but also because she combines elements of Aristotelian naturalism with Kantian transcendentalism. Instead of striving for a comprehensive overview her position, in the following explication of her views I shall primarily focus on drawing an answer out of her work to *my* question: why do living beings have objects and states that are objectively good and bad for them while all other entities do not?

⁶¹ Korsgaard, “Realism and Constructivism,” 304-310.

⁶² Korsgaard, “The Relational Nature of the Good,” in *Oxford Studies in Metaethics Volume 8*, ed. Russ Shafer-Landau (Oxford: Oxford University Press, 2013) 5.

The two different ways in which Korsgaard thinks something can be non-morally good are labelled 'evaluative' or 'functional goods' on the one hand, and 'final goods' on the other.⁶³ Functional goods can be attributed to practically any kind of being on her view. She follows Aristotle in thinking that *any* substance, in virtue of being a substance, has a function—including, most obviously, artefacts like knives, cars, and vacuum cleaners.⁶⁴ So whenever we consider something as good, in the sense of being in a good state, we mean that something performs its function well: a vacuum-cleaner is in a good state if it vacuums well, a knife is in a good state if it cuts well, etc. And on the same basis, whatever helps a thing to perform its function is good for it: sharpening is good for a knife, a new bag is good for a vacuum cleaner, gasoline is good for a car, etc.⁶⁵ Functional goods are therefore objective and relational on Korsgaard's view; goods are grounded in the nature of every individual substance insofar as they are a functional system. When writing in Aristotelian mode, and, importantly, when she *isn't* referring to the unique way in which human beings are functional, Korsgaard's position is that functional goods obtain independently of human attitudes and preferences, and are therefore wholly objective.⁶⁶

⁶³ See Korsgaard "On Having a Hood," 11-21; "Relational Nature of the Good," 5-7; and "The Origin of the Good and Our Animal Nature," in *Problems of Goodness: New Essays on Metaethics*, ed. Bastian Reichardt (Forthcoming): 16-22.

⁶⁴ Christine Korsgaard, *Self-Constitution: Agency, Identity, and Integrity* (Oxford: Oxford University Press, 2009), 35-41.

⁶⁵ Or in Korsgaard's words: "If something is a functional system, the properties that enable it to perform its function well are the properties that make it a good one, and the conditions that tend to promote and protect those properties are good for it." Korsgaard, "On having a Good," 20

⁶⁶ I return to Korsgaard's ideas about human functionality in Chapter Five (§4.1).

The other way in which something can be non-morally good, Korsgaard calls 'final goodness'. Final goods are also good-for certain beings on her view, but good-for in a more specific sense, *viz.* good "for their own sakes."⁶⁷ Korsgaard argues that functional goods of artefacts are not good for the 'sake' of the artefacts themselves. Cars, knives, and vacuum cleaners can be in a good state and have things contributing to their well-functioning, but *only* insofar as these items fulfil a function for the sake of human beings. Functional goods for animals and human beings, by contrast, are good for the sake of animals and human beings themselves. The reason why Korsgaard thinks that only animals and human beings have things beneficial for their own sake is because animals and humans have *conscious experiences* of what is good and bad for them; animals and human beings are creatures "who can welcome or reject the things that they experience."⁶⁸ When a being consciously relates to its own functional goods these goods become final goods on Korsgaard's view; only then are they good for the sake the being itself. 'Having a sake' therefore requires being a conscious being.

Now, at this stage of her argument it looks like *all* substances have functional goods and *only* conscious beings have final goods, which would be of little help in explaining our claim that *only* living beings stand in valuative relations to an external environment and their own states. In analysing what it means to have 'a sake', however, Korsgaard moves away from this dualistic set-up and does end up isolating living beings in a special way – at least, this is what I will now try to show.

⁶⁷ See for instance Korsgaard, "On Having a Good," 12.

⁶⁸ Korsgaard, "Relational Nature of the Good," 4.

When Korsgaard writes that an “artefact exists and has a function only with reference to us and our needs” her claim is not just that artefacts are made and designed by human beings and therefore happen to have a function that is useful to us.⁶⁹ She makes the more fundamental and ultimately Kantian claim that the functionality of artefacts *as such* exists only in relation to human beings, so that the things good-for an artefact are good-for-it only with reference to us. Instead of the Aristotelian idea that something has to have a function in order to be a substance, Korsgaard endorses the Kantian view that *we* impose functional unity onto things when we isolate and interpret them as functional systems. In *Self-Constitution* she indeed claims that “what I want to claim [...] is that we pick out an object as a region of the manifold that appears to be doing something, and we understand it as a single and unified object by understanding it as internally organised for doing whatever it does.”⁷⁰ As a result of this transcendental move, the good-for of artefacts is only a *derivative* good-for, originating with human judgement and interpretation instead of the nature of the thing itself, so to speak. So although the function of a knife is to cut, the idea is now that the knife’s functionality, and therefore also anything that benefits it, exists only in relation to human beings for whom knives are things with a cutting function. Things that are good for knives are good only within the context of human judgement and our activities of cutting and slicing up of things; that is, the functionality of artefacts, and thus also their functional goods, depends on *our* functionality.

⁶⁹ Korsgaard, “On Having a Good,” 26.

⁷⁰ Korsgaard, *Self-Constitution*, 38.

The functional goods of living beings, by contrast, are not derivative and do not necessarily refer to human judgement in this way. We could of course call a chicken a ‘good’ chicken when it serves our nutritional needs, just as we can call a dog a ‘good’ dog when it obeys our commands, but animals and plants also have states and objects that are good for their own sake. I think the reason behind this distinction between the functionality of animate and inanimate beings is that living beings are functional ‘with regard to themselves’—so to speak; that is, their functions are directed at the entity of which they are a part, i.e. the organism itself, rather than anything external to it. Goods for living beings are good for their *own* sake rather than the sake of something else. And since all living beings are functional in a non-derivative way, all living beings have ‘a sake’.

The sake of plants and animals, according to Korsgaard, consists in self-preservation and reproduction, which, she argues, amounts to nothing other than their health.⁷¹ So when something is good for a plant or animals it is good for the sake of the plant or animal itself, which means exactly the same thing as serving the health of the plant or animal. ‘Having a sake’, at least in the context of plants and animals, means nothing other than being able to be healthy and unhealthy.⁷² I think Korsgaard therefore ultimately defends a claim quite similar to Railton, Canguilhem, and Foot: non-moral goodness exists only in relation to living beings and coincides with what promotes the health of living beings—at least in the case of plants and animals.

⁷¹ Korsgaard, “Animal Nature,” 18.

⁷² The sake of a human being is an altogether different matter for Korsgaard, and something I will return to in Chapter Five (§4.1).

The distinction just drawn between goods for living beings and goods for non-living beings marks a move away from Aristotelian metaphysics in the direction of a more Kantian perspective, it seems to me. In the *Critique of the Teleological Power of Judgement* Kant equally argues that the functionality and purposiveness of inanimate objects exists only relative to something else, *viz.* to humans and other living beings. Kant calls the functionality of inanimate things “usefulness” if they are functional to human beings and “advantageousness” if they are functional to another type of creature.⁷³ Kant considers a thing *internally* functional or purposive, by contrast, when it is functional in relation to itself. Kant calls this internal functionality or purposiveness “objective purposiveness.”⁷⁴ This latter type of functionality, Kant claims, and Korsgaard seems to agree, can be only found in living organisms. Since it is only living organisms that are internally functional, i.e. not functional relative to something else, it is *only* living organisms that have a sake and *only* living beings that are capable, ultimately, of grounding functional goods. Although Korsgaard opens her recent papers with the Aristotelian position that goods originate in functional systems and that each individual thing has a function, I think her reflections on ‘having a sake’ gradually make her switch back to a Kantian perspective according to which *only* living beings are internally functional, so that only living beings have states and objects non-derivatively and indeed objectively (at least in the case of plants and animals) good to them.

⁷³ Kant, *Critique of the Power of Judgement*, 5:367.

⁷⁴ Kant, *Critique of the Power of Judgement*, 5:368.

Now, at this stage of my reconstruction of Korsgaard's views it is no longer clear whether it is only *conscious* beings that have 'a sake for which' things are good or bad or whether *all* living beings have this property. We saw that Korsgaard's original claim is that only conscious beings have goods for their own sake, because conscious beings can welcome and reject things in experience. When Korsgaard specifies what it means to have a sake, however, she turns to the internal functionality of living beings, directed at maintenance of the health of the organism as a whole. The latter claim would imply that all living beings have a sake, including 'non-conscious' organisms like plants, because all living beings are 'internally' functional. So the question is now whether on Korsgaard's view *all* living beings have a sake and therefore non-derivative relational goods, or whether only *conscious* organisms do so. If the latter is true, we would be back at Canguilhem's position that living beings give rise to normative differentiations due to life's inherent subjectivity. If *all* living beings have a sake, however, and if this sake is underpinned by something other than conscious experience, she will have explained why living beings have things that are of value to them other than subjective experience of some kind.

Korsgaard appears divided on this crucial issue. A draft version of her paper "On Having a Good" includes an appendix with the title 'On Having a Sake' and focusses precisely on this issue. Sadly this appendix and the views expressed therein have largely disappeared in the published version of the paper.⁷⁵

⁷⁵ Christine Korsgaard, "On Having a Good," Presented as The Royal Institute of Philosophy Lecture, London, March 2012, Accessed April 15, 2013, www.people.

In this appendix, Korsgaard considers the question whether non-conscious living beings like plants have a sake for which things are good or bad. Her answer is affirmative: when things are good for a plant they are good for its own sake, whereas when things are good for artefacts they are not. Now, given her earlier claims, this would imply that plants have a final good, which means that plants must be able to welcome and reject things in experience, which is absurd. Korsgaard recognises the dilemma and answers that “it is because the things that are bad for it frustrate its ‘efforts’ at self-constitution that they are bad for its own sake.”⁷⁶ What this remark reveals, I think, is that instead of conscious experience of what is functionally good, it is life’s *inherent* functionality that makes living beings such that things can be good and bad for their own sake; that is, because living beings can be healthy and unhealthy things can be good and bad for them.

Even if this final statement has distanced us somewhat from Korsgaard’s own views, it would provide us with an answer to the question we were looking for, *viz.* the question why living beings have states and objects that are non-morally good and bad for them while non-living beings do not. The answer is that non-moral goods are grounded in the inherent functional organisation of living beings directed at the sake of the organism itself. And since the sake of a living being, at least for non-human living beings, consists in the promotion of health, Korsgaard’s answer to the question why living beings have

fas.harvard.edu/~korsgaard/CMK.HG.pdf. When reference is made to this earlier version of the paper, [Draft] will be added to the reference. Where content has remained unchanged, reference is made to the final version.

⁷⁶ Korsgaard, “On Having a Good [Draft],” 45.

relational goods, is, ultimately, because living beings can be healthy and unhealthy whereas non-living beings cannot. Inanimate beings are functional only with reference to a living being, therefore do not have a sake for which things are good and bad, and therefore, to point out the obvious, cannot be healthy or unhealthy.

This Korsgaardian view, stripped of all subjective or experiential elements, therefore works as an explanation for Canguilhem's, Foot's and Nietzsche's thesis that living beings, in virtue of being alive, have things that are objectively good and bad for them: objective goods are grounded in functions, and only living beings have functions that serve their own sake, i.e. their own health, rather than something outside of themselves, so that only living beings have an objective good-for. What I earlier and only provisionally called the 'structural features' of living beings, are therefore the *biological functions* or *functional parts* that make up living beings. The objective properties of living beings in relation to which external objects or events are objectively good or bad are the functional systems of living beings, *qua* functional part, are directed at maintaining the health of the organism as a whole.

3. Summary of the Proposed Meta-Normative View

With these final explanatory remarks, we can now integrate the relevant ideas and concepts into a summary overview of a theory of values and try to show that on this account there are indeed non-moral values that meet the three criteria for normative realism as specified above.

On the meta-normative view I propose, objects and events in the world have no value independently of beings constituted in such a way that things can be of value to them. The meta-normative theory therefore concedes to Mackie and Nietzsche and other anti-realists that values have no *absolute* existence or complete ontological independence. Nevertheless, the normative realists' views discussed above suggest this recognition does not entail that all value judgements are categorically erroneous or that moral values cannot be part of the mind-independent world in another way. Denying value absolutism does not imply that values cannot have an objective relational nature. Specifying this meta-normative position therefore primarily means unpacking the idea of objective relational values and to explain this very possibility.

3.1 *Two Kinds of Non-Moral Value*

In the discussion of Railton's argument for normative realism I argued that there are two kinds of non-moral values, differing metaphysically as well as epistemologically. One kind of non-moral goodness exists as a relation between subjective attitudes and things considered or experienced as valuable. These objects are valuable only for people with these particular attitudes and experiences. People may be alone in having these values, share them with a community or culture, or even with humanity at large; but as long as values are relative to subjective attitudes and preferences they remain metaphysically subjective. True statements can be made about subjective values, but the truth-conditions for these statements include the presence of the relevant subjective attitudes of the person who considers or experiences

something valuable. If someone's subjective attitudes change, so do the things that are subjectively valuable. Subjective values therefore supervene on individual attitudes and certain objects and events. In order to know what is valuable for someone in this way we have to inquire into someone's valuative attitudes or infer these attitudes from choices, behaviour, and emotional responses. Subjects are ultimately the sole authorities over these values and under normal circumstances people cannot be claimed to be wrong or mistaken about what they value in this way. Subjective values are therefore legitimately diverse, but they do not have to be. Although described in terms of relations rather than projections of mental attitudes, I expect this to be a relatively uncontroversial characterisation of subjective non-moral values.

If all values were metaphysically and epistemologically subjective in this way, then subjectivists like Mackie and Nietzsche would be correct to claim that there are no mind-independent values, and Fulford, Canguilhem, and Nietzsche would be right to say that truth-conditions for health-judgements involve subjective attitudes or experiences of some kind. On the account of values I propose, however, there are also values that obtain between two items neither one of which is a subjective attitude or personal preference. The claim is that certain objects or states are good for living beings without the mediation of subjective attitudes, desires, or any other kind of affective responsiveness. Knowledge about these values involves being informed about, what I provisionally called the 'structural features' of living beings, but later specified as the 'functional parts' of living beings, as well as knowledge of the relevant properties of the external world. If

this is right, then in addition to subjective values there are also values supervening on the objective properties of living beings (their functional systems in combination with objective properties of the external world)—values that, due to the objectivity of both *relata*, have an objective yet relational nature. Contra Mackie, I conclude that these values are not metaphysically queer, given the fact that there are numerous other objective relational properties that we do not think of as metaphysically queer. Subjects have no authority over these values and statements about them are true independent of our ways of gaining knowledge about them. We could be wrong and mistaken about what is objectively valuable for us and for other living beings. Although there is mind-independent truth about these values, these objective values do of course depend on the existence of living beings and their specific makeup; in the life-independent world or a universe without living beings whatsoever, the proposed account implies that nothing is valuable, good or bad, better or worse.

3.2 Objective Non-moral Goodness as Identical to Health

The normative realists considered above all think that objectively valuable states and objects correspond to what promotes a living being's health. In other words, the 'sake' for which things are good and bad in a relational yet objective way corresponds to the health of an organism. External objects and events are objectively good for an organism if they are conducive to the health of the organism as a whole; grass, for instance, is not good for a cow's stomachs but good for the sake of the cow as whole. The end towards which biological functions themselves

are directed is also the health of the organism as a whole. Objective values, I therefore conclude, are *either* relations between an organism as a whole and any of its functional parts, whereby parts are well-functioning if they sustain the health of the organism as a whole (and *vice versa*)—or relations between the organism as a whole and objects and events external to it that sustain and promote an organism’s health, whereby objectively good objects and events are those that promote the health of the organism as a whole (and *vice versa*). In short, therefore, objective values are relations between the organism as a whole and any of its functional parts or relations between the organism as a whole and external objects and events, whereby objective goods sustain and promote the health of an organism and objective bads do the opposite.

3.3 *Further Explanatory Question*

The best explanation I could find for the fact that living beings have non-moral relational goods was a functional explanation. Objective relational goods, then, are grounded in functional systems: if something is a functional system it is purposive, directed towards a certain end, which automatically gives rise to normative differentiations in its own states as well as its external environment. An explanation why *only* living beings have things of value to them is because only living beings are internally functional, i.e. not functional relative to something else. Other entities that we can conceive of as functional items derive their functionality and directedness, and therefore also their functional goods, from human beings or other living entities who, as part of their own functionings and purposes, interpret these entities *as* functional

entities: a river is a functional entity only insofar as *we* bestow a function on it—e.g. taking it to be a source for providing drinking water (which it can do better or worse)—and is therefore functional only relatively to us and our own functional nature. Likewise, a collection of branches is a nest, i.e. a thing with a purpose or function (e.g. protecting offspring, thermoregulation, etc.), only relatively to animals that nest, so that whatever is good or bad for the nest is so only relatively to nesting animals rather than to the nest itself. The functional constitution of living beings, on the other hand, exists for the sake of a living being itself, i.e. for its own health. Because only living beings have functional parts directed at their own health things can be good and bad, ultimately, only for living beings.

3.4 *Satisfying the Criteria for Normative Realism*

This sub-class of values, grounded in the functional organisation of living beings and directed towards the health of the organism as a whole, satisfies the three criteria of normative realism outlined above: life-based values are *cognitive* since statements about them permit of truth and falsity; they are *independent* from our opinions, preferences, sentiments, attitudes, and so on, since they arise out of the functional nature of living beings rather than our own subjective attitudes; and they give *feedback* in the rather straightforward way that objectively good things promote health and objectively bad things undermine it. A sub-class of non-moral values, grounded in the functional organisation of living beings and corresponding to what is healthy and unhealthy for living beings, are therefore values that are objective and real.

At this point I should also repeat that the proposed normative realism only pertains to a sub-class of *non-moral* values. Whether typically moral statements like ‘killing is wrong’ can be objectively true is a question on which I have made no claim and shall not take a stance. I have insisted, however, that statements about what is non-morally good for a living being do not entail anything about what a living being *ought* to do or about what is morally right and wrong—an inference from non-moral goods to moral goods that we found in Foot’s work. If a sub-class of non-moral values is indeed objective then it does not follow that moral claims are also objectively true, also not *by analogy* to the objectivity of health. Paul Bloomfield has recently written a book-length version of latter the claim, boiling down to the idea that “moral goodness has the same ontological status as physical healthiness, so that if we are realists about the latter, then we ought to be also about the former.”⁷⁷ This is blatantly false: it is perfectly possible to be a realist about values involved in judgements of health while accepting an error-theory or other form of anti-realism of typically moral values and ought-statements. Using the objectivity of health-judgements as an analogy or spring-board to claim objectivity of moral principles amounts to committing a category mistake: it muddles and obfuscates the distinction between things that are good for living beings on the basis of their own functionally integrated make-up, and principles guiding and constraining human conduct in societies composed of people with conflicting needs, interests, and desires.

⁷⁷ Paul Bloomfield, *Moral Reality* (Oxford: Oxford University Press, 2011), 28.

Categorically distinct though moral and non-moral values may be, they are nevertheless also not entirely disconnected; it is not hard to imagine that in a society of beings for whom it is non-morally and objectively bad to be killed (it annuls their health), moral principles like 'one ought not to kill' arise and are treated with utmost seriousness. Moral statements *may* therefore in some indirect way be anchored in what is non-morally and objectively good for living beings, i.e. what is healthy and not. This would not even be a possibility, however, if non-moral goodness was not itself already grounded and objective. Having said this, it is important to emphasise that moral claims and ought-statements are not identical to, or entailed by, or true by analogy with the fact that there are non-moral values with an objective status.

3.5 Three Desiderata for a Theory of Health

The conclusion yielded by the analysis Chapter One was that we needed an objective yet normative theory of health, which, given the ubiquitous assumption that everything normative is essentially subjective, required a second-order view enabling the possibility of objective normativity. In the works of prominent meta-normative realists we find the claim that precisely health-promoting goods are objective goods. If the concept of health were now to be defined in a way that would render health itself relative to subjective values and cultural standards, it would undermine the second-order account itself. The respective meta-normative views we considered all postulated an objective account of health: Railton and Korsgaard specify health as conditions for survival and reproduction; Foot specifies health as conditions for preserving and reproducing in a

manner typical to the life-form of a species; and Nietzsche in his later works, freely interpreted at least, could say that health consists in an accumulation and exercise of power. These accounts of health are normative but at the same independent of subjective attitudes and preferences. The proposed meta-normative realism view according to which certain non-moral values are objective, if indeed plausible, therefore not only enables an objective yet normative account, but even *demand*s such an account; that is, health must be defined without reference to subjective attitudes or preferences for the meta-normative realist view itself to hold.

Another consequence of the proposed theory of values is that the meaning of health is drawn outside the contours of strictly medical and psychiatric contexts. The claim we encountered several times in this chapter and one that I endorsed in the final sections, is that a sub-set of non-moral goods can be reduced to whatever promotes the health of a living organism; so on that basis, health corresponds to objective non-moral goodness itself. In other words, something is objectively non-morally good for an organism if it sustains or improves its health. And by the same token, when a living being is in an objectively good state, it is in a state of health. If we now return to the question what health itself is, what we are asking is what objective non-moral goodness consists in for a living being. Instead of a reflection on medical and psychiatric practice *per se*, this meta-normative exercise shows that raising the question of health means asking a much broader question; *viz.* the first-order normative question what objective non-moral goodness consists in for living beings.

The third and final point to take from this chapter is that health itself cannot be defined as the well-functioning of parts, as this would amount to a circular definition. We said that an organism's functional parts are in a good state and functioning well if they promote the health of the organism as a whole. If we now were to define health itself as the well-functioning of parts, we would effectively define health in terms of health: health would be the state of an organism where its parts fulfil their role in sustaining the health of the organism. To avoid such circularity, health must be defined on the level of the organism as a whole and capture what it means for parts to be in a good state and for them to be functioning well. The most obvious candidate for such an account of health, defended, as we already saw, by Boorse, Wakefield, Railton, Foot, Korsgaard, and many others, is that parts function well if they facilitate self-preservation and reproductive success of the organism of which they form a part. If health is defined as a state in which an organism is successful at self-preservation and reproduction, then the effectiveness of functional parts can indeed be measured against a conceptually distinct level, namely that of successful self-preservation of the organism. Parts would be functioning well or poorly depending on how well or poorly they promote the preservation and reproductive success of the organism. Although in the opening sections of the next chapter I will criticise this idea and attempt to salvage health from its identification with conditions for self-preservation and reproduction, it is important to point out that even though an organism's health depends on the well-functioning of its parts, health itself cannot be defined in terms of well-functioning of parts.

Chapter 3

A Universal Theory of Health

1. Towards a Capacity Account of Health

1.1 *Requirements for a Theory of Health*

In the previous chapter a meta-normative position was outlined according to which objects and events are objectively good for a living being if they promote its health and objectively bad if they do the opposite. Although normative judgements can be considered objective on this view, the position itself demands, and is conditional upon, health being something objective. That is, we must be able to define and specify the nature of health independently of subjective experience, attitudes, and preferences in order for the meta-normative position itself to hold. The task of this chapter is precisely to formulate such an account of health and to provide an answer to the central question of this thesis: *what is health?*

From the foregoing discussions we can derive a number of criteria that a viable theory of health must meet. The first criterion is that the theory of health should be applicable to all forms of life. Whatever the properties and characteristics are that the concept health picks out, these properties and characteristics must be present across the complete manifold of life. Every living being has functional systems directed at their own sake that can function in better or worse ways, so all living

organisms must be able to expand and diminish their health. This first criterion immediately narrows down the options for an account of health and excludes the subjective elements we are supposed to avoid anyway. Notions like happiness, pleasure, and desire-satisfaction fail to generalise to most other forms of life and therefore cannot be the defining features of health—presuming, *pace* Canguilhem, that plants cannot feel happy and amoebas do not experience pleasure. A healthy fungus is something quite different from a healthy human being of course, but my claim will be that they are healthy in the same way: health retains the same meaning when predicated over different forms of life. Rather than being limited to some class of species, the account of health we require must capture the nature of health for all forms of life: it must be a *universal* account of health.

The second criterion is that a theory of health must enable the evaluation of biological functions and functional parts. At the end of the last chapter I pointed out that health cannot be reduced to effective functioning of parts since the functioning of parts is itself evaluated in terms of how well it succeeds in sustaining the health of the organism as a whole. To avoid circularity, health must be defined on the level of the organism as a whole and have the form of a standard or principle against which the functioning of parts and subsystems can be evaluated.

And third, the reference class with respect to which an organism's health is evaluated must be fixed independently of subjective values and prejudices. Similar to Foot's notion of a life-form, but unlike Boorse's arguably more arbitrarily chosen reference classes, the reference class must be an objective category.

1.2 *Health as Self-Preservation*

The most obvious and widely shared candidate for a theory of health based on these constraints—ubiquitous in the literature and deeply ingrained in our use of language and health care practices—is one whereby health is defined in terms of conditions for self-preservation.

Health defined as conditions for self-preservation, perhaps even as conditions for ‘optimal’ self-preservation, would seamlessly meet the criteria we just defined for a universal theory of health. First, self-preservation is applicable to every form of life; in fact, living beings are usually defined and distinguished from the non-living precisely on the basis of their ability to preserve and sustain themselves. Second, self-preservation enables the evaluation of functional sub-systems. As we already saw in Boorse and Wakefield, functional subsystems can be evaluated on the basis of their contribution to the preservation of the organism of which they are a part. Biological functions too are usually defined precisely in this way, i.e. as directed at the preservation of the organism as a whole. Effective functioning of a cow’s digestive system and effective functioning of a plant’s photosynthetic cells involve radically different processes, but what they have in common, and what would unite them if they function well, is their success in preserving the life of the organism as a whole. And third, the reference class for this account of health is probably the species: health would be measured in terms of how well an organism preserves itself compared to how well or long it could preserve itself given the species to which it belongs. And species are objective reference classes, fixed independently of personal preferences and prejudices about health.

Reducing health to conditions for self-preservation would also fit well within the meta-normative position outlined in the previous chapter, where a sub-set of non-moral goods was said to reduce to what promotes the health of an organism. Especially in the context of animal and plant life it seems *prima facie* plausible that objective goods are indeed nothing other than things that helps to preserve and sustain an organism in its existence. The judgement that some plant or animal is healthy seems to express little beyond the impression that it will stay alive for an extended period of time and, perhaps, that it can endure some challenging conditions. In the previous chapter the example *par excellence* of an objectively bad object was a poison, i.e. a substance imposing death upon an organism. The ideal-type of an objective good is nutrition, i.e. something that nourishes an organism and helps to preserve it. It seems therefore quite reasonable to think that what is objectively good for an organism is indeed what helps to preserve it.

Also in the context of human life we tend to identify health with successful self-preservation, at least if we look at typical health policies. Objects and behaviours standardly considered unhealthy and publicly discouraged are the kind of objects and behaviours that result in a reduced life-expectancy, e.g. cigarettes, UV radiation, fatty diets, stress, general passivity, etc. Likewise, things we ordinarily think of as healthy are considered healthy in virtue of the fact that they reduce the risk for the most common causes of death and thus on average increase the longevity of our lives. I think it is fair to say that most health policy and discourse on human health is premised pretty straightforwardly on the idea that health consists in successful, if not optimal, self-preservation.

The idea that that health consists in successful self-preservation is also shared by a number of thinkers we already looked at: Boorse thinks health consists in internal parts giving their statistically typical contribution to self-preservation and reproduction; Wakefield argues health consists in parts performing the function they were selected for in evolution, which results in the preservation of the organism; Railton thinks well-being consists in states associated with survival and reproductive fitness;¹ Foot thinks health consists in “development, self-maintenance, and reproduction” — at least for plants and animals;² and when Korsgaard reflects on health she also writes that “we should not call a condition healthy if it did not tend to maintain or extend life” and that it is “very nearly a tautology to say that good health will extend your life.”³

The equation of health with self-preservation can be found everywhere, remains largely unquestioned, and pervades the very definitions of life and organic functions. And yet, it is this idea of health that I think we must call into question and seek to improve upon. It is obvious that preservation is in some way important to an organism’s health, as an organism cannot be healthy without at least preserving itself for some period of time. But the question I shall raise is whether self-preservation and reproductive success are indeed the *defining* features of health and whether these notions indeed fully capture what health is. After presenting several arguments against the health as self-preservation identification, I will propose a different theory of health.

¹ See Railton, “Moral Realism,” 179, footnote 21.

² Foot, *Natural Goodness*, 33.

³ Korsgaard, “On Having a Good,” 17.

1.3 *Salvaging Health from Self-Preservation*

One way to criticise the identification between health and conditions for optimal self-preservation is to show that it is possible for an organism to improve and diminish its health without affecting its life-expectancy. If this is indeed possible we would have good reasons for thinking that health does not correspond to conditions for self-preservation.

Now, at the very least, it seems possible for an organism to *diminish* its health without shortening its life-expectancy. There are plenty of diseases that uncontroversially weaken and undermine human and non-human health without affecting life-expectation or reproductive success. We must either conclude that such diseases aren't reductions in health or accept that health is something else, something that can diminish irrespective of the expected duration of life.⁴ If someone were to have his leg amputated after a bacterial infection, for instance, I think it would be safe to say this marks an uncontroversial reduction of his health. Yet, an amputated leg does not necessarily affect life-expectancy or reproductive success. Moreover, even if it turns out that amputees do on average live shorter lives and reproduce less prolifically, it seems strange to think that their health is reduced on the basis of these statistics alone. The reduced abilities they suffer from seem to be the more relevant features health loss, more so than life-expectancy or reproductive success. One could of course object that in medically less advanced or socially less supportive societies the chances of survival would be significantly reduced after losing a leg. But this

⁴ The former option is defended in Robert E. Kendell, "The Concept of Disease and its Implications for Psychiatry," *The British Journal of Psychiatry* 127 (1975): 305-315.

line of thinking easily leads to absurdities: someone unable to walk long distances on bare feet may not have survived long in prehistoric times, but this fact would not render someone unable to walk long distances without footwear unhealthy in the present. It seems beyond dispute, then, that not every disease and uncontroversial health reduction implies an earlier death or lowered reproductive success. And even when diseases do diminish life-expectancy it is not obvious that the reduced life-expectancy is indeed the defining feature of the health loss.

The conceptual discrepancy between health and optimal self-preservation can be shown to be even greater if we can establish the possibility of an organism *increasing* its life-expectancy after an uncontroversial *reducing* its health. If health consists in conditions for self-preservation, then the very idea of health impairments resulting in an increased life-expectancy would amount to a contradiction and an empirical impossibility. Various examples demonstrate that increased health and lower life-expectancy can coincide, however, and by no means constitute an impossibility of this kind. We could for instance think of an insect that normally dies after mating, like the male praying mantis. An inability to mate would result in a significantly longer life for the praying mantis, but the reproductive inability should probably count as a diminution of its health—at least not an improvement. Or, alternatively, we could think of a rodent with a chronic paw-injury, unable to sprint over exposed terrain and no longer capable of performing its treacherous leaps from one branch to another. The rodent's health is uncontroversially compromised, it seems fair to claim, but it may end up growing exceptionally old whilst hiding out in its

burrow, hidden away from its natural predators. Or we could think of an infected tree no longer capable of growing fruits, yet living an extraordinarily long life as a result of being avoided by herbivores and fruit-eating insects. Increased life-expectancy may be unlikely in these cases, but the point is that the health of these organisms is at least not increased proportional to their augmented life-expectancy. Health impairments resulting in increased life-expectancy, although requiring some imagination, do not form a contradiction or an empirical impossibility. If someone were to insist that under 'normal' circumstances the aforementioned cases and all others like it would result in reduced life-expectancy and therefore qualify for states of ill-health, it would have to be specified what 'normal' circumstances are and which likelihood of reduced life-expectancy is required for inabilities to qualify for a reduction in health. But regardless of how this is detailed, if health is indeed identical to the condition for self-preservation it must be acknowledged that dysfunctions and inabilities resulting in greater life-expectancy are instances of improved health. And this is precisely where things would have been turned on their head: inabilities and incapacities are *de facto* signs of lessened health.

For human life the difference between health and conditions for self-preservation seems even more self-evident. A life lived in complete conformity with the conditions for the longest possible life, thought *in extremis*—i.e. with fixed exercise routines and strict dietary constraints, absence of stress and ambition, limited exposure to sunlight, long spells of boredom, complete risk avoidance, etc.—would make for a poor caricature of a healthy human life and one we should criticise for *reasons*

of health. Especially for human beings the conditions required for self-preservation do not seem to cover what it means to be healthy—a feature of human life that I will discuss later on. But the claim that conditions for self-preservation do not capture what it means for an organism to be healthy is not limited to human life.

Health could be dislodged from its presumed identity with successful self-preservation further if we could establish the possibility that an organism's health can *improve* without affecting life-expectancy, or the stronger case whereby an organism's health improves *at the expense* of life-expectancy. These options would require an alternative account of health, however, one that has not yet been defined. So far I have relied on relatively uncontroversial cases of health reductions and argued that they do not necessarily shorten life and sometimes even extend it. But if we were to accept that health is best understood as an organism's range of capacities, as I will argue below, then we could think of cases in which an organism's capaciousness increases at the expense of life-expectancy, effectively creating the possibility for a *tension* between health-improvements and successful self-preservation.

Other than raising counter-examples, we could also criticise the health as successful self-preservation thesis by asking what is *good* about an extended life and what is *bad* about death. On the second-order theory formulated in the previous chapter a subset of non-moral goods reduces to objects and events that promote an organism's health. If this is true, and if health itself were indeed reducible to conditions for self-preservation, then it follows that self-preservation corresponds to non-moral goodness for an organism and death to non-moral badness; self-

preservation would capture completely what it means for an organism to be in a good state. Nevertheless, it seems to me that mere self-preservation, i.e. merely living on, or life-extension *qua* life-extension—insofar it is possible to thematise this notion independently of what is effectively *made possible* by life-extension—is not of positive value for an organism. Think for instance of an organism living in a medically supported comatose state, incapable of any type of activity whatsoever and without prospects of waking up: the bare fact of living on does not seem to carry any positive value for an organism. Instead, it seems that the increased possibilities for activity that a longer life opens up bear the positive value and make self-preservation generally something good. And the same seems true about the badness of death: the mere transition to a state of non-living, or death *qua* death, is not bad for an organism. Death is something bad for an organism because it deprives it of its potential for any kind of further activity.⁵

These considerations suggest that life-extension is something good for an organism and associated with health primarily because it increases an organism's potential and scope for acting, not because life-extension *as such* is healthy and of positive value. And likewise, death is something bad and absolutely unhealthy for an organism primarily because it limits and annuls an organism's potential for acting. The concept of health, then, primarily seems to denote something along the lines of the scope of potential activity of an organism. If this is correct,

⁵ This latter claim is adopted from Thomas Nagel, "Death," in *Mortal Questions* (New York: Cambridge University Press, 1979), 1-10. While Nagel concludes that death deprives us of 'possibilities' in a general and undefined sense, I will argue that it is our 'potential for activity' that death reduces to a zero-point.

self-preservation would be important to health but only in an indirect way, *viz.* only insofar as successful self-preservation conditions an increase in potential for activity for the organism. The hypothesis with which I shall continue, derived from the criticisms towards the health as self-preservation hypothesis, is that health consists in a range of abilities and possible activities—a range that can be compromised by diseases, reduced to zero by death, and *in part* increased by life-extension.

I should add that disconnecting health from conditions for self-preservation in this qualified manner does not conflict with evolution theory. In short, evolution theory is an explanatory theory, also of the things that people subjectively value, but as an explanatory theory it does not warrant or justify any claims about what is in fact good for an organism.⁶ From the fact that that certain traits are adaptations, evolved through natural selection due to their positive effect on the replication of off-spring with the genetic material responsible for the trait, nothing follows about what is good for the being with the respective traits. Evolution theory therefore does not conflict with the claim that an expansion of abilities outside the economy of survival and reproduction is good for organisms and a token of health. And the same applies to the idea that reductions of abilities irrelevant to an organism's chances for survival are something bad and a token of lessened health. What the above considerations suggest, I shall therefore maintain, is that health consists in an organism's abilities and capacities—to some extent irrespective of their chances for survival.

⁶ See for further discussion: Sharon Street, "A Darwinian Dilemma for Realist Theories of Value," *Philosophical Studies* 127:1 (2006): 109-166.

1.4 Capacities and the Theoretical Constraints

In presenting arguments against the idea that healthiness reduces to conditions for self-preservation and reproductive success, the idea surfaced that health refers to an organism's abilities and possibilities for activity. A shorthand and preliminary way of describing abilities and possibilities for activity would be to speak of an organism's capacities—or rather, an organism's 'set' or 'range' of capacities. The hypothesis I shall explore further is that an organism is healthier if it possess a greater range of capacities, and that it is less healthy or indeed in a pathological state if it has a smaller or significantly reduced set of capacities. Before detailing this account further, I will first attempt to show that a 'capacity account' of health, roughly defined along these lines, meets the three requirements for a universal theory of health.

With respect to the first criterion, we can point out that every living being has capacities, so a capacity account of health could indeed apply to all forms of life. Every living being acts in some way, if only by growing and maintaining its form, and can be attributed a prior capacity for these activities. Capacities are not restricted to living beings, as inanimate objects like computers, batteries and engines also have capacities. Overextension to the non-living domain is no weakness of the account; in fact, I will argue that this is an important strength of a capacity approach to health. But for now it is only required to establish that capacities can indeed be attributed to all forms of life.

More contentious is the second requirement: the way in which an account of health must enable the evaluation of functional parts. This requires a distinction between an organism's set of capacities on the one

hand, and the functioning of its parts on the other. Not only must this be a meaningful distinction, it must also apply to all forms of life if a capacity account of health is indeed a candidate for a universal theory of health. And most importantly, it must make sense to evaluate functional parts in terms of capacities of the organism as a whole. These three concerns demand more careful consideration.

Although a distinction between biological functions and capacities of the organism as a whole is fairly easily drawn for complex organisms, the distinction is more tenuous in the sphere of the smallest forms of life. What would be the capacities of unicellular organisms like bacteria, for instance?—capacities made possible by underlying functions like protein synthesis and other metabolic processes? In unicellular life a distinction between functions of parts and capacities of the whole almost seems to collapse. Despite this near collapse, I think we can maintain the claim that all living beings have capacities on the level of the whole made possible by underlying biological functions, also for unicellular organisms. Capacities of bacteria could include the capacity for fission and multiplication—capacities made possible by some set of underlying biological functions. But also capacities like the synthesis and breakdown of external substances, the capacity to cause necrosis in tissues of a host organism, or something like the capacity to colour surrounding solutions could be counted amongst the capacities of bacteria considered as wholes. Functional parts enable the bacterium to manifest these capacities, of course, but the bacterium as a whole, rather than any of its parts is the reference-point for these activities.

The fact that bacteria do not possess many capacities on the level of the organism as a whole implies that variations in health are minimal in these regions of life; it would explain why it is indeed almost meaningless to speak of 'healthy' bacteria and fungi. What matters for our purposes, though, is that capacities can be identified across all forms of life and differentiated from underlying biological functions, enabling the evaluation of parts against a distinct level of capacities.

The distinction between functions of parts and capacities of organisms as wholes is even more complex in the case of bacteria, because bacteria can also be functional parts of larger organisms. The bacteria in our stomachs, for instance, are functional parts of our bodies and therefore also influence *our* health. On the account of health now under consideration, evaluating bacteria *qua* functional parts of larger organisms means evaluating how the bacteria influence the range of capacities of the organism of which they are a part, just like any other functional part can be evaluated in terms of its capacity-supporting or capacity-inhibiting effects. Bacteria can thus be evaluated in two different ways: as organisms themselves, comprised of functional parts and with a degree of health of their own, and as functional parts of larger organisms whose capacities they can facilitate or constrain. And these two levels of evaluation can indeed conflict: a bacterium can itself be in a functionally good state and have a wide range of capacities, while at the same time being detrimental to the health of the organism in which it resides. To make these distinctions somewhat clearer and to try and systematise the choice of terminology, the following schematic overview might be of help:

	<i>Functional part</i>	<i>Organism as a whole</i>
<i>Doing well</i>	to function well or effectively	being healthy
<i>The meaning of doing well</i>	to condition a wide range of capacities for the organism as a whole	to have a wide range of capacities
<i>Doing poorly</i>	to function poorly or or ineffectively	being less healthy, or diseased, or ill
<i>The meaning of doing poorly</i>	to constrain the range of capacities for the organism as a whole	to be constrained and to have a small range of capacities

Table 1

Capacities of unicellular organisms include capacities for fissure, the synthesis and breaking down of substances, and so on. For plants we may think of capacities for growth, blossoming, growing fruits, emanating scents, directing leaves towards the sun, etc. In the animal kingdom, with the structural properties for locomotion, perception, communication, the range of abilities and capacities of organisms increases exponentially. And human beings of course have a variety of capacities spanning an even wider range, mainly due to our cognitive powers. This does not imply that a squirrel is healthier than a cactus plant, of course, or that human beings are *de facto* the healthiest beings on earth; comparisons of health are possible only between different states of one organism or between two specimens of the same species—something I will return to in §2.4 when specifying the reference classes.

The basic idea, then, is that functional parts function well and effectively if they maintain or increase the range of capacities of the organism of which they are a part. Consider for instance the capacity of a shark to swim. Functional parts like the shark's cardiovascular system, its musculoskeletal apparatus, and its metabolic system together condition the shark's swimming abilities. If a shark were to develop the capacity to swim faster, accelerate more swiftly, or turn more sharply, the shark would be a healthier shark on a capacity account of health, and thus have better functioning parts, *ceteris paribus*, than a shark that doesn't have these additional capacities. And importantly, the more capacious shark is healthier and has better functioning parts not because of its enhanced chances of survival; the idea is that the greater capaciousness *as such* renders it a healthier shark. For even if the increased abilities would undermine its chances for survival, e.g. if an enhanced leaping capacity would make it more susceptible to being harpooned by fishermen, the expansion of abilities still marks an increase in the shark's overall health.

Evaluation of functional parts in terms of their contribution to the organism's set of capacities is not only possible for all forms of life, there are also good reasons for thinking that it is *better* to evaluate parts in this way, especially compared to evaluation of parts in terms of their contribution to self-preservation. Consider for instance the functioning of a cardiovascular system. It is obvious that a severely dysfunctional cardio-vascular system immediately results in death, while effective functioning will help keep the organism alive. But this is not the be all and end all of its well-functioning. Someone's heart condition may be

life-sustaining but still inhibit the individual in various ways—by precluding intense physical activity, for instance. A defender of the health as self-preservation thesis could of course argue that this individual would not survive under demanding conditions and *therefore* has a poor-functioning cardio-vascular system. But not all activities precluded by a poor functioning cardio-vascular system will result in death when attempted; some activities are simply not achievable and realisable anymore. The capacity restrictions following poor functioning of parts signify lessened health without necessarily impacting on self-preservation. A better way to evaluate functional parts may therefore indeed be to evaluate them in terms of the range of capacities of the organism they enable or exclude—a range reduced to zero if a part's poor functioning indeed causes death, but a range that is also compromised if poor functioning merely inhibits certain activities.

Also in the case of exceptionally well-functioning of parts does a capacity account of health seem to capture better what it means for them to be functioning exceptionally well. We no doubt want to maintain that a cardio-vascular system is in a functionally better state if it enables a person to run over longer distances, walk up hills more rapidly, and engage in all kinds of other intensive physical activities. If the functioning of parts were evaluated strictly in terms of their contribution to the preservation of the whole, it would be unclear when an exceptionally well-functioning cardio-vascular system would indeed be exceptionally well-functioning, as it would be so only if it positively impacts on the organism's success at self-preservation; only if the ability to engage in intensive physical activities would result in higher chances

of survival would the cardio-vascular system actually be better function. If the functioning of parts were evaluated in terms of the range of capacities they condition, however, as I suggest, a cardio-vascular system functions exceptionally well when it enables a large amount of capacities for the organism as a whole, to some extent independently of whether these activities positively affect chances for survival.

At this point of the analysis of what it means for a part to be well-functioning someone like Boorse might still agree. Although Boorse defines health as absence of disease, he claims that 'positive health' describes situations where functional parts perform their function in a statistically supra-normal way.⁷ Boorse's account of positive health remains tied to the idea of self-preservation, however, in a way that my account is not. On Boorse's view a part functions abnormally well only if it performs its *self-preserving* function better than what is statistically normal. A well-functioning cardio-vascular system enabling more intense physical activities would thus fall under Boorse's idea of positive health; the self-preserving function of the cardio-vascular system is simply carried out better than what is statistically normal.

A capacity account of health, by contrast, has more radical implications and takes the evaluation of functional parts outside the economy of self-preservation. To show this, we must briefly return to the discussion of 'spandrels', touched on before in Chapter One (§3). Recall Wakefield's thesis that an organ or functional part is dysfunctional if it fails to fulfil the function evolution selected it for, which was criticised for falsely excluding disorders and health-

⁷ See especially Boorse, "Rebuttal on Health," 8.

reductions resulting from spandrel failure. Not only failures in functions directed at self-preservation can constitute a disorder but also failures in non-adaptive functions of organs can constitute an instance of lessened health, I agreed with Murphy and Woolfolk. Now, the capacity account of health under consideration, in its crudest form, states that the greater the set of capacities an organism possesses the healthier it is. Hence, on this account, the more capacities a functional part enables the better or more effectively the part functions. In addition to a part's contribution to self-preservation, spandrels therefore play an important role: if a part has functions that support a wide range of capacities for the organism, also if these capacities have no bearing on the preservation of the whole, these extra functions are constitutive of an organism's health. Likewise, spandrel failure resulting in reduced capacities for the organism signifies a decline in its health, which, in turn, means that the part functions less well, *even if* the part continues to successfully carry out its role in self-preservation. The capacity account of health therefore does not restrict the evaluation of functional parts to their contribution to self-preservation alone, but incorporates the full range of spandrels within its evaluative scope. The more capacities a part's spandrels condition, the more capacities the organism has and the healthier the organism is—and so in a roundabout way, the better the part functions. Instead of Boorse's claim that a part functions exceptionally well *only if* it is more efficient in fulfilling its role in self-preservation, a capacity account of health implies that a part is in a functionally better state if it enables a wider range of capacities for the organism—including those unnecessary for self-preservation.

To illustrate this latter point we could return to the example previously employed—human hands. Evaluating the well-functioning of hands in terms of their contribution to self-preservation proved wholly insufficient; it would only measure how well hands execute their gripping functions, which barely captures the variety of ways in which our hands can be dysfunctional and constrictive of our health. A capacity account of health, by contrast, makes it possible to claim that hands are in a functionally better state if they support a wider range of capacities for the individual, also if these capacities have no bearing on self-preservation. Put simply, the more we can do with our hand the better they function—and this includes spandrel-based capacities like hand writing, playing the piano, throwing baseballs, and mastering origami. The capacity account of health implies that a hand is in a functionally good state if it supports a wide range of capacities for the person as a whole, and in a functionally bad state if they pose structural limitations to the range of capacities.

Labouring the distinction between functions and capacities in this manner aims to demonstrate three points, all of which were part of the second requirement for a viable theory of health: an organism's capacities can be *distinguished* from underlying functional parts; the distinction between capacities of the organisms and the functioning of its parts can be maintained across *all forms* of life; and most importantly, a part's functioning is evaluated *more adequately* when evaluated in terms of how many capacities it supports for the organism as a whole—more adequately, in any case, than when parts are evaluated strictly in terms of their contribution to self-preservation.

Before moving on there is one more theoretical constraint we need to consider, *viz.* the objectivity of reference classes. So far I have only explored the hypothesis that health consists in a range of capacities of some kind without mentioning any reference classes. When detailing the capacity account of health further in the second part of this chapter I will introduce three different reference classes relative to which the health of an organism can be measured: the species, the individual organism, and the individual organism at some point in its existence. The final verdict on whether these three reference classes are derived from prior valuations about what is healthy and unhealthy or whether they are indeed objective, will have to be postponed until after they have been described in greater detail. But by way of anticipation, the main idea is that an organism's health consists in a range of capacities vis-à-vis a maximum of capacities that the organism could have given the species that it belongs to, given the individual organism that it is, and given the individual organism that it has become at some point in its life. And I will claim this to be an entirely factual matter—unmediated, in any case, by subjective preferences and attitudes.

On the basis of these considerations, I believe we may tentatively conclude that a capacity approach to health meets the theoretic requirements formulated at the beginning of the chapter: capacities apply to all living beings; capacities are conceptually distinct from biological functions and enable the evaluation of functional parts; and capacities can be measured against an objective reference class—although the latter claim still has to be examined more closely.

1.5 *Further Advantages of a Capacity Approach*

Before spelling out the capacity approach in greater detail, there are several further advantages to the approach worth highlighting. Going back to the problem cases levelled against the health as self-preservation thesis, a capacity approach to health could explain why an organism's health can improve and worsen without changing life-expectancy; on a capacity approach it is possible for organisms to gain or lose capacities without necessarily influencing chances for survival or reproductive success. Likewise, diseases that do not affect life-expectancy could be understood as systematic reductions in capacities of the organism, either in the present or the future, but as conditions that simply do not bring about an earlier death.

Although my primary concern is the nature of health, a capacity account of health also has ramification for the way we understand pathology. On a capacity account of health it is a necessary (but not sufficient) requirement for pathology that it reduces the range of capacities of an organism. This implication seems correspond to all the paradigm cases: whether we consider orthopaedic, cardiovascular, neurological, endocrine, congenital, or psychiatric diseases, the common denominator is that diseases involve a reduction in capacities for the organism as a whole. Pathology *incapacitates*: a shoulder lesion inhibits one to lift something; intermittent claudication reduces the capacity to walk; aphasia limits the capacity for speech; anxiety disorders limit one's capacities for specific actions; and so on. A capacity approach therefore seems to get it right that reduced capaciousness is a necessary (but not sufficient) condition for diseases.

This also opens the possibility for disconnecting pathology from a reliance on 'natural' functions, or even worse, 'design'. We saw before that Wakefield considers conditions like albinism, reversal of heart position, and fused toes to be dysfunctions, falling short of being disorders because societies do not consider them harmful. A capacity account of health does not require social standards to establish that these conditions are not pathological; neither condition constrains the range of capacities of the person in any way and so neither qualifies for an impairment of health. And the same would be true for something like homosexuality, which on the accounts of Boorse and Wakefield do not necessarily escape the verdict of being a disorder. Since homosexuality has no impact whatsoever on one's range of capacities it is not a pathological condition, regardless of what one might consider the 'natural' function of our reproductive parts or the 'design' of our bodies.

Although diseases necessarily imply a reduction in capacities, they are not straightforward opposites of health. If a spell of disease results in an increase in capaciousness, then on the suggested account of disease it is to be judged as health-promoting and thus something that is objectively good for an organism. There are at least two ways in which illness and disease can be part of health. First, a disease may have an effect comparable to a vaccination and create a state of *resistance* or *immunity*. The health improvement would consist in immunity towards specific threats and organic disturbances and so an ability to retain one's capacities under a wider set of circumstances. Canguilhem recognised this point as well and wrote: "the possible abuse of health is part of

health.”⁸ This is all little more than common sense and the reason why it is generally considered healthy for children to go through periods of illness. A second way in which disease can be part of health is because it can improve an organism’s capacities for *recovery* and *convalescence*. After a disease an organism may achieve greater resilience, so that it can absorb and overcome a greater intensity of pathology. We may quote Canguilhem here again, when he writes: “to be in good health means being able to fall sick and recover, it is a biological luxury.”⁹ And similarly: “The measure of health is a certain capacity to overcome organic crises and to establish a new physiological order, different from the old. Health is the luxury of being able to fall ill and recover.”¹⁰ But clearly not every disease ends up enhancing the degree of biological luxury. Diseases could also cause lasting reductions in an organism’s set of capacities and thus be straightforwardly opposed to health. If a disease imposes death on an organism it is even the *absolute* antagonist of health, a reduction of capacities to an absolute zero point. Disease and illness are therefore *ambiguous* phenomena: under certain circumstances or for certain individuals a disease can be conducive to health, while in other circumstance or for other individuals a disease can be straightforwardly health-negating and life-destroying. Something like a stomach bug may in the long run result in an increased resistance and increased capaciousness—by increasing the capacity to

⁸ Canguilhem, *Normal and Pathological*, 200

⁹ Canguilhem, *Normal and Pathological*, 199

¹⁰ Georges Canguilhem, “The Normal and the Pathological,” in *Knowledge of Life*, ed. Paola Marrati and Todd Meyers, trans. Stefanos Geroulanos and Daniela Ginsburg (New York: Fordham University Press, 2008), 132.

digest certain foods for instance. In the sphere of mental health a depressive episode may result in deepened self-knowledge and the overcoming of life-events that exerted inhibiting effects, which would equally widen one's range of capacities. On the other hand, a stomach infection may also have lasting negative effects, just as periods of depression can be utterly detrimental to one's health. One of the virtues of a capacity approach to health is that it draws out this ambiguity and provides a relatively clear model on how to differentiate beneficial from disadvantageous periods of illness.

A final advantage of the capacity approach to health worth pointing out is that for human beings it makes for a *unified* theory of health—one that includes physical, mental, and social components. Rather than distinguishing physical health, mental health, and social health and somehow forging them together into a mysterious cumulative notion 'Health', as the 1946 WHO definition of health famously has it, the total set of capacities captures and describes health as a unitary phenomenon.¹¹ The range of capacities of organisms endowed with psychic life is determined partly by their psychic states. A depressed athlete, for instance, may become incapable of carrying out even the most basic of daily activities and therefore be judged as being in very poor health. The psychic dimension of health is not only relevant but also equally objective: psychic conditions influence one's overall capaciousness just as bodily conditions do. Psychological factors

¹¹ World Health Organization, "WHO definition of Health," in Frank P. Grad, "The Preamble of the Constitution of the World Health Organization," *Bulletin of the World Health Organization* 80:12 (2002): 984.

are not less objective or somehow less real than physical ailments. In fact, once human health is taken to refer to the full range of capacities it becomes problematic to claim that someone is physically healthy but mentally not, or that one is mentally healthy despite being physical ill. On the proposed view health consists in the range of capacities of human beings as a whole—a range conditioned by both physical and psychic factors. A capacity account of health not only grasps health in a unified sense, then, it simultaneously *restricts* it to this sense as well.

To sum up, additional advantages of a capacity approach to health are that it renders intelligible how health can improve and worsen independently of changes in life-expectancy; that it explains the nature of positive health; that it provides a necessary condition for disease and illness; that it is capable of accounting for the ambiguous value of disease and illness; and finally, that it allows for a unified account of health, rendering psychic and social determinants equally important in evaluations of human health. This first characterisation of a capacity approach to health, I think, therefore warrants a more rigorous and detailed analysis, to which I shall turn now.

1.6 Capacities Further Analysed

An organism's health improves when its range of capacities expands and it deteriorates when its range of capacities shrinks. This kind of talk about capacities was merely a short-hand way of saying that health consists in a potential for activities that an organism is able to carry out. Although this rough characterisation made it possible to argue for the attractiveness of the approach, it must now be defined more precisely.

The first important characteristic of a capacity approach to health is that it refers to what an organism is capable of doing. That is, capacities primarily refer to the *activities* that an organism is able to carry out or. The word 'activity' is preferable over 'action' here, as 'action' is traditionally reserved for what is intentionally done by human agents, involving at least some processes of rational deliberation. 'Activity' is used less restrictively in the tradition and will therefore be more suitable to denote the behaviours and manifestations exhibited by all organisms. I shall simultaneously reserve 'activities' for the domain of life, excluding manifestations of inanimate things. The eruption of volcanos or the erosive effects of rivers on their banks are therefore not genuine activities on my use of the term; they are activities only insofar as we speak metaphorically of the movements of inanimate entities, i.e. only when we speak as if rivers and volcanos were living beings. The first point to note about the capacity approach to health, in any case, is that it refers to the range of *activities* that an organism is able to carry out or manifest.

Capacities are of course not activities currently being carried out, just as evaluations of an organism's health do not describe what an organism is doing at a specific point in time. Capacities are properties required for the execution of activities, activities that may or may not be carried out in the future. Capacities are nevertheless genuine properties of things, possessed in the present tense. Statements about an organism's health are evaluations of the present state of an organism, even though on the proposed account of health the most relevant factors are the activities it can exhibit in the future. A capacity approach to

health therefore identifies health with a *potential* for activities. 'Potential' is preferable over 'possibility' here, as 'possibility' generally denotes the external circumstances under which potentials may or may not be realised. An organism can have the *potential* to fly thousands of miles, for instance, but lack the *possibility* if it is locked inside a cage. Even though natural language is not all too strict here, I will henceforth stick to the distinction that an organism's capacities condition its *potential* activities, while the *possibility* of their manifestation depends on external circumstances.

The proposed capacity approach to health centres on the idea that the 'range', or 'set', or 'scope' of capacities determines the level of an organism's health. On this approach, health therefore refers to a *multiplicity* of potential activities that an organism has or is able to carry out. Just as an organism's capacities are amongst their actual properties, so is their number, range, set, or scope. A capacity approach to health is an approach whereby *variations in multiplicity* of potential activities correspond to variations in health. The multiplicity of potential activities determines whether one state of an organism S_1 is healthier than another state of the same organism S_2 , or whether organism X of species α is healthier than organism Y of species α .

One crucial element is still lacking in this more precise formulation of the capacity approach to health, *viz.* a reference to the species necessary to mark off the relevant capacities; that is, we still need a reference class. A reference class is ineliminable from an account of health for two reasons. First, health judgements do not merely state how many capacities an organism has and how great its potential for

activities is. A mere numbering or listing of capacities does not determine whether an organism is healthy or not; we know whether it is healthy only in contrast with a maximum of capacities that it could have, i.e. in contrast to a *norm*. And second, without a maximum set by a reference class there would be infinitely many activities that organisms lack a potential for, which would render every organism *de facto* infinitely unhealthy, which is absurd. The variation in multiplicity of potential activity of an organism has, what I shall call, *factual limitations*: limitations fixed by the species to which the organism belongs. Trees are factually incapable of flying, orcas will never be able to climb up a mountain, and human beings shall never grow mangoes out of their armpits, and these incapacities do not compromise their respective degrees of health. Every species has intrinsic, factual limitations to what a specimen belonging to the species can have a potential for. On the proposed view, then, assessing an organism's health means comparing its multiplicity of potential activity vis-à-vis the factual limitations of the species. An organism is completely healthy—that is, healthy in a way that does not permit of any further improvement—when its multiplicity of potential activity coincides with the species-bound factual limitations, i.e. when the organism can perform all possible species-specific activities.¹²

¹² The *species-relativity* of maximum capacity is not identical to *species-normality*. If a statistically normal orca cannot jiggle itself on and off a beach, for instance, then an orca capable of doing this, other things being equal, is a more capacious and thus a healthier orca than the statistically normal one.

On a more precise definition of the capacity approach to health, then, we find that health consists in a *multiplicity of potential activity vis-à-vis factual limitations*. This is the definition of health that will be developed further and analysed in piece-meal fashion in the rest of this chapter, and defended against various objections in the next chapter.

2. Health as the Multiplicity of Potential Activity vis-à-vis Factual Limitations

The purpose of the second part of this chapter is to analyse the idea that health consists in a multiplicity of potential activity vis-à-vis factual limitations in greater detail. Each element of this account of health comes with specific problems and important implications. In the following sections the aim is to clarify health as a *unitary* phenomenon while elucidating each element of the definition. The concern is still a universal account of health, i.e. one that applies to all forms of life. More specific considerations regarding human health will be addressed in the following two chapters.

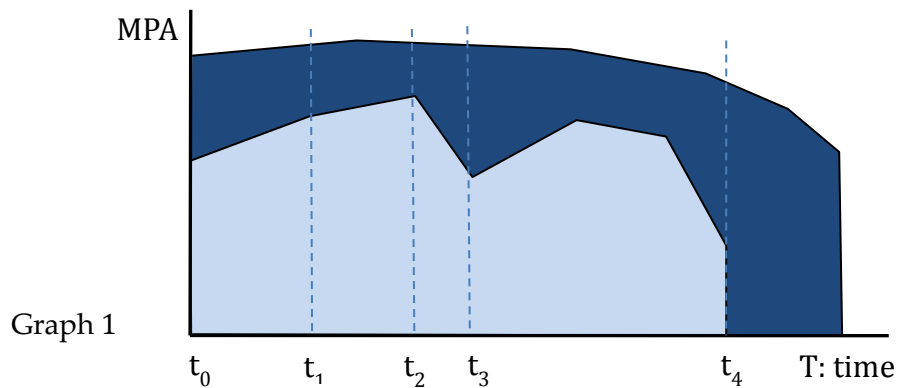
2.1 *Multiplicity*

Variations in health correspond to variations in multiplicity of potential activity, which I will henceforth abbreviate as MPA. The greater an organism's MPA the greater it's health, and *vice versa*—this is the basic principle of the account of health under consideration.

The idea that an organism's health refers to a multiplicity of some kind points to the idea that health denotes something essentially quantitative. The most natural way to understand a multiplicity is to identify, separate and add up individual units, in this case the activities that an organism has a potential for. So we could take any organism at any point in its life, say a squirrel at some time t_1 , and count the potential activities it could perform at that point: digging a hole, cracking acorns, jumping over branches, climbing trees, etc. The larger the set or range of potential activities the healthier the squirrel. Although the account of health was roughly introduced along these lines, it suffers from one major deficit, *viz.* its failure to account for the fact that potential activity also extends into the future. In addition to what an organism is currently capable of doing health refers to what an organism is capable of doing in the future, and for how long, given its current state of being. This was the indirect way in which self-preservation was said to be relevant to health. In addition to working out this temporal aspect of multiplicity I shall question whether health corresponds to a quantitative multiplicity or whether it refers to, what Henri Bergson calls, a 'qualitative multiplicity'. Both these issues shall be addressed in an effort to elucidate what is meant by 'multiplicity'.

2.1a *Multiplicity and Time*

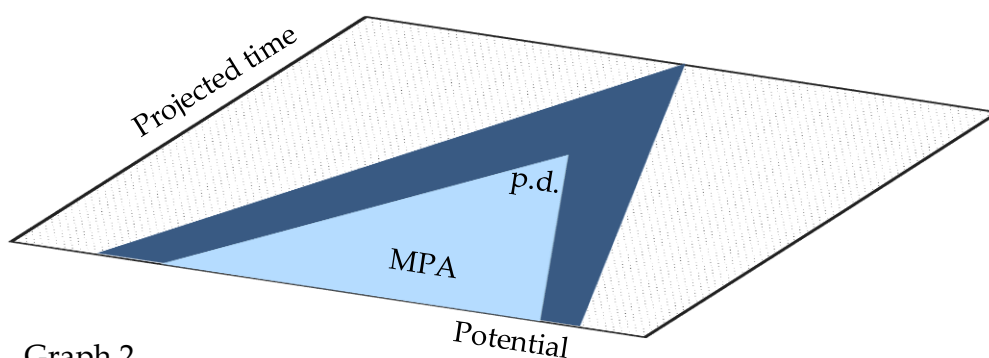
First I shall turn to the temporal dimension of the multiplicity expressed in health judgements. Perhaps the best way to demonstrate the idea is by means of graphs, beginning with one representing the deceptive idea that multiplicity refers to what an organism currently has a capacity for.



The horizontal axis in Graph 1 stands for a period of time and the vertical axis signifies a numerical index of potential activities, with t_0 being some random point in the squirrel's life. At each point in time the squirrel is capable of performing some given set of activities, indicated by the lowest line and the lightly shaded surface below it. The MPA increases between t_0 and t_2 , indicating an increase in health, e.g. if the squirrel has been well-nourished for some time and gained abilities it previously didn't have. After t_2 the MPA drops significantly, possibly due to disease, hunger, or an accident, while at t_3 recovery begins—a recovery that never fully restores the level of health the squirrel had before. At t_4 the MPA is reduced to zero, meaning our squirrel has died. The upper line and darker shade represents the factual limitations of the species, indicating the factual limits to what the squirrel could have been able to do, and for how long, given the fact that it is a squirrel.

This representation of the account of health may look consistent with what I said so far, but it misrepresents the temporal aspect of health. An organism's level of health does not just denote what it is capable of doing in the present, but also, and probably for the most part,

what it is capable of doing in the future. A healthy sprout, cub, or child is not healthy on the basis of the few things it is capable of doing early in life, but healthy in virtue of harbouring a potential for activities in the future. An unhealthy sprout, cub, or child is not necessarily compromised in its typical sprout, cub, and child activities; its health-deficit often lies in the constraints to its future potential activities. Or consider an animal with a malign form of cancer, still able to execute all activities available to the species. The animal is not unhealthy due to any current constraints in its action-potential, but unhealthy due to the loss of potential for activities it is bound to suffer in the near future. In short, the relevant multiplicity is not limited to current activities but also includes the potentialities the organism is expected to have in the future given its *current* state of being. The multiplicity therefore requires a different graphic representation than Graph 1. A better way to represent the nature of health, I suggest, would be the following:

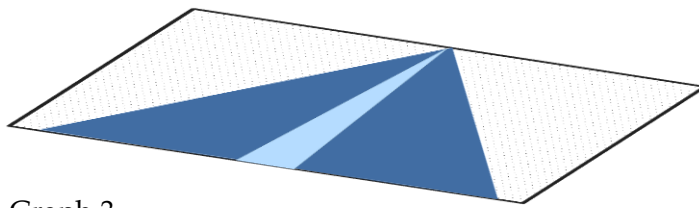


Graph 2

This requires some explanation. While the first graph represented health over a period of time, Graph 2 aims to characterise the health of an organism only at one single point in time. The variety of activities the organism is currently capable of carrying out determines the width of the base of the lightly shaded triangle and falls within a wider shade representing factual limitations to how much the organism could possibly be capable of given the species that it belongs to. Each living being has a projected point of death, here indicated with 'p.d.', which again falls within the darker shade of factually given or 'intrinsic' age-limitations.¹³ The height or depth of the pyramid marks life-expectancy along an axis of *projected* time and thus does not represent any *actual* passage of time or the actual moment of death. Actual death, on this type of graph, would be represented by an empty plane containing neither MPA nor factual limitations: MPA and factual limitations would coincide in being zero. The organism's health is represented by the *total size* of the area of the lightly shaded triangle. This kind of graph represents more adequately how health is a function of current capacities as well as capacities projected to be had in the future—despite remaining overly simplistic and suggesting that capacities decrease linearly. The size of the area spread out over this two-dimensional plane constitutes the multiplicity of potential activity, i.e. the health of the organism.

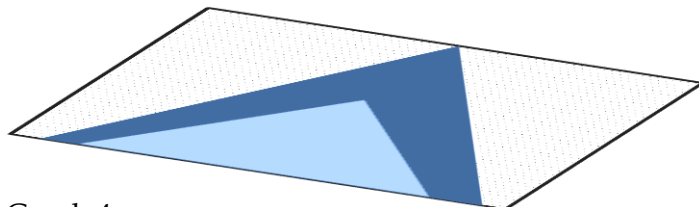
¹³ Not every life-form has intrinsic age-limitations, however; there are for instance types of trees that can in principle live on forever. Such rare cases do not fundamentally alter the picture of health, however, as there still is a projected point of death—all organisms die eventually. The projected point of death, as well as the limitations within which it must fall, are just wholly indeterminate.

With this type of representation we may return to some of examples that I used in the preceding sections and provide some further graphic illustration. Graph 3 would be a way to represent a human life lived in complete conformity with the longest possible life, or indeed the injured rodent growing old in its burrow.



Graph 3

This graph illustrates why both human and rodent are in poor health, despite expected to realise the maximum possible longevity; the *total* surface area of potential activity remains relatively small. We may now also appreciate why such a life can be criticised for reasons of health; a healthier life would have been possible given what is factually possible for it. An organism that increases its potentiality at the expense of its projected life-span may turn out to be in a far healthier state on this model, as the total MPA will be significantly greater, illustrated by the increased surface space of the light shaded triangle in graph 4.



Graph 4

These illustrations should help clarify how a one-dimensional numerical model of multiplicity falls short and how the multiplicity that health consists in is one that spreads out into a dimension of projected time. In short, the multiplicity referred to in judgements of health is one that obtains at a single point in time, which could be any moment in an organism's life, but the multiplicity that obtains at that point, i.e. the level of health then possessed, is partly constituted by the scope of the projected future and the number of capacities projected to be had therein—all based on an organism's current state of being.

2.1b *Quantitative and Qualitative Multiplicity*

A further question about the multicity constitutive of health is whether it is indeed a quantitative multiplicity or whether it is what Henri Bergson calls a 'qualitative multiplicity'. A few words on Bergson's notion of a qualitative multiplicity are required to answer this question.

Bergson develops the notion of a qualitative multiplicity in his work on consciousness, where he argues that conscious states cannot be separated and treated as individual unities in the way that deterministic theories of mind tend to presuppose.¹⁴ Bergson claims that in immediate experience we find that conscious states continually fuse together, permeate one another, and form a continuous, indivisible flow.¹⁵ As a result, consciousness does not lend itself for division, partitioning, numbering, and counting—i.e. the type of procedures he considers

¹⁴ Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, trans. F. L. Pogson (London: George Allen & Company, 1913).

¹⁵ Bergson, *Time and Free Will*, 75-87. The technical name for this indivisible flow is Bergson's famous notion of 'duration'.

necessary for deterministic theories of mind. On the basis of this insight Bergson differentiates between two different kinds of multiplicity: a 'numerical' or 'quantitative' multiplicity on the one hand, and what he called a 'continuous' or 'qualitative' multiplicity on the other.¹⁶ A numerical or quantitative multiplicity is made up from individual and separable units, like a collection of extended objects positioned in space, which can unproblematically be added up. A continuous multiplicity, by contrast, pertains to the non-extended sphere where a certain flow or continuous becoming unfolds—constituting a multiplicity that, whilst being multiple, essentially remains indivisible. While changes in a numerical multiplicity are *quantitative* changes, i.e. changes in number, changes in a continuous multiplicity are *qualitative* changes; conscious experience changes in quality rather than number when experiences appear or disappear, intensify or weaken.¹⁷

Of these two options presented by Bergson, I think it is evident that the multiplicity denoted by health is a quantitative multiplicity, just as the norms against which an organism's MPA is measured in health-judgements are quantitatively defined. On the proposed view it is the number of activities that an organism can manifest that determines its degree of health. When health improves the quantity of potential activities increases and when health worsens the quantity drops. The multiplicity referred to in judgements about an organism's health, is therefore first and foremost a quantitative multiplicity.

¹⁶ Bergson, *Time and Free Will*, 87.

¹⁷ Deleuze's commentary on Bergson's work is particularly clear on the *qualitative* aspect of a continuous multiplicity. See Gilles Deleuze, *Bergsonism*, trans. Hugh Tomlinson and Barbara Habberjam (New York: Zone Books, 1991), 42.

This is not to deny that changes in health cannot be experienced as qualitative changes—changes that are continuous, that fuse with one another, and that constitute a certain indivisible colouring of one's experiences. When my health deteriorates I will indeed experience this as a qualitative change rather than a quantitative alteration of some kind. My experience of falling ill does not consist in a number dropping on an internal potentiality index. Health loss is revealed to me in qualitative way: I feel weaker, incapacitated, and experience that my horizon of possibilities has narrowed down. Health may therefore be subjectively experienced as a qualitative multiplicity of a certain a kind.

Such changes to a qualitative multiplicity, I suggest, could best be understood as the experiential counter-part of what objectively occurs when health improves or worsens. There is no reason to favour or prioritise the qualitative dimension, however, for if we were to do so the problems inherent to subjective accounts of health would immediately reappear: organisms without a nervous system do not experience a qualitative multiplicity and so could not improve or impair their health; it is possible to experience an intensification of a qualitative multiplicity while in reality the scope of one's potential for activities actually drops, (e.g. in a state of drunken euphoria); and the situations in which a multiplicity is qualitatively experienced as intense may be widely divergent among different people, throwing us back onto the sceptical view that there are only a plurality of conditions experienced as healthy that have objectively very little in common. The multiplicity referred to in health judgements is therefore a quantitative multiplicity, with, perhaps, a qualitative multiplicity as its experiential counter-part.

2.2 *Potential*

Unlike the notion of multiplicity, the idea of potentiality has played a much more prominent role in the philosophical tradition, going back at least to Aristotle's concept of *dunamis*. The task here is not to recount the history of the concept and its myriad theoretical roles, but to provide an account of potentiality in the context of a theory of health that answers to several important questions. The first question is one of explication: what does it mean for an organism to have a potential for an activity and what is the metaphysical status of capacities and potentials? The second question is whether potentialities pertain only to the domain of life or whether potentials also exist in the rest of nature. If the latter is true, the account of health would remain within the contours of naturalism; the properties referred to would be homogenous and continuous with rest of nature. A third question about potentiality is whether there is a fundamental difference *within* the domain of life itself, *viz.* between a potentiality of human beings and higher animals and the potentiality pertaining to the rest of organic life. In human life having a potential for certain activities means, on the face of it, having alternatives lines of action available, which seems different from a plant's potential to absorb water and to grow flowers. Human potential seems to include alternative lines of action while in plant life potentiality seems to refer to the unfolding of a more linear process. And the fourth question is what it means for an organism's potentiality to increase or decrease: how can its multiplicity vary? In answering these four questions we should get to the heart of the thesis that health designates a multiplicity of potential activities relative to a certain norm.

2.2a Explication of Potentiality

In contemporary metaphysics most authors tend to treat potentials and capacities in terms of ‘dispositions’ and ‘powers’—two terms generally used interchangeably.¹⁸ This growing bulk of literature will prove instructive in my attempt to explicate the idea that organisms have a certain potential corresponding to their degree of health. The typical examples used in debates on dispositions and powers, however, seem to have little to do with the potentiality of organisms that on my account constitutes their health: the standard cases for dispositions are ‘fragility of glass’ and ‘salt’s solubility’. A bridge must therefore be made between dispositional properties like the brittleness of glass and solubility of salt and the potentiality of organisms, including that of human beings.

The reason why so much attention has been given to dispositions in recent metaphysics is that properties of any object whatsoever are detectable, identifiable, and known due to the causal effects they have

¹⁸ I have relied on the following sources for this discussion: David M. Armstrong, *A World of States of Affairs* (Cambridge: Cambridge University Press, 1997); David M. Armstrong, Charles B. Martin, and Ullin T. Place, *Dispositions: A Debate*, ed. Tim Crane (London: Routledge, 1996); Alexander Bird, *Nature’s Metaphysics: Laws and Properties* (Oxford: Oxford University Press, 2007); John Heil, *From an Ontological Point of View* (Oxford: Clarendon Press 2003); Charles B. Martin, *The Mind in Nature* (Oxford: Oxford University Press, 2008); George Molnar, *Powers: A Study in Metaphysics*, ed. Stephen Mumford (Oxford: Oxford University Press, 2003); Stephen Mumford and Rani L. Anjum, *Getting Causes from Powers* (Oxford: Oxford University Press, 2011); Elizabeth Prior, Robert Pargetter and Frank Jackson, “Three Theses about Dispositions,” *American Philosophical Quarterly* 19:3 (1982): 251–257; Sydney Shoemaker, “Causality and Properties,” in *Time and Cause: Essays Presented to Richard Taylor*, ed. Peter van Inwagen (Dordrecht: Reidel Publishing Company, 1980), 109-135.

on other objects and their properties—including, as Locke already taught us in the context of secondary qualities, the causal power to affect our senses. If properties were causally inert we would have no way of detecting their presence and determining their nature. The central thought is that something is yellow because it is disposed, or has the causal power, to give us a sensation of yellowness; glass is brittle because it is disposed to break when struck with force; and salt is soluble because it is disposed to dissolve in water. If properties were not dispositional or powerful in this manner we would have no means of detecting their presence and determining their character.

A disposition or power may in its simplest form be defined as follows: X has a certain disposition D (or power P) if under a set of circumstances C it will manifest M. This is probably the most basic formulation of dispositions and powers and one that will suffice for our purposes. The central metaphysical question is whether properties are only *known* through their manifestation or whether properties are themselves *nothing other than* the dispositions or powers to bring about certain manifestations. In Armstrong's words, the central metaphysical question is "whether a property's nature is *exhausted* by the powers that it bestows, or whether instead the property, in itself, is to be distinguished from those powers."¹⁹ To this question several answers are possible, which I will survey shortly. First a case must be made that the potential of organisms, the potentiality for activities corresponding comprising their health, are metaphysically identical to dispositional properties like brittleness of glass and solubility of salt.

¹⁹ Armstrong, *A World of States of Affairs*, 69

To that end, consider the potentiality of a plant, or two capacities in particular: a plant's potential to flower and its potential to absorb water from the ground—two genuine capacities of plants and *prima facie* important to its health. If plant A of species α lacks the potential to flower and plant B of species α has lost its capacity to absorb water, other things being equal, plant A and plant B are less healthy than plant C of species α that doesn't lack either capacity. Can the potential to flower and the potential to absorb water be treated as 'dispositions' or 'powers' of the plant? I think the answer is positive: a plant has the disposition 'flowering' or 'absorbing water', if, and only if, under particular circumstances it will manifest the growth of flowers or an influx of water. A capacity, or a potential for an activity, then, is the same thing as being disposed towards something or having a power for it. *What else* could it mean for a plant to have a capacity or potential other than that the relevant manifestations will occur under a set of specific circumstances? If a plant does not manifest the growth of flowers or the absorption of water under any circumstances whatsoever, then the plant would simply lack the potential; this is what it means not to have a potential or capacity for something. So a potential for some activity is nothing other than a disposition or power for that activity, which *must* become manifest under some set of circumstances.

Is there really no difference then between a plant's potential to flower and for glass to break when struck with sufficient force? Two differences do appear to obtain. First, for glass to break is for it to have a *passive* disposition or power, i.e. a disposition to be affected *by* something in the world, whereas for plants to flower and to absorb

water is for it to have an *active* disposition or power, i.e. a disposition to change something in the world or bearer of the disposition itself.²⁰ Some have suggested that 'power' would be a more adequate a term for active dispositions and 'disposition' for its passive counterpart, but generally authors do not make the distinction. But even if one would insist that a plant's capacities are active powers rather than passive dispositions, this would not entail a break between life and the rest of the material world, for active powers also exist everywhere in the rest of nature. The plant's potential to flower could for instance be compared to the active power of fire to heat up things, or to the active power of painkillers to suppress sensations of pain: both cause changes external to themselves rather than being affected by something. The potential activities of living beings are therefore not 'active' in a sense that dispositions of non-living beings are not; they really are the very same kind of property.

The second apparent difference between glass's brittleness and a plant's potential to flower is the complexity of what goes into the relevant circumstance necessary for a plant's potential to become manifested. For glass to have the dispositional property brittleness is for it to shatter when struck by a solid object with sufficient velocity. For a plant to have the potential or disposition to flower means that flowers *will* grow, but they typically do so only under a complex set of circumstances, including conditions like sufficient nutrition, sufficient sunlight, the right seasonal temperatures, absence of hungry herbivores, limited surrounding vegetation and so on. The relevant circumstances are much more complex due to the fact that a large range of factors

²⁰ Armstrong, *States of Affairs*, 70.

could prevent the plant from flowering, even though the plant itself has the potential to flower. Frost in spring, for instance, could prevent the plant from growing flowers even though it would have flowered in warmer circumstances. A plant with flowering potential may also get crushed in a stampede of large animals and never materialise its flower-growing potential. But no matter how long the list of circumstances necessary for the flower-power to manifest itself, the crucial point is that flowers *must* grow when the relevant circumstances obtain, if, that is, the plant indeed has a genuine potential to flower. So an organism's potential for an activity, I conclude, is a disposition or power to manifest an activity under particular circumstances, which is really no different from dispositions of non-living beings.

While a dispositional analysis of potentiality may indeed be defensible in the context of plant life, for more complex forms of life, especially human life, it is not immediately obvious this is the case. In human life much more complex processes are involved in the formation of behaviour. Adopting a dispositional analysis of human potentiality may strike one as a bridge too far, as it seems to reduce complex motivational processes to crude behaviouristic operations of stimuli and responses. Such a behaviouristic account could be deemed inadequate, as we are inclined to think human activities are not merely triggered by the right stimuli in a way that salt dissolves when placed in water and plants soak up water from soil due to osmotic forces. But this behaviouristic view of dispositions rests on a mistake: no behaviourism is implied in treating human potentiality as a cluster of dispositions. For the set of circumstances necessary for the manifestation of a power may

very well involve rational processes, individual choices, or perhaps even the free will of autonomous agents.²¹ For me to have the potential to run, for instance, is for me to have the disposition or power that *if* I indeed decide to run, and some further conditions are satisfied, I will indeed exhibit a run. If there is no determinable set of conditions under which I will run, I simply lack the potential for it. The claim can therefore be defended that human potentiality is also fundamentally no different from the potentiality of glass and salt. Human capacities are dispositional properties that under some set of conditions will manifest the relevant manifestation. And choices, emotions, and free will are included in the required circumstances or conditions, if they are indeed necessary for the relevant manifestations. While for the manifestation of brittleness a strike with a solid object may suffice, the manifestation of human potentials may require acts of will, emotions, rational deliberation and so on. In analysing human potentiality as dispositions or powers, however we can afford to stay neutral on questions on free will and determinism. *Whatever* turns out to be required for the manifestation of our dispositions will be the circumstances under which a disposition or power *must* be manifested, if the potentiality is indeed possessed by an individual.

Note that this account of human dispositions and powers is markedly different from the way that van Inwagen conceives it in his influential taxonomy of freedom-related terminology.²² For van Inwagen the power of human agents is radically different from the

²¹ I am indebted to here to conversations with Martin Lipman.

²² Peter van Inwagen, *An Essay on Free Will* (Oxford: Oxford University Press, 1983).

powers and capacities of other things, despite being united in terminology. The power of a human being, he writes, is the power to “originate” changes rather than merely “react” to environmental changes.²³ According to the view I am advancing here, however, van Inwagen may be right that human beings don’t merely react to stimuli and that acts of choosing and willing are indeed necessary for certain behaviours to occur. But once it is admitted that choosing and willing is a *condition* or *circumstance* required for certain actions, there is no reason to presume that the basic dispositional model has to be abandoned in the context of human activities: powers and dispositions do not demote human behaviour to mere reacting to circumstances. Our choosing and willing may indeed be a necessary (though not sufficient) condition for the manifestation of various powers; that is, humans can be *self-conditioning*. This does not imply, however, as van Inwagen thinks, that “talk about the *action* of hydrochloric acid on zinc and the *action* of an automatic pistol ... is really very different from talk of the power of an agent to act, despite their common origin in the technical terminology of medieval Aristotelianism.”²⁴ According to the view outlined here, it is precisely the same talk, as it concerns the same kind of happenings, *viz.* manifestations of dispositions—only with more complex conditions involved in some of our behavioural manifestations.

²³ van Inwagen writes: “The concept of a causal power or capacity would seem to be the concept of an invariable disposition to react to certain determinate changes in the environment in certain determinate ways, whereas the concept of an agent’s power to act would seem not to be the concept of a power that is dispositional or reactive, but rather the concept of a power to *originate* changes in the environment.” van Inwagen, *An Essay on Free Will*, 11.

²⁴ van Inwagen, *An Essay on Free Will*, 10.

The uniformity of human potential and dispositional properties of brute objects also helps answering the question raised above regarding a difference in potentiality between human life, involving alternative lines of action, and the potentiality of simpler life forms, restricted to a more linear unfolding of potentials. I argued that if choice between alternatives is indeed a feature of human action, then choices are part of the required conditions for a manifestation of human activity. There is no reason to suppose that potentiality itself is radically different for human beings, however, or that health takes on a different meaning in the context of human life: also in human life does health refer to and individual's dispositional properties and powers.

For things to have a disposition or power does not require the relevant manifestation ever to occur; in fact, the standard scenario is that it doesn't. The solubility of a salt flake may never manifest itself if contact with water never occurs. The number of dispositions and powers always outstrip and exceed their manifestations. The actual circumstances and corresponding manifestations will never be more than a fraction of the dispositions possessed by a thing. The same applies to life and human life in particular. If the right circumstances do not occur, potential activities will never become manifested. If volition is part of the necessary circumstances under which humans manifest their dispositions, and if alternative lines of action are abandoned when we choose one action over another, alternatives will remain unrealised. Again, I think we may conclude that a dispositional model does not set human potentiality apart from that of animals or plants, or even from that of glass and salt.

2.2b *Dispositions and Metaphysical Naturalism*

This brings me to the metaphysical status of dispositional properties. Here the views diverge widely and a number of positions are available. According to one view, 'categoricalism', dispositional properties depend on underlying non-dispositional properties. On this view dispositions are higher-level properties that require lower-level properties as their metaphysical realisers, or as their "causal basis", as Prior, Pargetter, and Jackson write in their classic paper on the subject.²⁵ So on this view the brittleness of glass would not be the cause of it breaking when struck, in the same way that the power to flower is not causally responsible for plants growing flowers. According to categoricalism, the lower-level realisers are categorical properties, i.e. properties that are non-dispositional and self-contained, i.e. properties that do not point outside of themselves to any possible effects. On the two level view defended by Prior, Pargetter, and Jackson, dispositions are therefore "impotent" and "epiphenomenal" properties, while lower-level categorical properties are causally responsible for all manifestations: "the disposition does nothing."²⁶ Subtly different from this two level view would be the categoricalist thesis defended by Armstrong, in which dispositions are not higher-order properties but simply properties that follow from the combination of categorical properties and the laws of nature. According to Armstrong, being fragile or having a potential to grow flowers result from the microphysical categorical properties of glass and plants, which, together

²⁵ Prior, Pargetter & Jackson, "Three Theses," 251.

²⁶ Prior, Pargetter & Jackson, "Three Theses," 255.

with the actual laws of nature, form the relevant dispositions—dispositions that do not reside at some higher or additional level.²⁷ According to categoricism, then, any entity's dispositions are grounded in non-dispositional or categorical properties. So an organism's capacities and potentials are understood as underpinned by functional unities like organs, cells, DNA, but ultimately, at the most fundamental level, by the microphysical particles that causally determine the cascade of dispositions and discernible potentials—microphysical particles that are themselves not dispositional.

Diametrically opposed to categoricism is the view known as 'dispositionalism', the view that "*all there is* to a property is its contribution to the dispositionalities of its possessor."²⁸ Shoemaker, an early proponent of the view, accepts the claim of two-level categoricism that a thing has powers like fragility, solubility, a potential to grow flowers, and so on due to underlying properties. Shoemaker argues that these underlying properties are themselves to be regarded as powers—powers that give the thing the dispositions that it has. The underlying properties acquire their identity from their contributions to the causal powers or dispositions of the thing of which they are the underlying properties. For these underlying properties are also known, and *can* only be known, via the causal effects that they have. Shoemaker argues in favour of this 'dispositions all the way

²⁷ For the categoricist, if the same categorical properties were placed in a universe with different laws of nature then the dispositions of things would change accordingly. Categoricists therefore follow Hume in considering the laws of nature to be contingent.

²⁸ Heil, *Ontological Point of View*, 97.

down' view because, if it were false, then it must be possible for those underlying properties to never have any causal effects, so that properties could exist that are in principle undetectable and unknowable. Furthermore, a thing could radically change its non-dispositional properties without changing its causal powers, and thus undetectably undergo fundamental changes. Deeming such consequences epistemically untenable, Shoemaker proposes a two-level dispositional theory of properties in which both the higher and lower-order properties are essentially dispositional. More recently this kind of 'pan-dispositionalism' has been defended by Mumford and Bird, who argue that all properties are potencies, i.e. that all properties have dispositional essences. Mumford's and Bird's arguments go much further than Shoemaker's epistemic concerns, however, and state that an ontology truthful to current theories in physics demand a pan-dispositionalist ontology. They claim that only this kind of ontology could consistently ground the laws of nature that contemporary physics has put forward. These arguments are highly detailed and would take us way too far afield.²⁹ But on the dispositionalist view an organism's potentials are underpinned by unities like organs, cells, DNA, but at the most fundamental level remain equally dispositional.³⁰

²⁹ One important implication of dispositionalism is that, contra Hume and Humeans like Armstrong, laws of nature are not contingent. According to dispositionalism the laws of nature could not be different than what they are with the same fundamental properties in place; laws of nature are metaphysically necessary and fixed by instantiated dispositional properties.

³⁰ Categoricalism and dispositionalism form two extremes on a spectrum of views. Mixed views and intermediary positions have also been formulated. Molnar, for instance, defends the view that some properties are fundamentally powers, while

For our purposes, merely sketching these two positions on the metaphysical status of dispositions should suffice, as we can afford to remain neutral on the question whether dispositions are ultimately grounded in non-dispositional properties or not. My claim is that health consists in the multiplicity of potential activities vis-à-vis a certain maximum, whereby potentiality can be explicated as the totality of dispositional properties and powers at the level of the organism a whole. The literature on dispositions gives us reasons to accept capacities and potentials as real properties of organisms, just as fragility and solubility are real properties of glass and salt. The properties invoked in the proposed theory of health would thus be real features of organisms. Even if categoricism turns out the superior metaphysical theory, nothing would be lost. The same properties of organisms would be picked out by the concept of health and these properties would not be any less real; dispositions would just be underpinned by non-dispositional microphysical realisers. The dispositionalist's thesis is quickly gaining terrain, however, and would imply that the account of health involves the kind of properties—dispositions and powers—that are *congruous* with the fundamental properties of everything that exists, also at the most fundamental level.

others, like a thing's shape, are categorical. Molnar's ontology has therefore a property dualism built into it: at the most fundamental level there are both dispositional and non-dispositional properties. Another mixed view is defended by Martin and Heil, who argue that properties are not exclusively categorical or dispositional. They argue instead that properties always contain both aspects: every property is both dispositional as well as categorical like two sides of the same coin.

This brief excursion into metaphysics has two important implications. The first is that a dispositional account of health does not require any form of metaphysical vitalism—a metaphysical picture according to which the fundamental constituents of life diverge from the rest of nature. The potentiality of an organism consists in dispositions identical to the dispositions and powers found everywhere else in nature, and, if dispositionalism is true, it is identical in structure to the most fundamental constituents of everything else that exists. As a result, the account of health falls within the boundaries of *naturalism*. By ‘naturalism’ here I only mean that the properties referred to in the account of health also figure in, or are required by, our best scientific theories. That is, we only have to accept the existence of things and properties we have to accept *anyway* if we are to take the natural sciences seriously. The capacity account of health does not commit us to entities other than the kind properties that the natural sciences take to be there; at least in its reliance on capacities, potentials, and dispositions—terms that, ultimately, all amounting to the same thing.

A second, related implication is that the theory of health lives up to the promise of *objectivity*. We sought to formulate an account of health that is objective; that is, an account of health in which subjective preferences and attitudes play no constitutive role. Health defined as MPA succeeds in picking out real, objective features of organisms. Even if the metaphysical debate settles on categoricism, capacities and potentials remain real properties of organisms and would continue to be objectively grounded, but only by fundamental constituents that themselves are not dispositional in nature.

2.2c *Quantitative Variation in Potentiality*

Having a firmer grasp on what is meant by potentiality, we can now consider the ways in which the potentiality of an organism can increase or decrease, i.e. the various ways in which a multiplicity can change. The basic schema of dispositions will again provide guidance: X has a disposition D or power P if under circumstances C it will manifest M. On the basis of this formula, we can identify three ways in which the potentiality of an organism can increase or decrease.

The most obvious way for an organism's potentiality to expand is for more dispositions to be included in the cluster of dispositions. This is the way in which I have been speaking about the multiplicity of an organism's potentiality so far. If an organism can exhibit a greater number of activities, i.e. if a greater number of dispositions are possessed by an organism on the level of the whole, the greater is its overall potentiality. The plant disposed to flower, the animal capable of discerning scents, the human with the ability to write—all have a greater potential than identical plants, animals and human beings (of the same species) lacking the power to manifest these activities.

A second way in which potentiality can increase follows from a difference between dispositions that are *exhausted* and those that are *sustained* after their manifestations. The disposition of glass to shatter is exhausted after one proper shattering, while the power of fire to heat up things is usually sustained for a period of time. The potentiality of the object possessing the disposition is of course greater if dispositions are not exhausted in their manifestation. If a plant is capable of flowering only once while another plant of the same species can flower time and

time again, for instance, the latter plant has a greater potential for flowering. In short, potentiality of an organism is greater when it sustains its dispositions after their manifestations.

Finally, potentiality increases when the circumstances under which the manifestations can occur become more flexible and variable. The more specific the set of circumstances under which a disposition is manifested the smaller the potentiality, and *vice versa*. Imagine a plant flowering only at precise temperatures and with a highly specific level of humidity. This plant certainly has the potential to flower, as it will flower under particular circumstances. But its potentiality would be greater if the plant would flower under a wider variety of temperatures, soil conditions, humidity levels, and so on. Or think of a leopard's capacity to run with a speed of 50 miles per hour. If the leopard can reach this speed only under cool temperatures and on dry surfaces, then a second leopard capable of running 50 mph also over slippery terrain and under warmer conditions has a greater capacity for running at that speed. If an organism is capable of manifesting a disposition under a wider set of circumstances the multiplicity of its potential for activities increases proportionally.³¹

³¹ There is a possibility of reducing the second and third form of potential multiplication to the first. To have the potential to sustain a disposition after manifestation may be formulated disjunctively, e.g. D₁ to grow flowers once, D₂ to grow flowers twice, or perhaps D₃ to grow flowers multiple times. The disposition itself would not be sustained after a manifestation but more dispositions would be included in the total set from the start. Similarly for the range of circumstances under which manifestations are possible for a given disposition: rather than one disposition being manifested under a wider range of circumstances, one could identify a large amount of disjunctive dispositions; D₁ to run 50mph over dry surfaces, D₂ run 50mph over wet surfaces, D₃ run over 50mph on a hot day, etc. The

This is also the point to introduce the idea that potentials can be a condition for further potential activities. A plant's potential for flowering is necessary for it to have a potential to reproduce. Similarly, a bird's capacity to fly is required for further potential activities like the potential to migrate, to hunt, to build nests, and so on. The human capacity to see and hear similarly conditions a great number of further potential activities. The idea that capacities can be a pre-condition for further capacities, or that certain dispositions are necessary for the having of other dispositions, makes it possible to appreciate the fact that some capacities impact the overall potentiality more significantly than others; some capacities are more basic and thus more broadly capacitating than others. Potentiality increases not only by possessing more dispositions, but also by possessing the dispositions that are required for a broad range of further dispositions. And precisely the latter dispositions are the dispositions most important to an organism's health.³²

In sum, then, potentiality increases when an organism has more diverse dispositions; when the organism can sustain its dispositions also after their manifestations; when an organism can manifest its dispositions under a wide range of circumstances; and when it develops dispositions that condition a broad range of further dispositions.

disjunctive option would result in an explosion of dispositions and thus be far less economical in set up, but it would be possible to reduce the second and third form of increase of potentiality to the first. The point remains, however, that by having sustainable powers and by being able to manifest a disposition under more flexible and varying conditions, overall potentiality increases.

³² In §1.1 of Chapter Four I shall return to this crucially important idea.

2.3 Activity

The idea argued for so far is that the greater the range of dispositions, and the more variable the set of circumstances under which they can be manifested, the greater the overall potentiality of an organism and, *ipso facto*, the greater its health. The task now is to determine the relevant 'activities', the dispositions for which constitutes an organism's health. A number of questions will drive the discussion. First, how do we prevent the overextension of the predicate 'health' to the inanimate world? How can we prevent the account of health from implying that salt with the disposition to dissolve is 'healthy salt' and a battery being charged from improving its 'health'? A dispositional account of health has the advantage of being naturalistic, but the trouble now reappears on the other end, *viz.* that health appears to apply to the rest of the world as well. Second, clearly not all dispositions of organisms are relevant to an organism's health: the disposition of a tree to cast a shadow over a field is entirely irrelevant to its health, but it is a disposition of the tree, and thus has to be included in the set of dispositions that makes up its health. Equally, a human being's powers to leave footprints in the sand, block the wind, or to fall down when pushed off a rooftop, seem completely trivial to its health, and yet these powers are included in the total set of its potentials. How are we to think of dispositions for such trivial activities? And finally, I will question whether *not* doing something is also a kind of activity. Do negative dispositions belong to health in some sense, and if so, how are they included in the dispositional model provided above?

2.3a *Overextension of Health*

First the question regarding overextension of health: while reducing health to a quantity of dispositions, how do we preclude health from applying to everything that exists? A dispositional account may be naturalistic but risks overextension of the predicate 'health' to things that it should not apply to. One way to solve this issue is with a conjunctive definition of health: X can be healthy, or health can be predicated over X, if and only if, 1) X is a cluster of dispositions and powers, and 2) X is a living being. This solution would retain the continuity between manifestations of living beings and those of the rest of the material world, while precluding inanimate things from being healthy or unhealthy. This is a superficial answer, of course, but ultimately the same answer that we already endorsed in Chapter two (§2.6) when pursuing the question why only living beings have a good-for and bad-for. In that discussion I agreed with Korsgaard that only living beings have a sake for which things are good and bad, which, as we saw, amounts to saying that only living beings can be healthy and unhealthy. Ultimately this is just a primitive that I think we must accept. The idea that living beings can be healthy and unhealthy while inanimate beings cannot is something that cannot be argued for further, or broken down into more fundamental propositions, or proven right in some way. The reason why the range of dispositions makes up an organism's health and why the dispositions of inanimate things do not, is ultimately just because only living beings can be healthy and non-living beings cannot. And this claim cannot be further broken down or explained: it is a primitive.

2.3b *Trivial Dispositions: Active and Passive?*

The question about trivial dispositions does not permit of such a simple solution. What distinguishes a tree casting a shadow from a tree growing fruits or turning its leaves towards the sun? The former activity seems trivial to the tree's health while the latter activities are not. Identifying health with the total potentiality of living beings, then, may not be specific enough to pick out the potentiality that constitutes health. One fairly intuitive way of distinguishing dispositions relevant to health from those trivial to it, briefly touched upon before, would be to distinguish between passive and active manifestations. Growing fruits and directing leaves have a certain *active* character and therefore seem *prima facie* more relevant to a tree's health, while casting a shadow and falling down seem utterly passive, rendering the potential for these activities irrelevant to a tree's health. I will consider two ways to flesh out the intuition that health refers only to *active* dispositions, but will end up rejecting both. Although I shall maintain that there are dispositions trivial to an organism's health, I will argue that their triviality does not consist in a metaphysical type of passivity.

One way to substantiate 'active' activities would be to return to the difference between active and passive dispositions that we already encountered above. To repeat, what differentiates active from passive dispositions and powers is that active dispositions bring about changes in a second thing, while possessors of passive dispositions have a disposition to be changed by a second thing.³³ The distinction between active and passive here, then, revolves around *the locus of change* rather

³³ Armstrong, *States of Affairs*, 70.

than causal priority. It is an active power of a hammer to shatter glass and a passive disposition of glass to break when struck by a hammer; the active or passive component do not determine which has causal priority. With this distinction between active and passive dispositions one could try to argue that health is restricted to active powers of organisms. Health, on this view, would refer only to an organism's cluster of powers for changing things external to the organism and exclude the dispositions to be affected by something. This may sound promising, but on closer inspection proves to be a non-starter. First, the distinction between active powers and passive dispositions becomes blurry outside the stereotypical cases: is the growing of fruits a change brought *to* the tree by external things like sunlight and nutrition, or is it an active power *of* the tree? It seems arbitrary to call it one thing instead of another. Second, most trivial dispositions would still not be excluded: the casting of a shadow would count as an active power of the tree as it is the tree that effectuates a change external to itself, *viz.* casting the shadow over the meadow. And finally, most importantly, many clear-cut passive dispositions of organisms are of central importance to their health. The disposition to experience pain when tissue gets damaged by an external thing; the narrowing of pupils in darkness; vasoconstriction in cold environments; the release of adrenaline when confronted by threats; flowers opening during daytime—all are passive dispositions but certainly to be included in the cluster of dispositions constituting their health. A distinction between active and passive dispositions therefore does not help to isolate the relevant dispositions that make up an organism's health.

An alternative and more traditional way to try and bring out the active component of certain activities would be to look at the *order of causation*. If an event is *caused* by the organism it would be active, whereas if an event is caused by something outside of the organism it would be passive. The suggestion, then, would be that health refers to a potential for activities, whereby the organism itself must be the *cause* of those activities. This would be a definition of activity close to what Spinoza calls ‘actions’, which he defines as the happening of something solely understandable through the being that acts—as opposed to being acted upon, which he defines as an occurrence partially explainable in terms of the being that acts and partly by something else.³⁴ This suggestion also does not help us much, however, as the bar for ‘active’ activities would be raised far too high: not a single organism could display an activity on this criterion. The growth of fruits and turning of leaves are not explainable on the basis the nature of the tree alone, as the causal nexus also involves nutritional substances, sunshine, and so on. When is an organism the sole cause of an occurrence? The ascription of such radical agency is already highly contestable in the context of human life, but certainly a non-starter for the rest of life. If ‘active’ activities require full causal responsibility, all manifestations of living beings would be equally passive.

³⁴ This is freely paraphrased from Benedict de Spinoza, *Ethics*, ed. Edwin Curley (London: Penguin Books, 1996), III D3: “I say that we act when something happens, in us or outside us, of which we are the adequate cause, that is (by D1), when something in us or outside us follows from our nature, which can be clearly and distinctly understood through it alone. On the other hand, I say that we are acted on when something happens in us, or something follows from our nature, of which we are only a partial cause.”

So where does the difference lie between trivial and relevant activities? I suggest the best answer is that the triviality and seeming 'passivity' of certain dispositions lies in the fact that it is *impossible* for living beings not to have them, and that this impossibility not to have them renders them trivial and redundant in evaluations of health. It is impossible for a tree to fail casting a shadow over a field when sunlight falls on it, in the same way that it is impossible not to fall downwards when thrown off a rooftop. It is, however, an empirical possibility for a tree not to blossom or not to grow any fruits, in the same way that it is empirically possible for human beings not to be able to walk. The best way to understand trivial dispositions, I would suggest, is not in terms of them being *passive* in some metaphysically significant sense, but on the basis of it being empirically impossible not to possess such dispositions. *Anything* with a shape and mass will have the disposition to cast a shadow and fall downward. The multiplicity of potential activities cannot fluctuate in terms of these trivial dispositions, which is precisely what renders them trivial in evaluations of health. When health improves or diminishes it cannot do so in terms of trivial dispositions, as it is impossible to gain or lose them. There is therefore also no need to exclude trivial activities in the definition of health, as it would exclude only a class of dispositions that is trivial and redundant in evaluations of health to begin with: an organism cannot fluctuate in terms of trivial dispositions. Instead of being passive in a metaphysically significant sense, then, I suggest that trivial dispositions can best be understood as dispositions that an organism cannot gain or lose.

2.3c *Negative Dispositions*

This brings me to the question of negative powers and dispositions, i.e. the capacity *not* to do something. Generally, a disposition or power not to manifest an activity simply means not having the power or disposition. To say about a tree that it has the power not to grow any fruits simply means the tree lacks the disposition to grow fruits—a lack that does not have any positive existence. But the question of negative dispositions could also be taken to mean that an organism has a capacity not to do something *under particular circumstances*, such as a tree not growing any fruits when it is freezing. Also this form of a negative disposition does not have any positive existence; the only property that obtains is the property to grow fruits, manifested when temperatures are above a certain threshold. A third form of negative dispositions, the most interesting and relevant one, is a power to *refrain* from activities that otherwise would have been manifested. Such a power is probably limited to human beings and certain higher animals, for trees cannot be attributed the power to refrain from growing fruits under conditions it otherwise would grow them. But the question is whether a negative disposition of this form is still a negative disposition and not a descriptive variant of a positive disposition. Consider a fox with the power to hunt, which, for simplicity's sake, gets manifested under conditions of being hungry and seeing a rabbit failing to pay attention. If the fox has the ability *not* to hunt whilst being hungry and seeing a rabbit goofing around, this amounts to an *additional* power. If, for instance, the fox does not hunt because it spots an eagle hovering over its head, the fox has the power or disposition *to hide*: it has the

power or disposition 'to hide' if under the circumstance 'spotting predators' it manifests the activity 'moving to a position invisible to the predator'. Refraining to surge towards the rabbit would therefore be the positive manifestation of another disposition, not a negative disposition.

Thus far, then, we have not encountered any genuine negative dispositions or powers. But how about the situation in which the fox refrains from launching itself onto the rabbit strictly on the basis of its own will? Or, more realistically, a human being who decides not to eat even though all conditions are present under which it would otherwise engage in the consumption of food. Again this can be best accounted for in terms of an additional disposition or power. The quasi-autonomous fox and dieting human would have an additional power, which may look as follows: X has the power 'not to eat', if under circumstances 'being hungry' and 'having food nearby' and 'a will not to eat', it manifests 'abstinence from eating'. And this property is only possessed if, simultaneously, the same X has the power 'to eat', if under circumstances 'being hungry' and 'having foods nearby', it manifests 'eating'. Again it appears that non-actions are entirely understandable as positive actions conditioned by positive dispositions. With these final examples, however, we have begun thinking about forms of *autonomy* and ways in which increased autonomy constitutes a greater potentiality for activities and thus greater health. The nature of autonomy and its relation to health will be addressed more extensively in Chapter Five (§3). For now, it only matters that all dispositions and powers are *positive* dispositions and powers: nature does not contain negative dispositions.

2.4 *Factual Limitations*

Fluctuations in MPA of a living organism have trivial dispositions as their lower limit—they are impossible not to be possessed—and what I called ‘factual limitations’ as their upper limit: the upper boundary that marks off the range of activities an organism *could* have a potential for. These upper limitations are determined by reference classes and constitute the norm relative to which an organism is more or less healthy. One of the requirements for a viable theory of health, I said at the beginning of this chapter, was that the reference class has to be objective, as otherwise it would fall prey to Kingma’s objection. If reference classes are fixed on the basis of subjective values and prior intuitions about health, the norms relative to which an organism health is evaluated are subjective norms and the ensuing health judgements would remain subjective judgements. We therefore need objective reference classes, setting an objective norm relative to which an organism’s health can be assessed. This mode of evaluation was already found in Foot’s work, whose key passage I’ll quote again:

Evaluation of an individual living thing in its own right, with no reference to our interests or desires, is possible where there is intersection of two types of propositions: on the one hand, Aristotelian categorical (life-form descriptions relating to the species), and on the other, propositions about particular individuals that are the subject of evaluation.³⁵

³⁵ Foot, *Natural Goodness*, 33.

Whereas Foot provides one reference class, *viz.* a life-form belonging to a species, I suggest there are three different reference classes to be identified when evaluating an organism's health, which result in three different measures of health. The three reference classes imply a different set of factual limitations relative to which an organism is in a state of greater or lesser health, i.e. each reference class implies a different norm.³⁶ The frames of reference I propose are the species, an individual organism, and an individual organism at some point in its life. I shall discuss each separately, argue that they are objective frames of reference, and describe the kind of health judgements they yield.

2.4a Species Limitations and Absolute Health

The first reference class is the species to which an organism belongs. A species sets an upper limit to what is possible for any of its members. Being a cherry tree means that the MPA of an individual cherry tree is limited to what is possible for the species cherry tree; being an Icelandic horse determines which dispositions could be possessed by an individual Icelandic horse in virtue of being an Icelandic horse. Species-dependent factual limitations, by stipulation, cannot be transcended. It

³⁶ The use of the adjective 'factual' may seem unnecessary and inelegant, but will be utilised consistently to stipulate that there is a certain 'givenness' or 'fact of the matter' about these limitations—as opposed to what subjects may feel or think as being their limitations. Someone may think that running a marathon is beyond their limitations, while, factually, it may very well lie within their capacities. Likewise, a plant may not appear to have the capacity to grow flowers but still flower under some particular set of unknown circumstances, *de facto* including the capacity to flower within its factual limitations. Factual limits to MPA of organisms may never be completely or fully known but there is a fact of the matter, which renders them 'factual' in precisely this crucial sense.

is an *a priori* impossibility for a cherry tree or Icelandic horse to possess more dispositions than those included in the maximum set of to the species while being a cherry tree or an Icelandic horse. This does not mean, however, that species are themselves defined on the basis of a cluster of dispositions. The standard scientific definition of a species—a group of organisms capable of interbreeding and producing fertile offspring—is sufficient to demarcate a collection of living beings with an upper limit to what any of the members could possibly be capable of. If species stand in continuity with one another, as evolutionary biology teaches us, this would only imply that the factual limitation to an organism's maximum range of potential activities is to some extent vague and indeterminate. If species boundaries are vague then the maximum range of potential activities of the species will be equally fuzzy around the edges; this does not mean, however, that factual limitations do not obtain.

Determining this maximum range of powers and dispositions is an *a posteriori* enterprise and depends entirely on what, for instance, cherry trees and Icelandic horses empirically turn out to be capable of. There is no *a priori* metaphysics of species involved that sets in stone, or inscribes in a Platonic heaven, what 'Icelandic horse-ness' or 'cherry tree-ness' means in terms of maximum potentiality. The precise determination of this upper limit is nevertheless a complex affair: only one specimen has to display a new activity and this activity will have to be included in the maximum set of activities possible for the species. In order to fully know the maximum set of dispositions possible for the species, all members would have to be assessed under all possible

circumstances and with full imagination. Only with such an extensive procedure would it be possible to determine the complete set of potential activities and fix the species-bound factual limitations. As this is practically impossible, knowledge of absolute limitations will always remain an *approximation*. Factual limitations belonging to a species can therefore best be viewed as what Kant called a regulative idea: an idea that can be utilised for grounding and guiding judgements while itself not being completely knowable to an investigator. Judging whether a cherry tree or Icelandic horse is healthy requires having an approximate idea about which activities an Icelandic horse or cherry tree could possibly carry out, which subsequently regulates judgements about an organism's degree of health. Approximate knowledge of species-bound factual limitations would normally suffice for this regulatory function. It does not seem epistemologically unacceptable that species-bound factual limitations to potentiality are known only by approximation; it seems enough to know approximately what cherry trees and Icelandic horses, *qua* species, are capable of doing and judge the potential of an individual specimen vis-à-vis this rough background knowledge. An Icelandic horse unable to gallop, for instance, is impaired in its absolute health if galloping is an activity included within the factual limitations of the species. Species-bound factual limitations to the dispositions that an organism could have, then, are *a posteriori* determined and function as a norm in relation to which an organism's health can be measured.

Measuring the capacities of an individual organism against the factual limitations to its capacities determined by the species, yields a measure of health that I will call 'absolute health'. Absolute health is

perfect, i.e. impossible to improve on, if an organism's MPA overlaps precisely with the maximum set of potential activities possible for the species. That is, an organism is in a state of complete absolute health if it can execute all species-specific activities under the maximum range of circumstances, and for as long as it possibly could, given the species that it belongs to. For complex organisms a state of perfect health will be virtually impossible as there will always be activities that one specimen has a disposition that another does not; hence, complex organisms will always be able to be healthier than they in fact are. For smaller organisms, on the other hand, perfect absolute health may not be impossible. Unicellular organisms do not have too many dispositions on the level of the organism as a whole, so possessing all the dispositions factually possible for the species is more likely to be the rule than the exception. When we speak of the health of plants and trees, I think we usually refer to their absolute health, i.e. their MPA measured vis-à-vis the maximum range of potential activities it could have given the species it belongs to. If a cherry tree lacks the capacity to blossom while it is possible for cherry trees to blossom, the non-blossoming cherry tree is limited in its absolute health.

Because species are objective reference classes, existent and fixed independently of intuitions and subjective values about when an organism is healthy or not, and because the norms set by the reference class are also a factual matter—factual limitations to the potential activities belonging to the species obtain independently of what we may think or want an organism's factual limitations to be; the absolute health of an organism is an objective matter.

2.4b *Individual Limitations and Individual Health*

While species-bound factual limitations yield judgements about the absolute health of organisms, this is not the only type of health measurement there is and certainly not always the most informative one. The health of an individual organism can also be measured against what would be possible *for it*, given the *individual* organism that it is. From the beginning of each single life some rough upper limit of what an individual organism could be capable of is already marked off, and these individual limitations do not always coincide with the limitations of the species. Organisms with a congenital deformity, for instance, may be impaired in absolute health, but within the scope of their individual limitations still achieve a certain optimum state; their MPA could still correspond to the maximum scope set by their *individual* limitations.

Measuring the health of an organism against the limitations of the individual organism yields a measure of health that I will call 'individual health'. The reference class—or better, the frame of reference—of this second measure of health is the individual organism itself, and the norm is the maximum range of dispositions that the individual organism could develop given the individual organism that it is. With 'individual health' I obviously do not mean a notion of health dependent on whatever this or that person thinks health is, or an understanding of health relative to individual desires, values and goals. By stipulation, individual health is a measure of an organism's MPA contrasted with the factual limitations inherent to the individual organism. Just as species-bound limitations, the factual limitations belonging to an individual organism can only be known by

approximation, as it involves knowledge about the range of capacities an individual organism could develop in a variety of different environments, and as a result, again, only plays a regulative role in judgements of individual health. Determining individual factual limitations presents greater epistemic difficulties than species-limitations as the only point of reference is the individual organism. This nevertheless need not be epistemically catastrophic; it still seems possible to know by approximation what an individual organism could have been capable of given the individual that it is, and measure its actual MPA in relation to this incomplete and approximate background knowledge. And like species-bound limitations, factual limitations of the individual also cannot be exceeded and transcended. If in fortuitous or therapeutically heroic cases people or other organisms end up becoming far more capacious than anyone ever expected, this does not mean that their individual limitations were transcended; people just had the facts wrong about what the individual limitations were.

Individual health is a meaningful concept in all regions of life. If a bacterium lives in an environment unfavourable to its functioning, it may end up having an MPA smaller than the MPA it could have had given the individual bacterium that it is. The temperature, acidity levels or nutrients of its immediate environment can positively or negatively affect its metabolic processes, for instance, which in turn may widen or narrow down its MPA. The same is true for plants, which may be born with a capacity to grow to a certain height, but due to draught or an overexposure to pesticides lose that capacity irreversibly. Both absolute health and individual health would be impaired in this scenario, as the

plant's MPA has been reduced relative to the species-maximum as well as the individual-maximum MPA. In the context of human life, individual health is also a meaningful measurement of health, probably more so than absolute health. Rather than comparing what a person is capable of doing to the maximum range of capacities possible for *Homo sapiens* at large, it is more meaningful to consider someone's health on the basis of a comparison between the MPA of the person and the MPA that person could have had given his or her individual limitations. Someone could have the capacity for handwriting but lose this capacity after a car accident, for instance, reducing individual health. But, to be clear, if handwriting was never possible for the individual to begin with, individual health would not have been affected by such an event. Individual health is therefore necessarily perfect and impossible to improve on at the beginning of an individual life—which could be the moment of conception, some stage during foetal existence or indeed at birth, depending on where the line is drawn.

One of the most interesting aspects of this notion of individual health is that it can be improved, strived towards, and perhaps even perfected also if an individual organism lacks certain potentials from birth and thus in an absolute sense will always be restricted in its health. Someone born with irremediable blindness, for instance, may reach great levels of individual health by developing all the capacities falling within her individual limitations, despite necessarily falling short in measures of absolute health. Individual health, then, provides an objective measures for how much one has been able to make out of oneself within the scope of one's own factual limitations.

2.4c *Contingent Limitations and Attainable Health*

The third frame of reference is an organism at a specific point in its life. The basic idea here is that in addition to species-bound and individual limitations there are factual limitations that an organism acquires through life. A plant having been affected by draught or pesticides; an animal having lost the power to run, to crack acorns, or to procreate; a human being incapable of walking after an amputation, unable to speak after a cerebral accident, or having lost the capacity for intense exercise after a cardiac arrest—all have their absolute and individual health reduced, but simultaneously acquire new upper limits to their MPA, which determine the possible fluctuations of their health after the structural loss of capacities.

Contingently acquired factual limitation function as a third norm in relation to which an organism's health can be evaluated. The health judgements yielded by this measurement are what I will call 'attained health'. Attained health is a measure of an organism's MPA relative to the maximum MPA they could have had given their species-limitations, individual limitations *and* contingently acquired limitations. Again these limitations can only be determined via *a posteriori* means, known only by approximation, and function as a regulatory idea in evaluations of health. But most importantly, there is a fact of the matter about the limitations. The limitations to how capacious an organism could get are not dependent on our preferences or attitudes: they are factual limitations. Comparisons between an organism's MPA and the maximum MPA it could have had given its acquired limitations, therefore also yields an objective evaluation of health.

Although attained health is a meaningful concept for all forms of life, I consider it to be most relevant in the domain of higher animals and human life especially. After a stroke, an amputation, a traumatic experience, a psychosis, a heart attack, or any other event with sufficient impact to have lasting effects, new factual limitations obtain for the individual. Within the scope of these acquired limitations, expansion or diminution of health is possible. The notion of attained health may therefore be of great *therapeutic* significance. Rather than measuring one's state of being vis-à-vis the way a human being could be, or vis-à-vis the way one could be given the potential one had at the beginning of life, the therapeutically and possibly ethically most relevant conception of health is one that expresses how capacious one is compared to how capacious one could be given the individual one has *become*. While absolute health is a kind of ideal state, one that can perhaps be aspired to but never fully realised, attainable health is a more workable notion of health that could be strived for and indeed realised.

The different frames of reference and the measures of health they produce, then, may be schematically presented as follows:

<i>Frame of Reference</i>	Species	Specimen at birth	Specimen at point in life
<i>Factual Limitations</i>	Absolute Limitations	Individual Limitations	Acquired Limitations
<i>Measure of Health</i>	Absolute Health	Individual Health	Attained Health

Table 2

3.5 *Synopsis*

The central idea put forward in this chapter is that an organism's health corresponds to its range of capacities. An organism's functional parts function well if they support a wide range of capacities for the organism as a whole and function poorly if they reduce this range. On a closer analysis of this account, health was claimed to correspond to a multiplicity of potential activities relative to a certain norm. The multiplicity referred to in health judgements is a quantitative multiplicity and a function of present capacities and those expected to be possessed in the future. The potentiality of organisms corresponds to the totality of their dispositions and powers, and the activities referred in the proposed definition of health are nothing other than the manifestations of these dispositions and powers. The greater an organism's health, the more dispositions and powers an organism has, and the greater its overall potentiality.

The margins within which the health of living organisms can fluctuate have trivial disposition as their lower limit, as it is impossible not to have them, and factual limitations as their upper limit, as it is impossible to exceed them. The norms in relation to which the multiplicity of potential activity is measured in judgements about health are the upper limitations to an organism's potential activity. These upper limits come in three forms and are determined by facts about the species, facts about the individual organism and facts about what the individual has become. Depending on the norms in relation to which an organism's potential for activities is evaluated we measure the organism's absolute health, individual health, or attained health.

Chapter 4

Objections and Further Elaborations

1. General Objections

This chapter contains a number of objections to the theory of health developed in the previous chapter and a defence of the central claims in light of these objections. The ambition of this chapter is not just to neutralise the objections, but also to develop and unpack the theory of health further in the domain from which the objections derive their force. There are undoubtedly more objections and counter-examples than there is opportunity to address here, but the hope is that answering this particular selection of objections will add to the overall plausibility of the account of health and open up avenues for answering further objections and concerns.

1.1 *Which Capacities? Quality versus Quantity*

The account of health specified in the previous chapter ultimately operates on the basis of one basic principle: the more capacities an organism has, i.e. the greater the multiplicity of its potential activity relative to an upper limit, the healthier it is.¹ Supposing the concept

¹ Henceforth I will use the terms ‘capacities’ and ‘potentials’ and ‘dispositions’ interchangeably.

health indeed latches on the range of capacities, an immediate objection is that the *value* or *quality* of capacities determines whether an organism is healthy—more so, in any case, than the *quantity* of capacities possessed by an organism. Plenty of non-trivial capacities are *prima facie* more important to health than others. The capacity to fly is more valuable to a bird and more important for its health than the capacity to scratch its own neck, for instance, just as a dolphin's capacity to navigate via sonar is more valuable and important to its health than its capacity to perform summersaults through a hoop. A plant's capacity to absorb water and nutrients is similarly more important to its health than its capacity to emanate scents. And in the human case, capacities for perception, communication and mobility are unquestionably more central to health than a capacity to wiggle one's little toe independently of other toes. My account stating that more capacities equals greater health seems to disregard these qualitative or valuative differences and may therefore be accused of falsely treating all capacities as equally valuable and equally relevant in evaluations of health.

A more schematic way of formulating the objection would be to point out that two organisms of the same species with precisely the same quantity of dispositions are on my account by definition equal in absolute health. Yet, if one organism has *prima facie* valuable dispositions included in its set of dispositions and the other has only *prima facie* irrelevant dispositions, it is counter-intuitive to think they are indeed equal in health. If one pigeon has a capacity to scratch its own neck but lacks the capacity to fly, while another can fly for hundreds of miles but not scratch its own neck, *ceteris paribus*, the latter pigeon is no

doubt healthier than the former. The *value* or *quality* of what the organism is capable doing therefore appears to be more important than the *quantity* of capacities it possesses, as I have claimed.

If this objection holds, the value of capacities is to be determined independently from the quantity of dispositions, and precisely the value of dispositions would turn out decisive in evaluations of health. Valuing an organism's capacities independently of the quantity of their capacities, however, would require some principle or source on the basis of which these valuations are to be made. If the value of capacities is ultimately a matter of subjective preference or social convention, the proclaimed objectivity of health would also be undermined—if not lost beyond repair. If the objection holds the account of health I provided would be at best incomplete but at worst plainly mistaken.

In response to this objection I shall return to the point touched on in Chapter Three (§2.2c) and further develop the idea that the value of a capacity can be derived from the quantitative increase of potentiality that it conditions. The objective value of a capacity, that is, can be determined by the quantity of further capacities that it conditions. The central idea is that capacities *prima facie* important to health are generally important to health precisely because they condition a greater range of *additional* capacities; or more specifically, valuable capacities are valuable precisely because they increase the multiplicity of potential activity of the organism more substantially. The capacity for a bird to fly is valuable and important to its health because it conditions the potential to locate and hunt down prey, migrate to warmer climates, escape from natural enemies, assemble nests, and so on. The capacity to

scratch its own neck is typically unimportant and insignificant for its health precisely because it hardly conditions any further capacities. Similarly, a plant's capacity to absorb water and nutrients from its environment is more important to its health than its capacity to emanate scents because the capacity to absorb water conditions virtually everything else a plant is capable of, including the emanation of scents. If a plant were to lose its water-absorbing capacity its multiplicity of potential activity would drop dramatically, much more so than if it would somehow fail to release scents. When the plant no longer absorbs water it will soon cease to live and so its overall potentiality has diminished immensely. Likewise, the human capacities to walk, see, hear, communicate, and so on, are more important to our health than wiggling our little toe, because possessing the former capacities are a pre-condition for a wide range of further capacities while the latter is not. The reduction in potential activity following from an inability to walk, or from blindness, or deafness, or aphasia is indeed monumental, whereas the reduction in potentiality following the inability to wiggle one's little toe is negligible. What this amounts to, therefore, is the fundamental and critically important claim that the *value* of capacities and dispositions can be determined on the basis of the same principle that I proposed in the definition of health: the more a capacity or disposition increases the overall potentiality of an organism, the more significant it is for its health, and thus so the more *objectively* valuable it is for the organism as a whole.

The idea that the objective value of a capacity for an organism can be derived from the quantity of further capacities it conditions remains intrinsic to the theory of value and the account of health formulated in the previous two chapters. That is, no additional valuative moment, standard of evaluation, or source of normativity is required to assess the objective value of the capacities possessed by an organism. Individual values and cultural preferences therefore do not enter into the valuation of capacities. Individuals or cultures may of course *subjectively* value one capacity over another; people may subjectively value throwing darts over running marathons. But the capacities that are *objectively* valuable are those that are a pre-condition for the having of other capacities and thus most significantly impact the multiplicity of potential activity of the organism as a whole.

The upshot of answering the quality versus quantity question in this way is the formation of a hierarchy of potentials for each species, whereby the most basic and objectively valuable potentials are those that are the least *conditioned* and the most *conditioning*. For birds the ability to fly will be more basic and objectively valuable than the ability to scratch their own neck, as the capacity to fly is a pre-condition for a larger number of further capacities than neck-scratching. For human beings the ability to walk, see, hear, and communicate are more basic and objectively valuable capacities than potentials to wiggle toes or to run marathons, *irrespective* of what someone might find subjectively valuable and preferable. For every living being a hierarchy of capacities can be identified and formed, with the most basic and broadly conditioning capacities at the basis and the least conditioning capacities on top of the

hierarchy. And the capacities found at the top of such orderings, it should be clear, are the least significant in evaluations of health and objectively the least valuable.

The kind of comparison sketched in the formulation of the objection must therefore be relegated to the realm of impossibilities: it is impossible for two organisms to have a set of capacities equal in size with one having more valuable capacities than the other. Once the objective value of a capacity is accepted to be dependent on the range of capacities it conditions, the individual organism possessing the valuable capacities *must* harbour a greater multiplicity of potential activity, for otherwise it would not have had more valuable capacities.

The capacities that are most important to health, therefore, are those that condition the widest range of further capacities and open up a larger range of potential activity. The quality or objective value that a capacity has for an organism can be derived from the range of potential activities that it enables. In short, the objective value of a capacity can be derived from the quantitative variation it conditions.

1.2 Specialisations

A second objection is that the dispositional account of health implies that it would be unhealthy for organisms to specialise towards the execution of one activity, or only a limited few activities. Especially organisms living in groups tend to specialise towards certain activities and inevitably adapt towards performing it. A straightforward answer to this concern would be to point out that there is nothing unhealthy about processes of specialisation as long as capacities for other activities

are not lost: becoming specialised in, or well-adapted towards, the execution of one activity does not necessarily imply a loss of potential to perform other activities.

However, a stronger version of the objection would immediately present itself: various organisms, human beings in particular, do in fact specialise towards certain activities *at the expense* of abilities to perform alternative activities. Some capacities are mutually exclusive, meaning that the development of one capacity automatically negates the possible development of other capacities. A classic example would be the ability to sprint and the way that a specialisation in sprinting requires a body-type incompatible with the ability to run long distances. Since specialisations of this kind are not health-reductions in any obvious way, the account of health may seem inadequate.

There are three ways in which the account of health can be defended against this stronger version of the objection. First, it should be pointed out that becoming specialised in one kind of activity constitutes, in and of itself, a *growth* of capaciousness and therefore amounts to an improvement of health. A bird developing specialised skills to dive deeper into the ocean to catch fish swimming further below the water surface has simply expanded its capacities. Similarly, someone well-trained and specialised in running long distances has thereby first and foremost increased her action-potential. Although this point is question-begging in the context of specialisations that go at the expense of other capacities, this recognition still constitutes the first step towards answering it. For the same can be said about adaptations and specialisations for the mutually excluded activities—e.g. sprinting really

fast. This specialisation too would first and foremost be an increase in capacities, albeit an increase in a different and opposite direction. Both specialisations mark an increase of action-potential and thus constitute an improvement of health compared to a state in which these specialisations didn't occur. The fact that at some level of training one cannot simultaneously improve the potential for both activities does not render it a health-reduction. It only shows that there are factual limitations to the development of certain capacities; the maximum set of potential activities cannot contain both capacities in a specialised or highly developed mode. The objection can be neutralised, therefore, by pointing out that factual limitations within which growth or diminution of potentiality is possible are to be taken into consideration.

If, however, one of the mutually excluded capacities would be very broadly conditioning—imagine, for instance, that it were true that the ability to run long distances would open a much larger set of further activities compared to the ability to sprint—then the capacity theory of health indicates that the more broadly conditioning capacity would be a healthier and more valuable capacity to develop and sustain. However, this would still not imply that the development of the excluded capacity—sprinting fast in this case—would be health-reducing. The development of both capacities amount to improvements of health, even if one is more broadly conditioning than the other. One potential would just constitute a more substantial health-improvement than the other.

A second way to answer the objections is by taking features of group behaviour into account. For herd animals capacity-reducing specialisations are necessary for survival. Imagine an animal that hunts

in a pack, say the grey wolf, whereby each member belonging to a pack has a highly specialised role: one wolf locates prey, another isolates a vulnerable young, the next wolf side-tracks it, a few others bar off escape routes, and the final one goes for the kill. Let's further suppose that each has a specialised role that requires specialised capacities towards executing it. We already established that specialisation will only begin to challenge the account of health insofar specialisations go at the expense of possessing and sustaining other capacities. So we should also presume that the ability to perform one single role in the hunt excludes the ability to perform the other roles: the division of labour in hunting requires mutually exclusive capacities. A specialisation of this kind, one might argue, annuls a whole series of potential activities otherwise available to the wolf, but still, specialisations of this kind do not seem necessarily unhealthy for it.

Once again, however, the factual limitations of the species must be taken into account. If wolfs prove to hopelessly inept at hunting individually and hardly ever succeed in catching a prey, then in order to survive they simply *have* to operate in groups and take on specialised roles. The action-potential of the non-specialised lone wolf would be extremely limited, as it would be in an unsustainable state. Whether specialisations are capacity-reducing therefore depends entirely on what organisms prove capable of without the specialisation. If the grey wolf could hunt perfectly well on its own then a reduction of action-potential following from joining a pack and undergoing in a capacity-compromising specialisation would indeed be an unhealthy move. In nature this scenario is extremely unlikely, however, and almost sounds

like an absurdity. Human life is probably the only exception where unnecessary action-potential reducing specialisations occur. Only human beings manage to specialise in the execution of small sub-tasks while simultaneously reducing and eradicating other capacities, even though we would be perfectly capable of carrying out the complete activity ourselves. A factory worker specialised in putting two miniscule components together with lightning speed will typically be deprived of the capacity for other stages of the production process, let alone develop or sustain the capacity to utilise the end-product. Not only would the worker be alienated from the final product, the results of specialisation would also result in a genuine loss of health. To be clear, the reason why it would be unhealthy for the factory worker to specialise in this capacity-negating manner and not for the hypothetical grey wolf, is because the factory worker has factual limitations that do not demand capacity-negating specialisations for survival.

The third and final reply to concerns about specialisation is that under certain circumstances specialisations do indeed amount to unhealthy developments. If an organism specialises into one kind of activity at the expense of capacities it previously had or otherwise could have had, and if the lost or underdeveloped capacities would be more broadly conditioning than those that are being specialised in, the health of the organism has indeed been compromised. If I were to specialise in playing video games and become so extortionately obese or frail that I can no longer carry myself around—and presuming that the capacity to walk is more broadly conditioning and capacitating than the dispositions acquired by playing video games—my health would

indeed have significantly deteriorated. But in such cases we can safely maintain the capacity account of health is confirmed rather than challenged in any serious way. The objection that specialisation for certain activities may be capacity-diminishing without necessarily being health-reducing, can thus be fully incorporated and explained in terms of the capacity account of health.

1.3 *Pain and Suffering*

Another objection stems from the widely shared thought that accounts of health and illness must contain, at the very least, *some* reference to the presence or absence of pain and suffering. An account of health and illness turning on the presence of pain and suffering was dismissed early on in the previous chapter on the basis of its failure to generalise to all forms of life and, hence, its inability to constitute a universal account of health. One might object this dismissal was made too hastily and insist that illness is in fact fundamentally associated with an experience of pain and suffering, and health with an absence of these experiences—perhaps even with pleasure and happiness. If organisms without a nervous system are incapable of experiencing pain and suffering one could just accept that health and illness cannot meaningfully be predicated over those regions of life. Health and illness would be restricted to forms of life that evolved a nervous system. The idea that illness requires an experience of pain and suffering and health an absence of pain and suffering would be consistent when construed along these lines, and therefore demands a more elaborate reply.

To illustrate how common and prevalent the view is, we could look at the opening pages of the *Diagnostic and Statistical Manual of Mental Disorders*. In the fourth edition of this of essential work in psychiatric practice we read that:

In DSM IV-TR, each of the mental disorders is conceptualized as a clinically significant behavioural or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom.²

And a little further:

The definition of *mental disorder* in the introduction to DSM-IV requires that there be clinically significant *impairment or distress* [...] The criteria set for most disorders include a clinical significance criterion (usually worded [...] causes clinically significant distress or impairment in social, occupational, or other important areas of functioning'). This criterion helps establish the *threshold* for the diagnosis of a disorder in those situations in which the symptomatic presentation by itself (particularly in its milder forms) is not inherently pathological and may be encountered in

² American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders: DSM-IV-TR*, 4th edition, text revision (Washington, DC: American Psychiatric Association, 2000), xxxi.

individuals for whom a diagnosis of ‘mental disorder’ would be inappropriate.³

In the more recently published fifth edition of the manual we find the same idea, although distress is now described as being ‘associated’ with disorders rather being a ‘threshold’ for it:

Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities.⁴

The proposed account of health implies that disablement and diminution of potential activity is a necessary (but not sufficient) condition for illnesses and disease, without any mention of distress, pain, or suffering. The formulations quoted above state that distress *or* disability are required for a diagnosis of mental disorder, stating that it is a necessary condition for disorders that one or the other must obtain, hence equally being a threshold for mental disorders.

Canguilhem, as we already saw, also places a heavy emphasis on the suffering in the case of pathology and an absence of suffering in the case of health. Recall Canguilhem’s adoption of Leriche’s phrase that “health is life lived in the silence of the organs,” and conversely, that “disease is what irritates men in the normal course of their lives and work, and above all, what makes them *suffer*.”⁵ Although Canguilhem’s

³ DSM IV-TR, 8. The emphasis on “threshold” is mine.

⁴ American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders, 5th edition* (Washington, DC: American Psychiatric Association, 2013), 20.

⁵ Canguilhem, *Normal and Pathological*, 91. Emphasis added.

views on health and pathology are more complex, his view ultimately also turns on the experience of suffering in the case of disease and an organic silence, i.e. absence of pain and suffering, in the case of health.

The idea that health and illness must at least in part be defined in terms of pain and suffering probably has its roots in the ancient old idea that pain is the ultimate founding principle of badness and pleasure (or absence of pain) the ultimate source of goodness. If that is true, then health and illness, as normative concepts, must contain some reference to pain and pleasure, as precisely these affects render illness something bad and health something good. The identification of goodness with pleasure and badness with pain is endorsed most explicitly in hedonistic versions of utilitarianism. By means of illustration we may quote the famous opening lines Bentham's of *An Introduction to the Principles of Morals and Legislation*:

Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure*. It is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne [...] Systems which attempt to question it, deal in sounds instead of sense, in caprice instead of reason, in darkness instead of light.⁶

⁶ Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation* (Kitchener: Batoche Books, 2000), 14

But Bentham was not the first to base an account of natural goodness on the experience of pleasure and absence of pain. The idea pervaded the Hellenistic world as well. Epicurus, for instance, already wrote that:

We say that pleasure is the starting-point and goal of living blessedly. For we recognized this as our first innate good, and this is our starting point for every choice and avoidance and we come to this by judging every good by the criterion of feeling.⁷

The idea that health and illness *qua* normative concepts must make reference to an experience of pain and pleasure therefore has a history dating back at least to Epicurus' garden in Ancient Athens.

In reply to the objection that pleasure and pain were dismissed too quickly as necessary criteria for health and illness, the aim is not to conclusively demonstrate utilitarianism to be false, Epicurus and other Hellenists to be misguided, Canguilhem to be deluded or the DSM to be fundamentally flawed. These passages were invoked to support and illustrate the objection that pleasure and pain cannot be ignored or dismissed in accounts of health and illness, as well as more generally in

⁷ Epicurus, *The Epicurus Reader: Selected Writings and Testimonia*, ed. and trans. Brad Inwood and Lloyd P. Gerson (Indianapolis: Hackett Publishing Company, 1994), text 4: 128-9. The passage continues with an important qualification: "And it is just because this is the first innate good that we do not choose every pleasure; but sometimes we pass up many pleasures when we get a larger amount of what is uncongenial from them. And we believe many pains to be better than pleasures when a greater pleasure follows for a long while if we endure the pains. So every pleasure is a good thing, since it has nature congenial to us, but not every one is to be chosen." (Ibid.)

accounts of what is naturally good and bad for living beings. Nevertheless, an attempt will be made to defend the capacity account of health in light these sources and to argue against the importance assigned to pleasure and pain in medical as well as ethical theories.

It should first be pointed out that an experience of pain and suffering tends to coincide with a loss of ability and diminution of potential activity. Pain is typically experienced when tissue gets damaged or when it is threatened to get damaged, usually resulting in a temporary or lasting reduction of potentiality. A temporary or permanent loss of ability typically goes hand in hand with an experience of suffering.⁸ An increase in ability, on the other hand, normally coincides with positive affects and feelings of pleasure. From the perspective of the capacity theory of health we could therefore say that a loss of health is *generally* accompanied by an experience of pain and suffering and health improvements *generally* by feelings of pleasure and happiness, so that the difference between the proposed capacity account and the challenge of the imagined adversaries is not too great. This does not imply, however, that health and illness can be *defined* in terms of a presence or absence of pain and suffering. That is, this does not imply that presence or absence of pain and suffering are necessary conditions for either illness or health. Besides the failure of pain and pleasure to generalise to all forms of life, there are four further reasons why pain and pleasure can't serve as foundational for health and illness.

⁸ The phenomenon of human suffering is no doubt more complex and intricate than just being an emotional response to some objective capacity-reduction. The point here is merely that an experience of suffering and loosing abilities often occur simultaneously.

First, plenty of clear-cut health problems do not cause pain or suffering. For instance, chronic obstructive pulmonary disease and cancers can go unnoticed for long periods of time and may never cause an experience of pain and suffering. A fatal heart attack could also take place without much pain and suffering while certainly not being a token of good health. In cases of a cerebrovascular accident or advanced stages of dementia it is also not evident that people are in pain or a state of suffering, whereas their health has beyond doubt been severely impaired. Even though pain and suffering often accompany health impairments, the fact that it is possible to dramatically undermine and even annihilate health without experiencing any pain and suffering whatsoever, already provide important indications that pain and suffering cannot be the defining features of health and illness. In fact, health problems could even be accompanied by feelings of pleasure. Someone could be addicted to psychostimulant drugs and subsist in a state of constant euphoria and elation. Especially over extended periods of time regular intake of drugs can be detrimental to health without, however, diminishing the sensation of pleasure. The capacity account of health as defined in Chapter Three does not rely on subjective experience of pain and suffering and can effortlessly explain why undetected cancer, COPD, various neurological conditions and vicious drug addictions are detrimental to health, even if the feelings of pain and suffering are entirely absent.

Second, if health and illness are defined on the basis of presence and absence of suffering the evaluation of health and illness will end up

being relative to individual desires and ambitions.⁹ The desires and ambitions of individuals can render one particular state of affairs pleasurable, distressing, or affectively neutral. Instead of one's actual state of being, desires and ambitions can turn out to be decisive in whether one is healthy or not. Consider for the sake of argument someone who has come to terms with some serious medical condition and who no longer subjectively suffers from it; this person could not be claimed to be limited in health anymore if health is indeed defined in terms of absence pain and suffering. And conversely, someone with great ability and physical prowess but desires and ambitions that far exceed any possible satisfaction and realisation may experience great distress and suffering, rendering him comparatively unhealthy on hedonistic definitions of health.¹⁰ Now, the impaired individual embracing fate is certainly more content than the unfulfilled high-flyer; perhaps she is even in a better state of what I called 'attained health'. But once health is itself identified with an experience of suffering we seem to lose the objective position from which an incapacitated individual is at least in the absolute sense of health less healthy than a highly capable individual, regardless of who subjectively suffers the most.

⁹ This second rejoinder only applies if health and illness are defined on the basis of presence and absence of *suffering*, not when defined on the basis of presence and absence of *pain*. Pain-sensations are generally not influenced, or at least a lot less obviously so, by one's desires and ambitions.

¹⁰ The management of desires and an acceptance of factual limitations to one's potential are not unimportant to health, also on my account, as will become clearer in the next chapter. The point here is only that health does not depend on levels of subjective suffering.

Third, the experience of pain and suffering for human and non-human organisms also depends on circumstantial factors. A bird locked up inside a small cage may suffer greatly, just as a human being living in deprived or imprisoned circumstances may experience great levels of distress. If absence and presence of pain and suffering are posited only as necessary conditions for health and illness and not as sufficient conditions, this recognition poses no real problem for the proponent of a hedonistic account of health. Nevertheless, a circumstantial change could alter sensations of pain in pleasure in such a way that someone would become healthy or ill directly as a result of circumstantial changes. And this concern does affect the idea that pain and suffering are necessary for illness. Two identical organisms, both impaired by some disease, but living under different circumstances, one more pleasurable than the other, would end up with differing levels of health. If we imagine two identical people, both suffering from cancer and both experiencing an equal degree of pain, and only one is administered pain relief, it seems plainly wrong to think that the anaesthetised person is healthier than the person still experiencing the pain.¹¹ A major problem for an account of health based on presence or absence of pain and suffering, therefore, is that one's health can be influenced by changes in circumstantial factors.

Fourth, pain and suffering are in many ways part of and necessary for being healthy. Pain serves important functions in life: it provides warning signals against potential tissue damage; it imposes rest upon the organism during periods of recovery; etc. When pain functions fail

¹¹ I am thankful to Matthew Broome for suggesting this example to me.

and people cannot experience pain, a condition known as *congenital analgesia*, people tend to struggle greatly with the basic demands of daily life and the management of illnesses. The absence of all pain therefore does not constitute an ideal case of health, if anything it constitutes the opposite.

These four reasons provide further motivation to resist a theory of health and illness based on the presence or absence of pain and suffering. Pain and suffering, I maintain, are only *indirectly* related to health. This fact was already recognised by Nietzsche, with whom we can agree when he writes:

Pleasure and displeasure are mere consequences, mere epiphenomena – what man wants, what every smallest part of a living organism wants, is an increase of power.¹²

In an unpublished note Nietzsche writes similarly:

The ‘health of the soul’ is a much fuller conception than happiness, where all moralist babble about. The wholly willing, creating, feeling soul and her health must be the purpose—not just accompanying phenomena such as ‘happiness’, etc.”¹³

¹² Nietzsche, *Will to Power*, §702. Nietzsche’s use of ‘power’ is notably different from the sense in which I spoke of powers and dispositions. As I briefly indicated in §2.4 of Chapter Two, Nietzsche’s concept of ‘power’ [*Macht*] refers primarily to feelings and practice of ‘domination’ over others as well as oneself, while on my account ‘power’ means nothing more than having a disposition for some activity, without involving any sense of domination, control, or exploitation.

¹³ Nietzsche, *KSA*, §11.27 [13]. My translation.

Now, so far I have only said that a theory of health positing presence and absence of pain and suffering as necessary conditions for health and illness are problematic and implausible, suggesting that the proposed capacity account of health indeed makes for a better theory of health. From the perspective of the capacity theory of health, however, there is more to say about pain and suffering, and especially about the tendency to identify goodness with pleasure and freedom from suffering, and badness with pain and suffering. This tendency, this very mode of thinking and valuing can be criticised on the basis of the capacity account of health. That is, it would not only be incorrect and misguided to identify health with absence of pain and suffering, but from the perspective of the account of health it would be even *unhealthy* and thus objectively *bad* for us to do so. Pursuing this line of argumentation moves us even more firmly onto Nietzschean grounds and the kind of criticisms he levelled against utilitarianism and hedonists like Epicurus.¹⁴

What, then, is unhealthy about the identification of health and natural goodness with pleasure, and illness or badness with suffering? In short, an idealisation of pleasure and avoidance of all pain and suffering easily descends into a life of comfort, complacency, if not laziness; the kind of life that Nietzsche calls “decadent.”¹⁵ Hedonistic ideals can be criticised for reasons of health precisely because they tend to reduce one’s action-potential over time: it eventually makes one

¹⁴ See for a more complete overview of Nietzsche’s critique of Utilitarianism, see: Jonny Anomaly, “Nietzsche’s Critique of Utilitarianism,” *The Journal of Nietzsche Studies* 29 (2005): 1-15.

¹⁵ See for instance Nietzsche, *Will to Power*, §44; Nietzsche, *The Anti-Christ*, §17.

weaker, both physically as well as mentally—especially compared to a life in which suffering and pain are utilised to overcome obstacles, to work through existing limitations, to create new avenues for action, and to expand one’s overall action-potential. Nietzsche writes with precisely the same concerns in mind:

If you refuse to let your own suffering lie upon you even for an hour and if you constantly try to prevent and forestall all possible distress way ahead of time; if you experience suffering and displeasure as evil, hateful, worthy of annihilation, and as a defect of existence, then it is clear that besides your religion of pity you also harbour another religion in your heart that is perhaps the mother of the religion of pity: the *religion of comfortableness*.¹⁶

An account of health and natural goodness centring on the avoidance and elimination of pain and suffering might therefore be itself an expression of a kind of vital exhaustion, an inability and lack of desire to become healthier and more capacitated, and to pursue what is good for oneself as a living being. This diagnosis would be consistent with the proposed account of health and be again a distinctly Nietzschean thought. The celebration of pleasure and condemnation of pain and suffering is not only associated with comfortableness by Nietzsche, but also with a kind of exhaustion and inability to act in the world. In one of Nietzsche’s notebooks we read:

¹⁶ Nietzsche, *The Gay Science*, §338.

The exhausted want rest, relaxation, peace, calm—the happiness of the nihilistic religions and philosophies; the rich and living want victory, opponents overcome, the overflow of the feeling of power across wider domains than hitherto.¹⁷

And similarly:

what they [the exhausted] would like to strive for with all their powers is the universal green-pasture happiness of the herd, with security, lack of danger, comfort, and an easier life for everyone; and suffering itself they take for something that must be *abolished*.¹⁸

The equation of non-moral goodness with health-promoting objects and behaviours, in combination with the positive account of health, puts us in a position to evaluate subjective values, ideals, and even rival accounts of health in terms of their health-promoting and health-inhibiting properties, in similar vein to how Nietzsche criticised the prevailing morality of his time, religious beliefs, and systems of value in light of how health-promoting and life-affirming he considered them to be. An idealisation of pain-avoidance and damnation of all suffering can be criticised as unhealthy ways of thinking, valuing, and living insofar as it incapacitates people and ends up restricting the multiplicity of their potential activities.

¹⁷ Nietzsche, *Will to Power*, §703. Again it has to be emphasised that Nietzsche's notion of power is different from the one we have used, which makes it somewhat risky to quote him in this context. See footnote 12 above.

¹⁸ Nietzsche, *Beyond Good and Evil*, §44.

To be clear, the suggestion is not to glorify pain and suffering or to advocate that people or other organisms should actively seek pain and suffering as much or intensely as possible, out of some grandeur but ultimate juvenile ideal of strength and a feeling of power. This is neither Nietzsche's view nor the one defended here. As Spinoza argued extensively in his *Ethics*, pleasurable objects and events, i.e. those inducing joy, are typically those that increase our power for action, while pain installs sadness—the affect accompanying a reduction of power for action.¹⁹ The claim I do endorse, in line with Nietzsche's later philosophy, is that an *idealisation* of absence of pain, the complete avoidance of all possible suffering, and the creation of the optimal comfortableness, is likely to be incapacitating and therefore unhealthy from the perspective of the capacity account of health. Pain and suffering, in the right doses and at the right times, are *necessary* for expansions of one's action potential and one's health. Growth pains, myalgia after physical training, and stitches during exercise would be good metaphors to illustrate the idea that pain is often required for health-improvements. Nietzsche himself speaks even of a 'disciplining' of suffering: an incitement to allow limited experiences of pain and

¹⁹ In Spinoza's words, "Joy is an affect by which the body's power of acting is increased or aided. Sadness, on the other hand, is an affect by which the body's power of acting is diminished or restrained." *Ethics*, IV: P41.Dem. However, also Spinoza realised that pleasure *can* be bad, and immediately adds, echoing Epicurus's qualifications, that if pleasure is "so great that it surpasses the other actions of the body, remains stubbornly fixed in the body, and so prevent the body from being capable of being affected in a great many other ways. Hence, it can be evil." And likewise, pain "can restrain pleasure, so that it is not excessive, and thereby prevent the body from being rendered less capable. To that extent, therefore, it will be good" Spinoza, *Ethics*, IV: P43.Dem.

suffering in order to attain greater health. In one particularly provoking passage, Nietzsche writes:

The discipline of suffering, of *great* suffering—do you not know that only *this* discipline has created all enhancements of man so far? That tension of the soul in unhappiness which cultivates its strength, its shudders face to face with great ruin, its inventiveness and courage in enduring, persevering, interpreting, and exploiting suffering, and whatever has been granted to it of profundity, secret, mask, spirit, cunning, greatness – was it not granted to it through suffering, through the discipline of great suffering?²⁰

Nietzsche speaks here of much more than growth pains, stiches, and myalgia. He extends the idea to the thought that the greatest enhancements in human life have come through great suffering and the strength required to live through serious turmoil. For our purposes, however, what matters is that in greater or lesser degrees pain and suffering *are* required for expansions of health and advancements of life, rendering events that cause pain and suffering sometimes conducive to health. The incentive or ideal to avoid all pain and suffering, in both the definition of health and the practice of living, therefore not only makes for an implausible account of health, it is also deeply problematic from the perspective of the capacity account of health developed here.

²⁰ Nietzsche, *Beyond Good and Evil*, §225.

1.4 Affluence and Social Advantage

A fourth objection to the proposed theory of health, an objection specific to human health, is that an accumulation of wealth would amount to an improvement of health on our account. One could object that the wealthier someone is, the wider the variety of activities one can engage in and the greater one's action-potential tends to be. Hence, individuals with a higher socio-economic status would necessarily be healthier than the less well-off on my account of health—a consequence both counter-intuitive and inadmissible for prudential reasons. People living in deprived areas would be categorically less healthy than the wealthy few with access to cars, private jets, restaurants, shopping opportunities, etc. Surely wealth *as such* does not constitute human health, one might object, and so the capacity account of health may seem false.

The reply to this objection centres on the distinction between potentials (or dispositions) and circumstances (or conditions). Health refers to the quantity of our potential activities, dispositions that may or may not be realised depending on circumstantial possibilities. Now, anyone with sufficient resources could shop endlessly or fly around in a private jet; the potential of the least well-off and the most affluent do not differ in these respects, and so their health does not vary in terms of these capacities either. The affluent may have infinitely more *possibilities* to realise certain dispositions, but they share the dispositions for these activities with most other people. In fact, someone may go through life without any material possessions whatsoever but still have a high degree of health in virtue of having large set of dispositions realisable under a broad range of external circumstances.

Nevertheless, in the modern world the well-off do of course tend to have better opportunities to expand their health—more so, in any case, than the most deprived and least well-off. For one, medical technologies and services can be accessed easier, enabling early detection and treatment of pathologies. The wealthy generally also enjoy better access to education, can afford qualitatively better nutrition, sports and physical training are easier engaged in, and so on—resulting in the development of an abundance of potentials unavailable to the underprivileged. The rich *may* therefore end up enjoying higher degrees of health than the less well-off. But this is a contingent feature of our society and does not establish a conceptual or necessary connection between health and wealth. A monk living in a monastic order may not have any material possessions at all, but through life-long learning, reflection, balanced nutrition, training and disciplining of his body and mind, could end up acquiring an extraordinary level of health. Wealth *per se*, therefore, does not constitute greater health.

The same principle holds for any other kind of social inequality. In societies where ethnic minorities and homosexuals are discriminated against, for instance, the possibilities for these communities may be constrained and impeded to a greater or lesser extent. This constitutes no reason to regard ethnic minorities or homosexuals as less healthy, however, also on my account. Socially disadvantaged may have similar or even greater quantities of potentiality, but due to hostile social climates remain deprived of the possibilities to realise them. The proposed account of health therefore by no means implies that socially disadvantaged are by definition less healthy.

Here too, however, it must be recognised that discriminatory practices *could* result in significant reductions of health. If minorities are deprived of medical services, education, opportunities for labour and so on, the totality of dispositions they will develop is likely to remain comparatively limited. Unequal or discriminatory societies therefore often do inhibit, suppress, and violate the health of certain groups. But the distinction between *dispositions* that determine one's health and *possibilities* granted by material and social environments, enables me to set aside the objection that the socially or economically disadvantaged are by definition less healthy.

1.5 *Technology and Health*

In the context of human life one could object to the capacity account of health that technological progress has immensely boosted human capacities, while technological progress *as such* surely does not equate with an improve of health.²¹ The final objection I shall consider is that, if, indeed, health refers to the multiplicity of potential activity, and if, second, technology increases the multiplicity of our potential activity, it follows that all technological progress directly and globally boosts human health. If this simple syllogism is sound, people living in pre-industrial times would *de facto* and *en mass* be less healthy than we are today, just as we would currently be less healthy than technologically more advanced generations of the future, simply due to differing levels of technological ability. Since this would be an absurd implication, the

²¹ I will use 'technology' in the everyday meaning of the word, referring to technological objects and instruments, both simple and advanced, rather than in a Foucauldian sense of 'technologies of the self'.

identification of health with a multiplicity of potential activity could be claimed to be wrong-headed from the start.

The rebuttal to this objection involves denying the second premise—the idea that technology indeed boosts the multiplicity of *our* potential for activities. The question, however, is precisely how to deny this premise. The line of thought I shall develop here is that only the *composite* or *aggregate* of human being and technological instrument has certain dispositions. Technological progress amounts to the creation of new dispositions, but only of dispositions possessed by human beings *together with* the technological item. On this line of thinking, the human being itself does not have a disposition to fly at the speed of sound; only the *sum* of human beings and supersonic jets would possess the disposition. Similarly, human beings *plus* telescope would have a disposition to observe distant galaxies rather than individuals themselves; only the composite object ‘people plus telephones’ would have a disposition to communicate with ‘people plus telephones’ on the other side of the planet; and only ‘human beings plus street lights’ would have dispositions to perceive colours after the sun has set. On this conception new dispositions do come into existence when technology advances, but the *bearer* of the new disposition is the composite of human being *plus* the technological instrument, rather than the human being herself. Human beings considered in isolation, by contrast, do not gain or lose dispositions whenever new technological instruments become available. And if we restrict health to the quantity of dispositions of human beings themselves, we can maintain that technological progress does not affect human health.

The guiding thought here is that the dispositions of human beings remain confined to the activities we are capable of realising ourselves, i.e. without instruments or technological support, and precisely this set of dispositions makes up our health. That is, the human being *herself* does not gain or lose any disposition the moment a new piece of machinery has been created. The capacity approach of health could therefore be preserved: the capacities of human beings themselves remain unaffected by technological advancements. Only the compound object of a human being plus a piece of technology has capacities that were previously inexistent.

A possible downside of this response, however, is that we must endorse, and find a way to make sense of, a metaphysics in which dispositions can be attributed to composite objects, like 'human beings + streetlights', or 'human beings + supersonic jets', or 'rocks + nuclear war heads', or 'humans + telescopes'. We would have to render intelligible the idea that there are dispositional properties belonging to objects of which the parts are in distinct places and widely separated by space and time. Somewhat odd as this may appear, it seems to me there is nothing uncommon about attributing dispositions to objects of which the parts are separated in this way. For instance, we can attribute dispositions to an army or a fleet—when we speak of their mobility or striking force, for instance—even though the components are located in different places and individually do not possess the dispositions of the army or fleet as a whole. On a grander scale, we could think of the disposition of solar systems and star clusters to expand or shrink, even though the planets and stars that make up these galactic unities can be separated by

light-years of empty space. Similarly, we may think of dispositions of cultures to protect or marginalise minorities, or dispositions of economic systems to crash and recover, or dispositions of weather systems to produce hurricanes: disposition all belonging to bearers constituted by parts widely spread out in time and space. In light of these examples, why not accept the possibility that 'human beings + telescopes' have dispositions that human beings as such do not have, or that the combination of 'human beings + streetlights' gives rise to dispositions that neither streetlights nor humans possess individually? We may not have words that pick out the composite object of 'humans + telescope' or 'humans + supersonic jet', in a way that we do have terms to pick out solar systems and particular human cultures, but this provides no reason to disregard them as composite objects to which dispositional properties can be attributed.

The way I would suggest to think about the relation between human capacities and technological instruments is therefore not that technology bestows capacities on human beings *themselves*, as the objection would have it, but, and to put it more simply, that human beings with technological instruments have capacities that human beings themselves do not have. And since health is restricted only to the latter set of capacities, the premise that technology boosts the multiplicity of *our* potential activity can be denied.

To complicate matters a little further, however, there are cases in which it is not entirely clear whether we are considering human beings themselves, or human beings with technological support. When a human being wears glasses, for instance, it is not clear which set of

dispositions we are evaluating when we evaluating her health; do we evaluate the human being's total range of capacities with glasses or only its range of capacities without the glasses? Similarly for an amputee using prostheses: when evaluating his health are we measuring what he is capable of with or without the prostheses? This ambiguity, I will argue, follows from the indeterminacy of the referent 'human being' rather than posing a problem for my our account of health. When referring to a specific human being, it is not precisely clear which object with which boundaries we refer to. We can easily distinguish between 'human being' and 'human being + airplane', and isolate only the former's capacities in assessments of health. It is less clear, however, what we are evaluating in cases of human beings with glasses and prostheses. When we say that some human being is more capacitated when wearing his glasses or that he is greatly incapacitated without them, it is the indeterminacy and imprecision of the concept 'human being' that makes these utterances possible. What we are really saying is that two different objects have a different number of dispositions: the human being has an MPA of X_d , whereas 'human being + glasses' has an MPA of $X_d + Y_d$. In natural speech it just isn't always clear what we are referring to when referring to one single human being. Is the human being *itself* only that lump of cells wired to a brain? Or would the glasses part of it? Insofar as glasses and prostheses are part of the individual they contribute to an individual human being's health, in the same way that well-trained muscles, developed motor skills, and cognitive abilities would improve someone's health. Insofar as glasses and prostheses are not part of the individual they do not bear on an

individual's health, just as airplanes and telescopes do not. The vagueness of our concept human being, however, is ultimately a semantic matter, and must find its resolution within those debates.²² For our purposes, and in reply to the objection, I shall maintain that the quantity of dispositions of human beings does not alter as a result of technological advancements.

Although this specification of the account should defuse the main objection, there are of course ways in which technological progress has influenced our health and no doubt will continue to do so. A few words on health-promoting technology would therefore be in place, if only to further illustrate my response to the objection. There are at least three ways to be distinguished in which technology affects human health. First, operating and handling technological instruments requires dispositions previously not possessed and could therefore constitute an increase of *our own* set of dispositions. Second, medical technology has enabled the prevention, diagnosis, treatment, and rehabilitation of various diseases, which directly impacts the level of health of those subjected to it. And third, technology enabling the enhancement of the human being directly intervenes on the scope of the dispositions that makes up our health. A comprehensive discussion of the ways in which technological progress impacts our health lies beyond the scope of this thesis, but a few remarks on each of these three forms could help to provide at least some schematic understanding of the issues at stake and the way the proposed account of health plays out in detail.

²² See for further discussion David Lewis, "Many, but Almost One," in *Papers in Epistemology and Metaphysics* (Cambridge: Cambridge University Press, 1999), 164-182.

Utilising technology requires the development of dispositions that previous generations did not possess, e.g. operating a personal computer, driving a car, handling a telephone, etc. Insofar technology demands specialised capacities, our own overall potentiality would increase proportional to the expanse of our handling and operating skills. Someone able to ride a bicycle or capable of typing text on a keyboard has dispositions no one could have had in the Stone Age. However, people in the Stone Age also had capacities to operate certain tools and probably possessed skills for securing nutrition and shelter that we no longer possess. Even if operating technology requires capacities previously unavailable and non-existent, it is thereby not settled that the technological age has increased the multiplicity of our dispositions compared to previous ages. There is namely also a good case to be made for the opposite view—the idea that technology has made human beings less capacitated and therefore, on the whole, less healthy. Technology makes us less capacitated once we lose the ability to carry out an activity without the technological item. For instance, we no longer need to be able to walk to get from A to B, as cars, buses, and trains effortlessly transport us to B. Once we lose the ability to walk from A to B due to frequent use of mechanised forms of transport and become dependent on technology to get to B, we would effectively reduce *our own* capacities. The unity of ‘human being + car’ would still be able to cover the distance, of course, but we ourselves would have lost the capacity. Similarly for mathematical calculations: together with calculators and advanced computers we are capable of highly complex calculations, but we ourselves are at risk of losing their ability for even

the simplest of additions and deductions. Especially once we become dependent on technology for basic and broadly conditioning capacities, like mobility, memory, communication, orientation, nourishment, and so on, we are at risk of drastically reducing our own health. From a perspective of health, technology poses a risk to health if we allow it to convert us into a state in which we are hardly capable of anything anymore without technological support. Only the aggregates and sums of which we are parts, and with which we may subjectively identify ourselves, increase their range of dispositions; we ourselves, on the other hand, gradually diminish the scope of our dispositions and slide into a state of complete incapacity. The comforts and ease delivered by technology could therefore pose a serious danger to our health. Even though utilising technology requires the development of specialised capacities, then this does not necessarily imply that our technological age has increased our potential activity itself— if anything the opposite seems more likely to be the case.

Medical technology, as opposed to technology more general, clearly does affect the multiplicity of human dispositions in some way. However, in light of the original objection, the *mere existence* of medical technology does not increase our health in a way that would make us *de facto* healthier than people of previous generations. The fact that we can prevent and cure vast amounts of diseases previously debilitating or even fatal, *qua* fact about our medical and technological abilities, does not make for an expansion of our own capacities. A new-born child with a pathological condition is as unhealthy now as it was in previous centuries, even if we now have the technological means to remedy the

pathology and re-open the full scope of potential activity to it. The mere existence of medical technology and techniques does not render anyone more or less healthy. The moment medical techniques are *utilised* to prevent illnesses, cure diseases, limit or delay pathological processes, facilitate recovery and rehabilitation, etc., medical technology indisputably does have the potential to improve the health of living beings. Those with access to medical services will mostly end up living longer, more capacitated, and healthier lives. The recognition that medical technology can make us healthier is of course little more than common sense.

This naturally brings me to technologies of human enhancement and the ways in which technology increasingly enables us to boost our physical and cognitive abilities. Here too the distinction between an 'individual human being' and the aggregate 'human being with technological enhancement' can be maintained, I suggest, and evaluations of health are restricted only to the range of dispositions possessed by the former. Also in the presence of pharmaceutically induced enhancements, brain implants, exoskeletons, and so on, human beings *themselves* do not become more capacitated, just as airplanes and streetlights do not make *us* more capacitated. Only the composite of human being *plus* capacity-enhancing technology would have extra capacities. When this type of technology becomes widely available in various forms and modifications, the account of health suggests that future generations do not necessarily become healthier than we are today, somehow establishing a historical divide in levels of health.

Whether human beings *themselves* become healthier when submitting to various forms of enhancements remains an open question.

But there will probably come a point where the meaning of our concept 'human being' will shift towards an entity that has been enhanced in certain ways. If most, if not all, human beings are enhanced in some way, it will become pointless to speak of 'human beings' without those enhancements. It is likely that the meaning of the concept 'human being' will gradually shift in direction of a more enhanced entity, in the same way that human beings currently may already refer to an individual with glasses and prostheses. If all human beings have brain implants supporting their cognitive abilities, our concept 'human being' will just come to refer to the human being plus brain implant. However, this still does not imply that the enhanced human being is healthier than non-enhanced human beings in virtue of having better cognitive abilities; it is only the ambiguity and indeterminacy of our concept 'human being' that would enable the comparison between two kinds of entities and their respective capacities. The moment we compare an enhanced and non-enhanced human being, what we really do is compare two different kinds of entities that we both call 'human beings'. The case would be similar to comparing the abilities of 'human being' and 'human being + computer': we would just be comparing two different kinds of objects. If certain sections of society do not have access to the relevant technologies, or if some parts of the world stay behind in terms of enhancements, this would not render them less healthy compared to enhanced parts of the world. It is only the indeterminacy

of the concept 'human being' that would give rise to the suggestion that enhanced people are healthier than non-enhanced people.

This is all to say that technological enhancements of the human being, in and of itself, also do not bring about an expansion of human health on my view, just as other forms of technology do not. In stages of advanced enhancement we may end up with different types of organisms, incomparable in terms of dispositions that constitute their health. Technological progress as such, therefore, also in the context of human enhancement, does not expand *our* capacities and therefore does not impact *our* degree of health. The objection that technological progress boosts our capacities but not necessarily our health is therefore one that can be rejected.

Chapter 5

Implications for Human Health

1. Preliminaries

While the preceding two chapters presented a theory and defence of a universal theory of health, the concern of this chapter is to draw out the implications for human health. Although I shall maintain that the meaning of health itself does not change for human beings, several distinctive features of human beings do have important consequences for how we are to think of human health more specifically. The task of finding out which objects and behaviours increase the multiplicity of potential activity of human beings is of course an empirical enterprise. But on an abstract level more structural claims can be made independently from this empirical task. In this chapter I will focus on three aspects of human life most relevant to the larger problem-horizon of this thesis—the tensions between subjective values and the objective nature and value of health. I shall consider the consequences of the fact that human potential is, in a sense, limitless and how this gives rise to a plurality of ways in which human beings can be healthy; I will consider the way in which the human ability for autonomous activity bears on the account of health; and I will analyse the human ability to pursue goods and ends at the expense of our health.

In specifying the nature of human health claims will be made about states and processes that are non-morally good for human beings, and in doing so, we shall inevitably enter into the ethical domain. It is only in the context of human life that implications of a theory of health become genuinely *ethical* implications, instead of mere evaluative statements about when an organism is healthy and unhealthy. Although I argued that all living beings have objects and states that are objectively good and bad for them, the facts about what is good and bad will not affect the ways in which non-human organisms behave, respond to events in the world, or in general organise their lives. Human beings are unique in that for us the question how to best live our lives—or, to put it in Socratic form, “how one *should* live”—presents itself *as a question*.¹ That is, for human beings their own life and health are always, in important sense, *an issue*—in a way that it is not for animals, plants, and bacteria. Defining the nature of health and determining ways to improve it provide us with reasons for acting in certain ways—reasons that can be strengthened, counter-balanced, and overridden by other considerations, but reasons that nonetheless have an impact on questions about how to live a good human life. Only in the context of human life does a theory of health have this ethical significance.

The claim that only human beings are ethical beings might be contested, however, as many have pointed out that the kind of behaviours typically associated with moral behaviour—altruism and

¹ Bernard Williams thinks that Socrates’s question “how should one live?” is the most fundamental and general question of ethics, more so than ‘what makes us happy?’ or ‘what are our duties?’ and I shall follow Williams’s lead on this. See especially Williams, *Ethics and the Limits of Philosophy*, chapter 1.

mutual cooperation especially—can also be found in the non-human world, especially amongst primates. This does not imply, however, that non-human organisms displaying altruistic behaviour are moral beings or that we can meaningfully speak of an ‘ethics’ for non-human organisms. There are good reasons for supposing that a moral and ethical being must be able to take a reflective stance on its own life and actions—a stance from which certain activities or states can be judged as better than others. If it turns out that activities considered as good by reflective human beings are also exhibited in the animal and plant world, this does not imply the animals ‘ethical’ or ‘moral’ in the same way as human beings are.² Questions about how to live and how to act simply do not arise as questions for non-human life; there is nothing animals can take a stance on, so to speak. Human beings are unique in that there is an openness of our sphere of activity and the way we live. Beliefs about what is valuable and what it means to live a good life shape the way we actually go about living our lives and affecting that of other. I shall therefore proceed on the basis of the traditional belief that ethics in the proper sense of the term minimally requires the ability to reflect on one’s actions and a responsiveness to reasons, and that this minimal requirement is met only in human life. I shall return to the ethical significance of the theory of health, or relative lack thereof, in the conclusions of this thesis.

² The claim that non-human organisms are not moral or ethical beings in this sense does not mean they are not worthy of respect or decent treatment. In virtue of having states that are good or bad for their own sake non-human organisms could still be argued to have a moral *standing*, placing demands on how human beings *as* ethical and moral beings are to treat them.

2. Human Beings as Limitless Beings

Health was defined as the multiplicity of potential activity (MPA) relative to a maximum potentiality, whereby an increase of MPA equates with an improvement of health and a diminution with a decline of health. One of the distinctive traits of human beings is the capacity to invent ever *new* activities, however, and in doing so, to continually increase the maximum set of capacities they can possibly possess. As a species, human beings are in an important sense *limitless* in what they can do and inherently *unbounded* in the variety of capacities they can manifest. This does not mean that human beings can do everything imaginable or that no factual limitations obtain in human life. Certain activities will always remain beyond the scope of the human potential and do indeed fall outside our absolute factual limitations, regardless of our inventive and creative prowess. Human beings shall never have the capacity to jump over mountains or develop a capacity to walk over the surface of the sun. The way in which human beings are limitless therefore does not imply that factual limitations do not obtain and that the reference class is devoid of any content. But the human being's capacity to invent and manifest ever new forms of acting, I would suggest, does result in an essential unboundedness of the kind.

The idea here is not that human capacities always outstrip the totality of actual manifestations in the way it was claimed in Chapter Three (§2.2a) that the number of dispositions of any type of entity always exceeds the number dispositions that get manifested in reality. The point is that human potentiality is itself unlimited and unbounded,

so that we cannot conceive of any permanently marked off and finite set of what would make 'the' human potential. The unboundedness of human potential is also crucially different from the way in which other living beings have factual limitations that cannot be completely *known*. I argued above that factual limitations to what an organism can do can only be known by approximation, given that for complete knowledge all members of a species would have to be assessed under all possible circumstances and with full imagination. The limitlessness of human potential does not follow from such epistemic obstructions but from the ontological fact that human beings continuously expand and diversify in what they are capable of: the constant invention of new activities and creation of corresponding capacities does not have an intrinsic or necessary endpoint. Even considered under all possible circumstances and with full imagination, human potential escapes definitive totalisation. Whether we consider new artefacts that we learn to manipulate; new forms of physical exercise and sports that we invent and learn to specialise in; new intellectual challenges we are confronted by and continue to construct for ourselves; the different and ever-differing forms of artistic expression; novel technologies we learn to operate; the way and mediums via which we communicate—in almost every sphere of life human beings invent and expand their range of activities, constantly requiring the attainment of more or less specialised capacities for their execution. It seems to me an indisputable fact that the action-potential of the human species is open-ended and unlimited in a way that finds no match or parallel in the non-human world.

In an important but rather specific sense, then, it is an *open question* what human beings are capable of doing—an open question not in the sense that it can be answered only once the relevant data is available, but open in the sense of an ineliminable openness. The question what human beings are capable of doing, to put it differently, is necessarily unanswerable. For every species of plant and animal it is more or less set what the maximally realisable set of capacities is, whereas the nature of human beings resists the very conception of such a bounded and limited set. When Deleuze, in his reading of Spinoza, centralises and almost dramatises Spinoza’s assertion that we do not know “of what a body is capable,” and that we should take this claim as a kind of “model,” it seems Deleuze is hitting on precisely the same point—even though for Spinoza the claim is of course not restricted to human bodies.³ The question ‘of what is the body capable?’ in the context of human life defies a definitive answer and is perhaps, *qua* question, indeed best taken as a model: precisely in the form of a question does it bring to the fore the unboundedness of human potentiality.

The intrinsic limitlessness of the human species has important consequences for the way we conceive of human health. The health of any organism was claimed to correspond to the quantity of dispositions measured against a background of a maximum range of realisable dispositions. Now, however, we are confronted with the fact that this norm of a maximum range of realisable capacities is for the human beings essentially unlimited. The most important implication for our

³ Spinoza, *Ethics*, EIII.P2: schol; Gilles Deleuze, *Expressionism in Philosophy: Spinoza*, trans. Martin Joughin (New York: Zone Books, 1992), 255-257

conception of health is that human beings cannot be perfectly or completely healthy: there will always be a discrepancy between what a person can do relative to what is factually possible for a member of *Homo sapiens*.⁴ In the case of plant and animal life we can say without much hesitation that if an individual organism can manifest all activities possible for the species under a wide range of circumstances and for an extended period of time, it is, as a matter of fact, a healthy plant or a healthy animal. In the case of human life, on the other hand, a single individual can never manifest all activities possible for the species, as what is possible for the species is itself not contained in any demarcated and fixed totality. The norm against which an individual human being's MPA is measured is itself open-ended, making it impossible for a human being ever to be perfectly healthy in the absolute and individual senses of health.

This does not imply that the account of health does not apply to human life: human beings can still be *more* or *less* healthy. Certain states are more healthy than others: person 1 can possess a greater number of capacities than person 2 and therefore be judged as healthier, just as person 1 at some t_1 can be less capacitated than at t_2 and therefore judged to be healthier at t_2 . But human beings cannot be healthy in the more straightforward sense in which plants or animals are healthy. Human health can therefore only be measured on a *continuum* with death on one extreme, i.e. an MPA of zero, and an open-ended possibility for increase of healthiness on the other extreme. In the

⁴ Maximum attainable health does seem to be possible for human beings. It is possible for a human being to optimise her potential for activities within the factual limitations that are acquired through life.

context of human life, but only in this context, we may therefore side with Canguilhem when he writes that:

To say that perfect health does not exist is simply saying that the concept of health is not one of an existence, but of a norm whose function and value is to be brought into contact with existence in order to stimulate modification. This does not mean that health is an empty concept.⁵

The way health was defined still allows it to fulfil its role as a norm or ideal, as something to be strived for, and as Canguilhem suggests, something that could stimulate modification towards an objectively better state of being. Human beings can always get healthier by increasing their capacities and widening their potential for activity; the problem under consideration is just that they could do so *ad infinitum*—at least in theory. The limitlessness of human potential implies that there is no species-given limit as to how healthy a human being can become and that perfect or complete healthiness is theoretically as well as practically impossible for human beings.

Although the species does not set intrinsic limitations on how healthy a human being can become, a number of other factors certainly do impose a maximum on how capacitated a human being can become. In any given human life there are just so many capacities one can develop and sustain, and just a few kinds of activities one can truly specialise in. The register of capacities available to the species may be essentially unrestricted and open to a constant expanse, the number of

⁵ Canguilhem, *Normal and Pathological*, 77.

capacities a single human being can *practically* develop and sustain, let alone actualise, certainly is limited in various ways. Due to the finite time, energy, cognitive abilities, and bodily powers we have at our disposal there are clearly *practical* limitations to how capacitated and healthy we can become. In theory the health of a human being could increase *ad infinitum*; in practice it cannot. In fact, there is a point at which efforts to further increase and boost one's capacities will have *inverse* effects: there is a moment where a pursuit of greater health will end up undermining and effectively collapsing one's health. An attempt to become ever-more healthy by developing ever-more broadly conditioning potentials realisable under an ever-greater set of circumstances will eventually result in an inescapable fatigue, burn out, and vital exhaustion—i.e. a temporary or even permanent destruction of one's health. Our finite nature determines that a pursuit of ever-greater health will eventually bring about the very opposite of health: the complete collapse of our capacity for acting.

Perfect health might be unavailable for human beings, but there does remain what we could call an *optimum* state of health for human beings. Optimum health is the state in which the pursuit of a further increase of capacities would effectively decrease one's potential for activity and thus compromise one's overall health. This notion of 'optimal health' would be only relevant and applicable in the context of human life; at least, it seems impossible for unicellular, plant, and animal life to reach a point where the pursuit of a greater capaciousness would effectively result in a lessening of potential for activity. The limitlessness of human potential combined with our finite individual

existence is what generates the possibility for an optimum state of health, which is different from the way other kinds of organism could be perfectly healthy and possess all capacities available to the species.

Given that there are optimums of health for human beings, we could even push the point further and argue that there it is an 'art' to living a healthy human life. While non-human organisms can reach a state where their action-potential roughly coincides with what is possible for the kind, human potential always exceeds and outstrips what a single individual can do. Not surpassing an optimum state of health requires a certain skilfulness and practical knowledge, i.e. an art of knowing how to live healthily. The art of living a healthy life could perhaps be illustrated by means of an analogy with physical training and the build-up of physical strength. In theory there is no real limit as to how fit and strong a body can become. More muscle fibres could always be formed so that heavier things could be lifted or pushed around, in the same way that a cardio-pulmonary system could always be trained to take up and circulate more oxygen per given time-unit. But there is a tipping-point at which more training and more self-imposed stress becomes *overtraining* and effectively results in the destruction of strength and endurance. In physical training each body has an optimum state beyond which one would only weaken it by training and subjecting it greater levels of stress. Just as there is an art of physical training, in this respect at least, so one could conceive of an art of living a healthy life for the human being as a whole. The art of living a healthy life would consist in optimising the multiplicity of potential activity without surpassing the point where potentiality is undermined and

diminished by a striving for even greater health, an even longer life, or even greater levels of specialisation. It would involve knowing when not to pursue even greater health in recognition of one's finite nature and to embrace the limitations on how healthy and capacitated one can practically become.

A further consequence of the limitlessness of human potential is that human beings can be healthy and improve their health in quite *different ways*. Two individual people can have a set of capacities that is similar in size but dissimilar in the capacities that it includes. One person could have developed her intellectual capacities to a high degree, for instance, while another person could have strengthened her athletic capacities. If both end up with a similar quantity of capacities they are equally healthy, even though they are capable of quite different activities and probably live different forms of life. This scenario probably requires that both individuals have a similar range of broadly conditioning capacities, as otherwise their sets of capacities are bound to diverge significantly. But if basic capacities are roughly equal, the capacity account of health allows for the possibility that two people are capable of quite different activities while enjoying a similar degree of health.

To be clear, this recognition does not render the meaning of health itself relative to particular individuals, their values, talents, or forms of life, in the way that Nietzsche thinks health is pluralistic due to the diversity of human types and wide variety of individual values. Health itself remains strictly a matter of quantities of potential activities. If a third person would possess both the intellectual and athletic abilities

she would be healthier than a physically frail intellectual or a thoughtless athlete—at least in terms of absolute health. The capacity account of health applied to human life nevertheless gives rise to the possibility of *plurality* and *diversity* in ways of being healthy while at the same time remaining univocal in meaning. Plants and animals equivalent in health, by contrast, are bound to be much more alike and capable of roughly the same kind of activities. The unboundedness of potential activity combined with the impossibility of possessing all capacities factually possible for the human species gives rise to the possibility that two individuals can be equal in health but dissimilar in what they can do. The MPA account of health implies that there are different ways in which people can be healthy and diverse directions in which health can be improved, without implying that the being and value of health itself is relative to the desires and attitudes of individuals. On the proposed view, human health is unitary in meaning but to some degree pluralistic in ways one can be healthy. The capacity account of health, then, allows for a plurality of ways in which people can be healthy without the nature of health itself becoming relative to subjective factors of the people whose health is being considered.

One final observation to add to these reflections on the limitlessness of human potential is that the capacity to invent and create new activities is itself characteristic of human health, and something that, on the whole, has great objective value for human life. I argued in Chapter Four (§1.1) that the objective value of an organism's disposition depends on how broadly conditioning it is for further dispositions and that the most broadly conditioning dispositions are objectively most

valuable for any living being. One of the most broadly conditioning dispositions a being can have, hence the most valuable, is the disposition to create new activities and to invent novel ways of executing existing activities. The loss of creativity, in the broadest and most generalised sense—so by no means restricted to ‘artistic’ creativity—is therefore one of the greatest losses we could suffer, even though creativity is itself of course underpinned by more basic capacities that would make an even greater loss when deprived off. From the proposed account of health it follows that creativity is not something that is possible or valuable only when all other capacities are in place—the icing on the cake for exceptional and fortuitous individuals—but something that it is of central importance and objective value for every human being. The ways in which human creativity can be inhibited, suppressed, and even obliterated—whether it be through stringent educational regimes, political oppression, repressive working conditions, or, to side with Nietzsche, moral condemnations of mere deviance and abnormality—can therefore be regarded as genuine and fundamental violations of human health. The value of creativity, in its broadest and most inclusive sense, can itself be rooted in the idea of human health once health is understood as a quantitative multiplicity of potential activities.

In sum, the intrinsic limitlessness of human potential for activities makes it impossible for human beings to be completely or perfectly healthy, but enables the possibility for a plurality of ways in which human beings can be healthy, and establishes a close connection between health and human creativity.

3. Health and Autonomy

Another essential feature of human life is our ability for autonomous activity. The relationship between health and autonomy briefly surfaced in Chapter Three when considering whether human potentials were somehow different from the potential of other living beings. The claim was defended that human potentials are dispositions for activities identical to the dispositions of other living beings and inorganic things. If volitions are required for the realisation of some capacity, these decisions or acts of will should be regarded as *circumstances* or *conditions* under which human beings manifest their dispositions, in the same way that swinging hammers make a condition for the manifestation of glass's brittleness. This account of human potentiality enabled me to argue that the proposed theory of health is naturalistic, with human health being no exception, as dispositions and powers exist throughout the natural world. In this discussion I remained neutral on the question whether human beings are free in some sense, but did indicate that human beings are *self-conditioning* if volitions or acts of our will are required for the manifestation of our dispositions. This latter recognition shelters a theory of autonomy. This theory is worth teasing out not only for the sake of formulating an account of autonomy fitting the same dispositional picture, but also because it will enable me to demonstrate how autonomy is significant to human health. I shall first try to formulate an account of autonomy consistent with the previous analysis of dispositions, and subsequently try to demonstrate its relation and relevance to health.

3.1 *Two Forms of Autonomy*

All attempts to define autonomy share the ambition to understand what it means for an individual or collection of individuals to be self-ruling and self-determining, as opposed to being ruled by forces and influences outside of one's will or the collective will of a group.⁶ The account of autonomy I shall develop here applies primarily to individuals and follows from the definition of capacities provided before. Capacities (or potentials), including those of human beings, were defined as dispositions (or powers) that under certain circumstances (or conditions) get manifested by the entity possessing the dispositions (or powers). I will argue that this definition allows for the identification of two forms of autonomy: what I will call a 'strong' and 'weak' form of autonomy. By way of anticipation, the strong form of autonomy is one whereby volitions condition the manifestation of dispositions that otherwise would not have been manifested, while the weak form of autonomy is one whereby volitions endorse or impede activities that otherwise would have been carried out anyway.

The strong form of autonomy, then, describes situations in which volitions, or an activity of our will, are a necessary condition for the realisation of some disposition. An activity is performed autonomously in the strong sense of autonomy if a disposition for the activity gets manifested, at least in part, due to one's own will or volition.⁷ Whenever

⁶ See for an overview of existing descriptions and definitions of autonomy: Gerald Dworkin, *The Theory and Practice of Autonomy* (Cambridge: Cambridge University Press, 1988), 5-6.

⁷ The idea of 'will' and 'volition' is understood and used here in line with Harry Frankfurt's account of the will, *viz.* as a "want to want", i.e. a second-order desire.

volitions are necessary for the manifestation of a disposition, the human being is literally *self-conditioning* with respect to the manifestation of the disposition. The will being a necessary condition for the execution of an activity implies that if the will were not to play its conditioning role, the activity would not come about at the relevant point in time. Volitions do not have to be a sufficient condition for strong autonomy; in addition to volition, a combination of desires, preferences, and external factors may and often must obtain for the relevant manifestation to come about. Consider the example of manifesting a disposition to run. The manifestation of running would be autonomous in the strong sense of autonomy if next to a desire to run, perhaps even desires to the contrary, a wish to become fit, combined with the presence of running shoes and other enabling conditions, an act of the will is necessary for the realisation of the potential. Other conditions may be involved and be equally necessary for the relevant manifestation, but as long as an act of will is required for the running to actually come about it is performed in the strong sense of autonomy. If desires, wishes, and other conditions are together sufficient to condition the run, however, the manifestation does not meet the conditions for strong autonomy. Similarly, if someone were to run away from gunfire or coerced into running by people having a power over her, the realisation of the running capacity would also not be autonomous in this strong sense, as the will would not have conditioned or co-conditioned the relevant activity. The strong form of autonomy could therefore be condensed into the following definition:

This will be explained more elaborately below. See Harry Frankfurt, "Freedom of the Will and the Concept of a Person," in *The Importance of What We Care About* (Cambridge: Cambridge University Press, 1988), 12-25.

Strong form of Autonomy: an activity is performed autonomously in the strong sense of autonomy, if, and only if, in addition to other conditions and circumstances, an act of the will is necessary for the manifestation of the disposition for the activity.

Precisely how one's will could play this decisive role in manifestations of dispositions can be understood in a number of different ways. But a common way to understand the efficacy of the will, introduced by Frankfurt, and the one I shall adopt, is to regard willing as a second-order endorsement or repudiation of first-order desires or, slightly extending his view, external factors that motivate one to act.⁸ The will can facilitate or inhibit the realisation of certain disposition via a second-order endorsement or rejection of particular motivational states and factors. The will does not operate in a vacuum or in complete disconnection from first-order desires and external motivators, "*ab initio*" as Dworkin says, but instead, appears to be efficacious precisely by supporting and inhibiting existing desires and external motivators directed at some particular line of action.⁹ Two avenues for critique towards this view will be discussed shortly. For now I shall proceed with the idea that the strong form of autonomy requires volitions consisting of a second-order endorsement or rejection of particular desires, inclinations, and other motivational factors, resulting in an empirical *difference* in the capacities that are subsequently realised.

⁸ Frankfurt, "Freedom of Will," 12-25.

⁹ Gerald Dworkin, "Autonomy and Behavior Control," *The Hasting Center Report* 6:1 (1976): 23-28.

In addition to this strong form of autonomy there is a weaker form of autonomy to be identified. The above definition of autonomy implies that if our will does not change or influence one's activities, the ensuing actions would not be properly self-conditioned and thus not performed autonomously. This account of autonomy is not satisfactory, as it leaves out cases where one reflectively endorses activities that would have been carried out also if one hadn't reflected, or, indeed, cases whereby one reflectively disavows activities one would not have carried out also if one hadn't reflected on them. The will may not make an empirical difference under these scenarios, but the ensuing activities or inhibitions, in virtue of being willed on reflection, still carry an element of autonomy. This is what I shall call 'weak' autonomy. If it just so happens that the will endorses activities one would have carried also without the will's endorsement, or if it renounces activities one would not have carried out also without the will's renunciation, the activities or refrainments are autonomous in a weak sense.

Nevertheless, activities in line with one's will would only be autonomous in this weak sense if one further criterion is satisfied, *viz.* the criterion that if one had reflectively rejected the activity one would have had the power *and* possibility *not* to carry out the activity. Reflective endorsement of some activity, it seems to me, makes the execution of the activity autonomous only if reflective disavowal of the activity *could* have resulted in an inhibition of the relevant activity. We may return to the running example to illustrate the point. The scenario is now one where desires and external factors are sufficient for making one run. On reflection, however, one wants one's desires and external

motivators to be the way they are and as effective as they are, and so one reflectively approves and wills the running potential to be realised. The point is that any subsequent running would be autonomous in the weak sense of autonomy *only if* a reflective disavowal of one's desires to go running or a renunciation of external factors motivating one to run *could* have resulted in an inhibition of the activity. In other words, one must be able to refrain from an activity for a reflective endorsement to constitute a moment of weak autonomy.

A brief comparison with political autonomy should help demonstrate the difference between the strong and weak forms of autonomy, as well as clarify the criteria for weak autonomy. If foreign powers determine the laws and policies of a community and practically determine the conduct of all its members, this community enjoys no autonomy. If the community has, or is being granted, the capacity to reflect on the externally imposed laws and policies, then cases in which the community reflectively approves of the externally imposed laws and policies would make those laws and policies, in a sense, *their own*, and the community would be self-governing in some weak form, despite the fact that without the reflective approval the same laws and policies would also have been imposed. Yet, the community would only be self-governing in this weak form if the community also has, or is being granted, the power and possibility to reject the relevant laws and policies. Put more simply: without a possibility to opt out the ability to opt in does not give the community any autonomy. Essentially the same point applies to individual autonomy: reflective endorsement of activities one would have carried out also without the reflective

endorsement amount to weak autonomy only if reflective repudiation could have resulted in an inhibition of the activity. And to make the contrast with strong autonomy, the community would be autonomous in the stronger form of autonomy if the community formulates laws and policies that otherwise would not have been formulated and instituted at all. This latter case undoubtedly makes for a greater form of self-governance and self-determination than the opt-in and opt-out form I called 'weak autonomy', but both forms, I think, are to be recognised as forms of autonomy.

While for strong autonomy the will is a necessary condition for the realisation of a disposition, weak autonomy only requires one to reflectively endorse the activity and to have the power to inhibit the activity. The involvement of the will is therefore a necessary condition for weak autonomy, but strictly speaking not a necessary condition for the *realisation* of some capacity. The weak form of autonomy could therefore be summarised in the following definition:

Weak form of Autonomy: an activity is performed autonomously in the weak sense of autonomy, if, and only if, 1) one reflectively wills the activity; 2) the will could inhibit the activity if it were not to endorse the activity; 3) conditions other than the will would have been sufficient for the manifestation of the activity.

What strong and weak autonomy have in common is reflective endorsement of one's actions and inactions. The two definitions make autonomy *simpliciter* a matter of having one's will aligned with how one acts and doesn't act. The difference between strong and weak autonomy

is still worth teasing out, however, not only for structural reasons, but also—as will become evident shortly—for the distinct ways in which strong and weak autonomy bear on human health.

This dual account of autonomy differs greatly from the most famous account of autonomy, *viz.* Kantian autonomy. Kant's account of autonomy, in keeping with the original Greek meaning of the term, centres on the ability to give oneself laws; Kantian autonomy is first and foremost a matter of *self-legislation*.¹⁰ According to Kant, one acts autonomously if one acts on the basis of principles that are self-imposed rather than on the basis of externally imposed laws, or, indeed, on any of one's desires and inclinations. Self-legislation is no arbitrary process for Kant, as our rationality commits our will to the self-imposition of the one and only moral law: "act only in accordance with that maxim through which you can at the same time will that it become a universal law."¹¹ The account of autonomy outlined above is weaker than Kant's account, as it does not invoke subjective principles of action, *i.e.* maxims, by which we are to act. On my definitions of autonomy, the will could be inconsistent with respect to the activities it enables and inhibits without undermining autonomy as such. In other words, *mere* self-conditioning and *mere* second-order endorsement with a possibility for opting out would suffice for autonomy in my set-up, as opposed to Kant's more stringent view that autonomy requires self-imposition of rational laws for action. Moreover, Kant's view of autonomy is substantive, determining which particular kind of actions could

¹⁰ Kant, *Groundwork*, 4:433.

¹¹ Kant, *Groundwork*, 4:421.

possibly be autonomous, *viz.* those activities the maxim of which could rationally be willed as a universal principle. The definitions of autonomy provided above are strictly *procedural* and *content-neutral*, making no claim on which actions could be autonomous. If on reflection one's will effectively makes one commit a murder, lie to someone, or steal their property, those activities would be autonomous activities on my score, also if the maxims of these actions cannot be rationally willed as a universal principle.

Another often-cited account of autonomy, much closer to the one outlined above, is the 'coherence account' defended by Dworkin. He summarises his account of autonomy as follows:

Autonomy is conceived of as a second-order capacity of persons to reflect critically upon their first-order preferences, desires, wishes, and so forth and the capacity to accept or attempt to change these in light of higher-order preferences and values. By exercising such a capacity, persons define their nature, give meaning and coherence to their lives, and take responsibility for the kind of person they are.¹²

Two important differences have to be pointed out here as well. The first is that second-order endorsements of first-order preferences, together with demands on the conditions under which the endorsements are made, suffice to establish autonomy for Dworkin. This seems too weak, as situations where one is incapable of resisting a desire or external motivator would still qualify for autonomous activity on Dworkin's

¹² Dworkin, *Theory and Practice of Autonomy*, 20.

view. On my definitions strong autonomy requires a genuine conditioning of action by the will, while weak autonomy requires an ability to resist or inhibit certain lines of conduct. Reflective endorsement of some activity without a capacity to refrain from it would meet Dworkin's requirements for autonomy, but fail to meet the criteria I defined.

The second difference with Dworkin's account brings us straight into a discussion of two important criticisms that have been levelled against the very idea of autonomy that we too need to address. According to Dworkin second-order reflection requires what he calls "procedural independence": the idea that one's critical faculties are not to be influenced by external sources and influences when reflecting.¹³ He adopts this principle to avoid cases in which people have their reflective will shaped and manipulated by external factors like indoctrinations, coercions, hypnosis, subliminal advertising, and so on. Although Dworkin recognises that the ability to reflect upon oneself can be positively influenced via external factors like education, information, and particular incentives, he considers most other influences to undermine and restrict the ability for proper reflection.¹⁴ It seems to me that Dworkin is guided by preconceptions of what autonomous actions look like, despite his proclaimed content-neutrality. He seems to be directed by presumptions about *what* a non-interfered and uninfluenced reflective agent will choose to do, such that certain external influences would contribute to it and others undermine it. Otherwise it is hard to

¹³ Dworkin, "Autonomy and Behavioral Control," 25.

¹⁴ Dworkin, "Autonomy and Behavioral Control," 26.

understand why some external factors contribute to second-order reflection and others not. More problematic, however—and this hits on the first major criticism of autonomy—is the kind of reflective agency he presupposes in his appeal to procedural independence, an agent stipulated to be uninfluenced by external factors and wholly expressing its own second-order preferences. Such an account of agency suffers from the same problems that liberal models of subjectivity do. It raises questions regarding the nature of this supposedly uninfluenced self or will, and flies in the face of the apparent fact that our will or self is always shaped and informed by historical, cultural, and social processes. The idea that our will or innermost selves are shaped and constituted by socio-historic dynamics, meanings carried and transmitted by language, gender and class positions, individual upbringing, and so on, is far from a novel insight and can be traced back at least to Hegel and Marx—with figures like Wittgenstein, Heidegger, and Foucault extending the idea in their own distinctive ways. If autonomy requires a liberal conception of self or will, unaffected by any influences and processes ‘outside’ of itself, then philosophical interests in the idea of autonomy is destined to die out sooner rather than later. Even though Dworkin recognises that “a notion of the self as isolated from the influences just enumerated ... is almost foolish,” and that “to insist upon this as a condition is to make autonomy impossible,” the conception of autonomy he develops still requires an strong independence of the will and reflective agency that renders his account vulnerable to a critique of precisely this kind.¹⁵

¹⁵ Dworkin, “Autonomy and Behavioral Control,” 24.

It seems to me that there is no need for an uninfluenced, freely valuing agent to get a meaningful conception of autonomy off the ground. The self or will can perfectly well be shaped by socio-historical processes, meanings carried in language, and a host of other factors, and still play its role as second-order rejection and endorsement of first-order motivational items. If I reflect on desires and external factors that move me in certain ways and on reflection my will makes a difference as to which desires and external factors I come to act on, these reflections and acts of my will have still been shaped by the processes that have made me the individual that I am: including my upbringing, cultural background, language, social position, and so on. Second-order reflection is an abstraction from first-order desires, but something that does not, probably cannot, and crucially *need* not escape all 'external' influence. If somehow a complete escape were possible from such influences it would even become quite mysterious which motives would inform and direct the reflective endorsements and disavowals of first-order desires.¹⁶ The will can be thoroughly socio-historically shaped and still make a difference as to how one comes to act, or reflectively endorse and inhibit certain actions, and that is all that is required for autonomy on my dual account.

Now, further abstractions can always be made from one's will, supposing we indeed have the ability to abstract also from second-order endorsements and identifications. For example, if I have a first-order desire to buy some new electronic gadget cleverly advertised to me but

¹⁶ Kantians would of course answer this concern in terms of demands set by rationality.

on reflection I decide not to act on the desire and refrain from buying it, then this reflection leading to my autonomous refrainment may very well be influenced by the ways I have been shaped in my thinking: perhaps there are traces of protestant austerity running through me, negative opinions of people I respect, a solidarity with the working-class, and so on. I could, however, abstract further and reflect on whether I want my second-order willing to be the way that it is, and whether, also on this higher level of reflection, I want my will to be different. If so, I could attempt to shrug off the influences of my social relations, protestant heritage, and working-class solidarity, and reflect differently on my first-order desire to buy the device. Even this higher reflection, however, is not immune to reflection and revision. Autonomy, as several people have pointed out—and this is the second common criticism of autonomy—can lead to an infinite regress; there are always higher levels of reflection possible where one could question whether one wants one's will to be the way that it is.¹⁷ This is often posed as a problem for autonomy and only reluctantly accepted by philosophers like Dworkin and Frankfurt.¹⁸ It seems to me, however, that the possibility for regress captures an essential and important aspect of autonomy, one that could further neutralise concerns about the ways in which socio-historical processes and other 'external' influences shape our will. Not only is a socio-historically shaped will still *my* will that can effectively condition the manifestation of some disposition, the socio-historic conditioned will can also itself be reflected

¹⁷ See for an early and forceful articulation of this criticism: Gary Watson, "Free Agency," *Journal of Philosophy* 72 (1975): 205-220.

¹⁸ Frankfurt, "Freedom of Will," 21; Dworkin, *Theory and Practice of Autonomy*, 19.

on, and in doing so, be revised in its own willing—even if on this higher reflection socio-historical factors still influence the decision making process. The possibility of a regress is precisely what gives the self the openness for continuous self-evaluation at higher levels of abstraction. It provides the space for a self-conditioning of the will itself, even if a complete abstraction from all ‘external’ influence is ultimately impossible. Provisionally, I would therefore claim that the possibility of a regress is precisely what could neutralise the kind of concerns that motivate Dworkin to introduce complex standards for procedural independence of reflective endorsements.¹⁹ Be that as it may, a socio-historic understanding of the self as well as a possible regress in levels of reflections does not seem to threaten the dual account of autonomy.

On the basis of these considerations we can identify four different ways to improve and expand individual autonomy. First, to repeat the point just made, one is more autonomous if one is capable of revising one’s will at higher levels of reflection; i.e. one is more self-conditioning the more one is capable of reflectively transforming one’s own will. Second, one is more autonomous if one can perform activities not just in the weak form of autonomy but also in the stronger form; if one is capable of self-conditioning activities that otherwise would not have

¹⁹ This way of incorporating historical selfhood into an account of autonomy is different from the way that Christman has proposed. Christman thinks that autonomy consist in a person’s “acceptance or rejection of desire *formation* or the factors *that gave rise to that formation*” and thus focusses on a second-order reflection on the process rather than its result. John Christman, “Autonomy and Personal History,” *Canadian Journal of Philosophy* 20 (1990): 1. See also John Christman, *The Politics of Persons. Individual Autonomy and Socio-historical Selves* (Cambridge: Cambridge University Press, 2009), 133-163.

come about, rather than merely opting in or out of activities that were already sufficiently conditioned, the activities would be performed with greater autonomy. Third, closely related to the previous point, one is more autonomous in performing an activity if fewer first-order desires and external motivators are required for its performance; the more the will is capable of conditioning an activity on the basis of its own willing, independently of other motivating structures, the more autonomous one is with respect to this activity. In other words, the more *self-sufficient* one is in realising certain capacities, the more autonomous one is; and one is more self-sufficient when fewer conditions other than one's will are required for the realisation of a capacity. And fourth, autonomy is greater if one's capacity for weak and strong autonomy ranges over a broader variety of activities. If one's autonomy is local, i.e. restricted to one or only a few activities, one's autonomy remains relatively limited; if a capacity for autonomous activity applies to many if not all activities one is capable of autonomy would be more global and thus greater. In sum, then, autonomy is greater when it is global rather than local, strong in addition to weak, when one is more self-sufficient in manifesting one's activities, and when one has an ability to reflectively transform one's own willing.

3.2 The Value of Autonomy

With this conception of autonomy in place we can now turn to the value of autonomy and the way autonomy relates to human health. Throughout history the ability for self-governance and self-determination have been attributed the highest of values, both in

personal as well as political life. Plato and Aristotle already argued that the rational part of a soul should be trained and developed to the effect of controlling the appetites and guiding practical life, just as the city-state could be best run by its most rationally equipped members. In the Hellenistic world abilities for self-determination and self-control were equally considered of key importance to living a virtuous life. Autonomy is one of the cornerstones of European enlightenment and ever since celebrated as one of the greatest goods. The reasons why various permutations of autonomy were so strongly valued, however, diverge widely. The relation between autonomy and human health is even less straightforward and has hardly ever been thematised in the history of philosophy. The central question to be raised here, and to which the discussion shall also be restricted, is whether capacity for autonomy affects human health—defined as the multiplicity of potential activity vis-à-vis factual limitations—and if so how. If a capacity for autonomy positively affects human health, autonomy would be *objectively* valuable already in virtue of being health-promoting, independently of other reasons people might consider it valuable.

Autonomy, I have argued, concerns the *conditions* under which human beings manifest or refrain from manifesting their dispositions. Autonomy therefore does not affect the quantity of capacities of human beings *per se*—even though in a superficial way a capacity for autonomy would of course amount to having an additional capacity. But the real importance of autonomy and the way actually impacts someone's health follows from the fact that the range of circumstances under which an autonomous being can manifest its dispositions becomes more

variable. In Chapter Three (§2.2c) I argued that an organism's potentiality could increase in three ways; first, by having more dispositions; second, by having dispositions that are non-exhaustive; and third, by having a wider range of circumstances under which dispositions are manifested. Autonomy does not increase potentiality in the first two ways, but a capacity for *strong* autonomy does affect the range of circumstances under which dispositions can be manifested. Whereas weak autonomy does not broaden the set of circumstances under which an individual can manifest its capacities, strong autonomy does. If one can be self-conditioning, one is less dependent on other enabling conditions and therefore capable of carrying out activities under a wider range of external conditions. A capacity for strong autonomy therefore directly translates into a higher degree of health.

Let me try to spell this idea out more clearly. If, for the sake of argument, we imagine someone lacking any discernible level of autonomy: a *Homo Pavlovian* who only acts on the basis of first-order desires and activity-provoking external factors. The conditions for realising any potential would be restricted to conditions and circumstances under which he or she just happens to exhibit some capacity, similar to salt dissolving whenever it happens to be surrounded by water and glass shattering whenever it happens to get struck. An individual capable of acting autonomously in the strong sense of autonomy, by contrast, would be able to manifest dispositions in a much more variable set of external circumstances, including those where activity-provoking external factors are entirely absent. Now, the crucial point is that a person capable of autonomous activity in the

strong sense has a potentiality that is *greater* than the non-autonomous person. The ability to perform an activity autonomously makes for a greater potential to perform that activity because the manifestation is possible in a much wider range of external circumstances and conditions. The reason why a capacity for strong autonomous activity amounts to improved health is because autonomy broadens the circumstances under which a human being can manifest its capacities.

A more indirect way in which autonomy could result in greater health follows from the fact that a capacity for autonomous activity enables one to manifest precisely those activities that will end up making one more capacitated. Here weak and strong autonomy are both relevant and equally function as conditions for improvements of health. In the absence of any form of autonomy one is handed over to external circumstances and the desires that happen to move one through life. As Frankfurt says, he would be “a helpless bystander to the forces that move him.”²⁰ One acquires and develops the capacities one just happens to develop, and one’s health will for the most part depend on how fortunate one is in one’s external circumstances and the desires that happen to reign. With a capacity for autonomy, however, the will can condition the realisation of potentials that will result in the acquirement of new and broadly conditioning potentials.²¹ A capacity for weak autonomy would enable one to refrain from activities that are likely to result in some capacity reduction. A capacity for strong

²⁰ Frankfurt, “Freedom of Will,” 21.

²¹ The will can also condition the realisation of potentials that will effectively undermine one’s health. The problems generated by this possibility will be discussed in the next section, §1.3.

autonomy would enable one to manifest capacities that would directly result in an expanse of capaciousness; via an act of will one could subject one's body to physical training, for instance, or engage in studies, learn new crafts, and so on, also when the external conditions and first-order desires are not sufficiently strong to realise the relevant dispositions.

Autonomy is therefore, in and of itself, both *constitutive* of health, as well as an important *condition* for health-improvements. Given the identification of objective non-moral goodness with objects that improve one's health, it follows that autonomy is an objective non-moral good for human beings. To briefly repeat the stages of argument: all living beings have objects and states that are objectively good and bad for them in a non-moral and relational sense; what is objectively good for a living being is what promotes its health; health consists in a multiplicity of potential for activities; developing a capacity for strong autonomy directly translates into a greater potential for activity; strong autonomy is therefore part of health and objectively good.

The claim, then, is that developing autonomy is good for human beings for the same reason that nutrition and exercises are good for us, and in the same way that sunshine is good for plants and grass is for cows. That is, the value of autonomy is grounded in *life* and what is naturally good for all living beings; it constitutes an increase in what we as living beings can do. This idea is not to be mistaken for any humanisation of life itself: the idea is not that autonomy is possible for all forms of life, or that non-human health should be evaluated in terms of autonomy. The thought is only that for living beings capable of self-

conditioning, cultivating and strengthening strong autonomy is objectively good for exactly the same reason that all other things are objectively good or bad for *any* living being: it increases one's health, i.e. one's overall potential for activity.

The strong form of autonomy that I identified above must thus be understood as a central part of human health, while strong and weak forms of autonomy make an important condition for health-improvements. If all this is true, this implies that inhibitions to the cultivation of human autonomy amount to nothing less than an impoverishment of human health. Speculating briefly where such inhibitions to individual autonomy originate, we may be inclined to look at political and legal systems, perhaps to coercive working conditions, authoritative systems of education or even a lack of education; factors like excessive parental control, gender inequality; and possibly even the brain-washing brought about by widespread exposure to advertisements. Although truth could probably be found in all of this, it is worth pointing out that obstacles to the development of autonomy could also come from the opposite direction, *viz.* from life lived under extremely favourable circumstances. If someone is never forced into reflection by an experience of hardship, or if one is required to manifest strong acts of will-power to overcome internal and external obstacles, one's degree of autonomy could remain relatively underdeveloped. Self-sufficiency and self-control do not come natural to most of us. Periods of hardship, adversity, isolation, and oppression—in the right doses of course—may turn out to be conducive to the development of autonomy, maybe more so than a life-long tailwind, a

wide range of external incentives and rewards, and reliable systems of social support. The suggestion, then, is that not just oppressive circumstances but precisely situations in which people enjoy great levels of comfort, social support, and external incentives, human autonomy may remain relatively underdeveloped. The question under which conditions human beings tend to expand and strengthen their autonomy is of course an empirical question. But it is worth pointing out that a threat to human health is the life we described earlier as 'decadent': that unconcerned, uneventful, balanced, comfortable, relaxed, peaceful, and stretched-out life that is so commonly associated with health. In any case, the central claim defended is that autonomy is to be viewed as *part* of human health as well as an important condition of possibility for the cultivation of health. Rather than thinking that one has to be healthy in order to live an autonomous life, I have argued that the opposite is true: a human being has to be autonomous in order to be healthy.

4. Human Health and Final Goods

A third distinctive feature of human life I shall examine more closely is our ability to strive for goals and ends at the expense of our health. Human beings have an ability to adopt and pursue, what we may loosely call, 'final goods': objectives, in any case, that can diverge from, and that may require means that directly undermine, the maintenance of our health. Final goods could be defined along Aristotelian lines as

states pursued for their own sake rather than for the sake of something else.²² Whether it concerns sacrifices we make for the welfare of others, the pursuit of a career, writing a difficult book, the achievement of demanding physical challenges, forms of creative expression: we can and often do adopt final goods where the means to realise them undermine and occasionally even destroy our health.

The very possibility for a discrepancy between pursuing final goods and maintaining health gives rise to a number of questions we shall confront. First, is health itself is to be viewed as a final good for human beings, perhaps as one amongst others? Or does health merely contribute and provide conditions for the realisation of final goods? Second, does the nature of human health change according to the final goods people adopt? Or does the nature of human health remain unaffected by the things we pursue as ends? And third, is an ability to strive for final goods that undermines our health somehow part of living a healthy human life, or does this just straightforwardly oppose what is healthy for us? In order to get a handle on these questions we first have to understand more clearly what underlies the possibility for a discrepancy between health-promotion and the pursuit of final goods. In an effort to answer these questions I shall return to recent work by Christine Korsgaard, as she has written extensively on the nature of final goods and their relation to health—even though her position is one I shall in the end come to disagree with.

²² See Aristotle, *Nicomachean Ethics*, 1094a18.

4.1 *Korsgaard and Health Relativism*

Korsgaard defends the view that final goods for human beings depend on the kind of lives we find worth living and choose to live, and the practical identities we take on in doing so. Her conception of final goods—and I shall follow her lead on this—is one that depends on what individuals decide or experience as “desirable or valuable for its own sake.”²³ And she allows for variation in what people experience as desirable and valuable in that way—more so, in any case, than Aristotle did. Korsgaard thinks we see final goods “as things to go for” and they will “include whatever promotes and constitutes our practical identities.”²⁴ She explicitly and repeatedly distinguishes final goods from the kind of goods that are health-promoting, which she calls the “motherly sense” of goodness in one paper and the “evaluative sense” of goodness in another.²⁵ Initially, Korsgaard keeps these two senses of goodness apart—final goods and health-promoting goods. As long as they are kept apart the possibility for a discrepancy between the two can easily be explained. If final goods are choice-dependent and health-promoting goods are not, an opposition becomes possible between the two depending on the choices we make. If one chooses a way of life that involves compromises to one’s health, a tension can emerge between the

²³ Korsgaard, “On having a Good” 3.

²⁴ Korsgaard, “On having a Good” 28.

²⁵ In ‘On Having a Good’ she speaks of the way in which some things are good in a ‘motherly’ sense of goodness, by which she means things that are health-promoting, and contrasts this with the ‘final’ sense of goodness. In ‘The Origin of the Good and Our Animal Nature’ she expresses the same distinction in terms of ‘evaluative goodness’ in contrast to the ‘final sense’ of goodness. When explaining the motherly sense and the evaluative sense of goodness she turns in both papers to Aristotle’s function argument, which I already discussed in §2.6 of Chapter Two.

two kinds of goodness. Although this is roughly the view I shall adopt below, Korsgaard's view is on closer inspection rather different.

First it is important to recognise that the possibility for a tension between health and pursuing final goods is reserved for human life alone. For non-human organisms the maintenance of species-typical capacities, including their reproductive capacities, does not appear to serve any further end or good. That is, the maintenance of health *just is* the final good for non-human organisms. Korsgaard agrees with this verdict, as we already saw in §2.6 of Chapter Two, and defends the thesis that Aristotle did so as well. She writes that "Aristotle's theory of the final good for an organism is essentially to be healthy," or more specifically, "to lead a healthy life of its kind in circumstances favourable to its leading such a life and continuing to lead such a life."²⁶ There is of course a question to be raised whether final goods can be attributed to non-human organisms at all, especially if final goods are by definition choice-dependent and intertwined with practical identities. This is a question that we touched on before and one I shall not elaborate on further.²⁷ I shall presume more tentatively that *insofar as* bacteria, plants, and animals indeed have final goods, their final good coincides with the maintenance of health.

Human beings do have the ability to adopt final goods other than the sustenance and development of health. This is also Korsgaard view: she writes that an identification of health with final goods "may be a plausible thing to say about the good for a plant or an animal, it may

²⁶ Korsgaard, "Origin of the Good," 22.

²⁷ See for a further discussion: Korsgaard, "The Origins of the Good," sections 6-8; and Korsgaard, "On Having a Good," Section 6.

seem to be too thin as an account of the human good.”²⁸ Korsgaard argues that the nature of animals and plants determines that well-functioning for them means nothing other than attaining and maintaining a state of health. The nature of human beings, by contrast, determines that well-functioning involves choosing “a way of life” and making something “valuable” and “worthwhile” out of oneself.²⁹ Phrased in Aristotelian terminology, she argues that the “forms” of plant and animals determine that attaining a state of health is their final good, whereas we “choose our own forms,” in virtue of being capable to decide for ourselves “what is worth doing for the sake of what.”³⁰ The very form of human life, she argues, is constituted by the choices we make and the final goods we adopt; according to Korsgaard we are *self-constituting* beings in the fullest sense of the term.

In line with Kant, Korsgaard argues that human life is distinct from the rest of life primarily due to our *self-consciousness* and capacity for *reasoning*. She states that while animal life is governed by instincts that seek out and track the kind of objects that would benefit their health—objects that are non-morally good in an objective but relational way—human beings are expelled from such an instinct-governed garden.³¹ Human beings are self-conscious, which, she claims, “opens

²⁸ Korsgaard, “Origin of the Good,” 22.

²⁹ See Korsgaard, *Self-Constitution* 128; Korsgaard, “Origin of the Good,” 22. In order to support the view we *should* make something valuable out of ourselves she turns to Kant’s formula of humanity. See Christine Korsgaard, *Sources of Normativity*, ed. Onora O’Neill (Cambridge: Cambridge University Press), 131-166.

³⁰ Korsgaard, *Self-constitution*, 127-128.

³¹ The chapter in which she describes the human condition is entitled “Expulsion from the Garden.” Korsgaard, *Self-Constitution*, Chapter 6.

up a space between the incentive and the response”—a space she calls “reflective distance.”³² Within this reflective distance we can question which incentives give us reasons for actions, reasons that are to determine “what is worth doing for what.”³³ The space opened up by self-consciousness gives human beings the possibility to determine their own final goods, and in doing so, constitute their own individual form. The properties that Korsgaard puts forward as underpinning our ability to adopt ends other than health are therefore precisely what we described previously as our capacity for autonomy. Our ability for self-conditioning and self-control not only allow us to realise capacities that maintain and improve our health, but also to pursue ends with opposite implications. Organisms lacking the ability for self-determination and self-control are dominated by instincts that, indeed, fairly reliably seek out those objects that sustain their health. Human autonomy constitutes a break with instinct-driven life and gives us the ability to pursue ends other than the maintenance of our health.

When the pursuit of final goods coincides with an expansion of health the two different kinds of goods cause no friction. More interesting are cases in which the pursuit of some final good results in a lessening of one’s health. If, for example, ascending the world’s most treacherous mountain—one that will almost certainly take one’s life—is adopted as final good, the *summum bonum* one decides to live and die for, then pursuing one’s final good practically implies an annulment of health. Or a little less extreme: if one’s final good is to push the frontiers

³² Korsgaard, *Self-Constitution*, 116

³³ Korsgaard, *Self-Constitution*, 116

of experimental jazz and finds that a regular intake of harmful doses of narcotics are necessary to get into the right mindset, this too involves means to realise one's final good that are health-undermining. Or more down to earth: if someone in old age wishes to continue living in his family home and makes this his final good, the true end of all his efforts and strivings, even though living in his home environment implies depriving himself of necessary care and support, a quicker deterioration of health, and possibly an earlier death, the living at home would also take its toll on the health of senior. However, in describing the means towards the realisation of these final goods as health-undermining, it is presupposed that health itself remains the same thing for the mountaineer, the aspiring jazz musician, the senior home-dweller, and everyone else—irrespective of the final goods they indeed pursue.

One could question whether what is healthy alters according to one's final goods and thereby call into question my central assumption that the meaning of health remains stable when predicated over different human beings and different types of organisms. Would it not be healthy for the mountaineer to practice at high altitudes and challenging ridges and to ignore activities that would secure his future existence, just to maximise his chances of achieving his ultimate goal? And similarly, would the narcotics not precisely be *healthy* for the zealous jazz-musician precisely because they promote him in his practical identity and help him achieve his final good? As we already saw in Chapter One (§1.5), Nietzsche's view is that the meaning of health changes according to one's aims, goals, and ends. Nietzsche, to repeat, thinks that "it is only sensible to speak of 'health' and 'illness'

with an eye to an ideal that has to be reached.”³⁴ What is healthy would differ for each of the hypothetical subjects on Nietzsche’s official view.

Korsgaard is more ambiguous on the possibility of a health-undermining pursuit of final goods. The two senses of goodness, health-promoting goods and final goods, are on closer inspection less far apart than she initially suggests. In summary of her own views, she writes that “the final sense and the motherly [health-promoting] sense of ‘good for you’ mention *the same set of facts*, but from two different perspectives.”³⁵ And, she continues, “it is because these two perspectives can come together that there is such a thing as the good.”³⁶ As long as the two senses of good come together there is little to worry about. The question is what happens if they don’t and whether this indeed a possibility on her way of thinking. In other words, we have to question whether Korsgaard thinks that final goods and health-promoting goods *necessarily* refer to the same set of facts. It seems to me this is precisely what she thinks. The reasons why Korsgaard is committed to this view shall be discussed shortly. But if she is indeed committed to the view that final goods and health-promoting goods *necessarily* refer to the same set of facts, this would leave two options: either health-promoting goods are relative to final goods or final goods must be in line what is simultaneously health-promoting in order for them *to be* final goods. The first option is Nietzsche’s official position again: whether one is healthy, and what promotes one’s health, depends on one’s self-chosen final goods. The second option is that final goods

³⁴ Nietzsche, *KSA* 9, 11[112]. My Translation.

³⁵ Korsgaard, “On Having a Good,” 19. My emphasis

³⁶ *Ibid.*

are limited to those things that would simultaneously be healthy when pursued. On this second option, people pursuing goods that undermine their health would not be pursuing any final goods at all since final goods would *have* to be congruent with what is health-promoting.

Of these two options, Korsgaard favours the first: Nietzsche's official view. Korsgaard writes that "the functional [health-promoting] sense of good-for and therefore the final sense too will include *whatever promotes and constitutes our practical identities*."³⁷ If our choices of final goods and our practical identities really constitute us as what we are, including the very forms of human life, then *whatever* helps one function in accordance with one's practical identity is to be regarded as healthy. If practical identities imply a reduction of overall potentiality for an individual this still means one is healthy, if we take her on her word. The semi-suicidal mountaineer would function healthily by practising on perilous crests and actualise his self-chosen and self-constituted form by dying on his favoured mountain. For the jazz-musician it would be literally healthy to use narcotics, as these too would help him to sustain his practical identity as a cutting-edge jazz musician. Failing to recognise the hazardous mountain quests and psychoactive drugs as health-promoting in these cases would be to fall short in appreciating who these individuals are and *as what* they have constituted themselves. Judging their behaviours as unhealthy would be to mistake them for people without the final goods and practical identities that define them; it would be to take them for beings they are not.³⁸

³⁷ Korsgaard, "On Having a Good," 28. My emphasis

³⁸ For Korsgaard's account of empathy see: Korsgaard, *Self-Constitution*, 201-202.

There might be aspects in Korsgaard's work that guard against this kind of health-relativism, but putting together the various premises she defends throughout her work seems to make the relativism of health inescapable. If final goods are choice-dependent and those choices constitute one's practical identity, and if what is health-promoting depends *entirely* on one's practical identity, it follows that what is healthy for human beings depends on one's self-chosen final goods. And this is where I take issue with her position: self-constitution and our practical identities don't cut all the way down and aren't wholly decisive in what is good for us, *precisely* when it comes to matters of health. Certain things are healthy and unhealthy for us regardless of our final goods and subjective preferences; they are good in virtue of us being a living being. If the narcotics of the jazz musician destroy his liver and kidneys, make his teeth fall out, erode central parts of his brain, prevent him from forming productive human relationships, significantly reduce his life-expectancy, and so on, the narcotics are simply unhealthy, no matter how innovative his improvisations are and how much he values his identity as a pioneering jazz musician. And if the senior home-dweller is not capable of nourishing himself and basic hygienic measures, continuing to live at home would require means that are unhealthy for him, regardless of the final good he has adopted. The relationship between health and final goods must therefore be different from the way I have interpreted Korsgaard as conceiving of it.

4.2 *Final Goods as Necessary for Health*

How are we to think of the relationship between health and final goods then? I shall follow Korsgaard in taking final goods to depend on what people choose or experience as worthwhile pursuing for its own sake. Final goods, that is, are subjectively chosen ends that can vary between individuals and even differ within the lifetime of one individual. Final goods are therefore not grounded in the way I argued health-promoting goods are objectively grounded in the nature of life. Final goods depend on what one subjectively chooses to pursue as a final good and nothing other than one's choices grounds or objectifies these ends.

Retaining the distinction between the two senses of goodness opens the possibility for evaluating the means to a self-chosen final end as health-promoting or not. On my account of health pursuing a final good is healthy if results in a proliferation of capacities and unhealthy if it brings about an irreversible reduction of total capacities. This does not mean that final goods *as such* are healthy or unhealthy: living at home, playing jazz, or climbing mountains could be health-promoting for other individuals or neutral with respect to their health, depending how the means to realise these ends affect someone's health.³⁹ A final good can be health-promoting for one individual and health-undermining for another. But once we keep health-promoting goods and final goods apart we can evaluate whether the means required for the realisation of some final good for some particular individual are beneficial to his or her health or whether they are not. And precisely this possibility is unavailable to Korsgaard and Nietzsche official view, as for both

³⁹ On this point I am indebted to conversations with Andrew Tyler.

philosophers health-promoting goods are relative and instrumental to the realisation of one's self-chosen final goods and practical identities. Resisting their relativistic position on the nature of health makes it possible to argue that for specific individuals pursuing certain final goods is healthier than pursuing certain others.

This relationship between health and final goods is not to be confused with the idea that health itself is *the* final good for human life. Final goods, to repeat, are states of affairs people experience as valuable or desirable for their own sake rather than for the sake of something else, *whatever* they might be. The claim that the means and pursuit for subjectively chosen ends can be healthy or unhealthy for an individual does not imply health itself is to be regarded as the ultimate final good. People *may* experience health as a final good and decide to adopt the development of health as the ultimate aim of their strivings. Especially after a period of severe illness it is not uncommon to hear expressions of the belief that health is the greatest good and the most valuable aspect of life. Regaining and maintaining health *may* therefore be adopted as a final good and as the end of one's efforts and strivings. But the recognition that the means to realising final goods can be evaluated in terms of how health-promoting they are for specific individuals and insisting that these evaluations are objective, does not amount to postulating health itself as the ultimate final good.

In fact, pursuing health as a final good would under most circumstances and for most people not even make for a very healthy final good. Broadening one's capacity only for the sake of broadening one's capacities would strike most of us as a rather futile enterprise, one

for which we would quickly lose the motivation and inspiration. Final goods may be ultimately groundless, relative only to one's choices and practical identity, but pursuing health as a final good is likely to be experienced as fairly pointless and meaningless, especially if there are alternative ends available that one could pursue.⁴⁰ We typically aim to realise objectives that have meaning outside the contours and limitations of our own lives: goals that give us a sense of purpose and meaning in life. The pursuit of health is not likely to generate this sense of meaning. Final goods that would more effectively facilitate our health are likely to be objectives that aren't primarily directed at one's health, but ends of which the pursuit would simultaneously make one more capacitated. If one's final good is to raise a family, for instance, to contribute to an institution's success, to write a book, to reach athletic targets, etc., one has to develop a range of capacities and sustain them over extended periods of time. These sorts of subjectively chosen ends are more likely to give us the motivation to develop and keep on developing ourselves in various dimensions of life, and in doing so, to maintain and improve our overall health. Experiencing a lack of meaning in one's activities and pursuits can be paralyzing and extremely incapacitating, rapidly resulting in the deterioration of one's health.⁴¹ Precisely striving for self-chosen ends that give us a sense of meaning and purpose enables us to maintain and expand our capacities

⁴⁰ Pursuing ends other than maintaining minimal levels of health may not be available for people living in deprived parts of the world.

⁴¹ Nietzsche would call such a condition *passive nihilism*: "a sign of weakness" where "the strength of the spirit may be worn out, exhausted, so that previous goals and values have become incommensurate and no longer are believed [...]." Nietzsche, *Will to Power*, §23.

and thus to improve our health. In order to live a healthy life, therefore, we *have* to adopt final goods different from the promotion of our health if we have the option to do so; that is, we *have* to adopt goods we deem worthwhile pursuing for their own sake. Adopting final goods and dedicating ourselves to realising them is precisely how we sustain and improve our health. The ability to adopt final goods and to experience certain states of affairs as worthwhile pursuing for their own sake, I would suggest, are therefore crucially important to human health.

How about final goods requiring means that undermine our health? Contrary to Korsgaard's view, it seems perfectly possible to adopt final goods requiring means that significantly reduce the multiplicity of one's total potential for activities and thus undermine our health. Things get more complicated, however, when we dig a little deeper and question with respect to what these health-undermining pursuits would be unhealthy. I just advanced the idea that human beings have to set themselves goals and targets in order to maintain and develop their health. It would be naïve to think that final goods requiring means undermining someone's health could be evaluated vis-à-vis a state in which they would not pursue any final goods at all, as if living without final goods would provide better conditions for health. Not only are we always engaged in various projects and directed towards certain ends, without such ends we would not be doing—or even be capable of doing—much at all. A health-undermining pursuit of a final good is therefore unhealthy only insofar *other* final goods *could* be adopted by an individual involving means that *would* condition better health.

But adopting a final good that withstands some level of reflective scrutiny is not like picking an apple from a tree. Choosing and subsequently experiencing something as worthwhile for its own sake is an extremely complex affair. Giving up on some final good is equally exceptionally demanding. Informing the jazz musician that his ways to achieving his end are unhealthy for him will probably not make him change paths, and even if he were to try so it is not a given he would be able to devote himself to alternative ends that would better sustain his health. We can easily fall into a state in which we get fixated on achieving some particular goal, subsequently becoming unable to redirect our energy and attention elsewhere and to strive for different ends. If no other end could be experienced as worthwhile pursuing then the required alternative compared to which the particular means towards some final good were judged as health-undermining would be unavailable. A seemingly unhealthy pursuit of some final good *might* therefore not always be unhealthy on a closer assessment of an individual's options and psychological make-up: it might just be as healthy as it could possibly get for someone. If the senior desiring to continue living in his family home would not be able to experience anything as worthwhile doing in the nursing home and fall into complete and irredeemable passivity, perhaps his health would be better served by continuing to live at home. The pursuit of some final good is therefore health-undermining *only if* an adoption other final goods would be possible for the individual by means of which his or her health would be better served. Once one's psychological state has become fixated on the pursuit of one particular final good, even if the

means towards its realisation are health-undermining in a self-evident and irreversible way, it may turn out that pursuing this final good will bring about the state of health that is empirically the best possible for this individual. The adoption of final goods can therefore set a contingent constraint on how healthy one can become. In other words, the maximum *attainable* health can be limited by one's self-chosen final goods, especially if the choice for final goods has become rigidified. Individual health as well as absolute health, however, would continue to be undermined if the means to some end are unhealthy: one could have been healthier given the individual one is and the species one belongs to. So attainable health can be influenced and limited by a final good, whereas individual and absolute health cannot.

Pushing the latter point further, we could argue that a degree of *non-attachment* to one's self-chosen final goods is generally conducive to our health. A level of flexibility in the kind of things one can experience as worthwhile pursuing for its own sake contributes to one's overall health for at least two reasons. First, if one can no longer continue to pursue some end for one reason or another, flexibility in what one can experience as worthwhile will enable the adoption of a new final good and thereby facilitate the maintenance of one's action-potential. And second, if one actually achieves one's final good and realises the deeply desired state of affairs, flexibility in what one can experience as final goods will allow one to adopt new final goods that could sustain one's health. There is also a risk of *not being attached enough*, however, which could prevent one from trying hard to accomplish one's final good.⁴²

⁴² I am indebted to Senthuran Bhuvanendra for pointing this out to me.

Non-attachment could also descend into a kind of indifference, laziness, and decadence that would prevent one from developing the capacities necessary for realising one's ends. Even though a degree of non-attachment is conducive to health, commitment and resilience in pursuing one's final goals are equally characteristic of health, since without it, one's action potential is bound to be constrained.

4.3 *The Great Health*

Having argued, contra Korsgaard and Nietzsche's official view, that it is possible to undermine one's health in the pursuit of a final good and that striving for ends other than the maintenance of one's health enables us to maintain and expand our health, we can now return to the question whether a health-undermining pursuit of a final goods is part of health or indeed simply opposed to it. The question I want to raise is this: would holding on to the prospect and expectation of a long life not precisely signify a lack of strength and health? Would avoiding health-threatening activities not precisely be incapacitating and therefore symptomatic of unhealthiness; perhaps even an unhealthy attachment to life? Does the ability to climb perilous mountain crest not precisely indicate a greater potential for activities possessed by the mountaineer? Does the ability to completely devote oneself to one cause and sacrifice one's health in doing so not precisely exemplify *greater* health; a greater health, in any case, than one in which someone were just to remain endlessly capacitated?

In short, I think the answer to these questions is 'yes', and that the capacity account of health can help explain why these questions have to be answered in the affirmative: being able to give up on one's future health directly results in a significant expansion of one's current potential for activity. If one is not limited by interests and concerns about one's future health a whole range of potential activities opens up that otherwise would remain precluded, including a one-way ascent to a mountaintop. With an ability to sacrifice one's health one is capable of carrying out a large number of activities and realising a much greater variety of ends than if one were to lack this ability and remain attached to one's own health. The capacity account of health therefore implies, paradoxically, that one can achieve a state of greater health the moment one is capable of undermining and even relinquishing one's health in the pursuit of one's ends. The paradox is that in giving up the concern for one's future health one precisely reaches a state of greater health, i.e. a state in which one has a greater potential for activities.⁴³ A soldier with a capacity to storm out onto an open battlefield, to pick an obvious example, has a greater action-potential than one who is forced to stay behind in the trenches due to a lack of courage, even though the former may destroy his health through his act of bravery and the latter will preserve it.

⁴³ Similar paradoxes appear in the context of freedom and autonomy: one is freer if one is capable of giving up one's freedom and limited in freedom if one cannot; likewise, one's autonomy is greater if one is able to autonomously give up one's autonomy, for otherwise there is an aspect of one's life, *viz.* one's own autonomy, over which one has no power of self-determination. Health seems to follow the same pattern: health is greater if one is capable of engaging in activities that entail subsequent loss of health.

There is a risk of falling into contradiction here, however, for how can something be simultaneously health-undermining and health-improving? The basic idea I am driving at is that lacking the ability to sacrifice one's health restricts the scope of what one is capable of doing and significantly constrains the ends one can adopt and realise. When specifying the nature of capacities and dispositions, I drew attention to the fact that to have a capacity or disposition does not mean one has to realise the capacity and manifest the activity. If the relevant conditions do not arise the disposition will remain dormant. In order to possess the 'greater health' currently under consideration, one therefore does not in actuality have to risk and undermine one's health in the pursuit of some end. But when adopting a final good that requires one to sacrifice one's health, someone possessing greater health would be able to realise such an end, which is precisely what renders this person healthier. And if someone were to lose her health in doing so, temporarily or even permanently, this would be nothing other than an *expression* of precisely this greater health. A mother who sacrifices herself for the welfare of her children, a jazz musician sacrificing his health for the sake of musical excellence, the mountaineer climbing a treacherous mountain, the soldier displaying bravery on the battlefield: all exhibit greater health by being able to do more due to their ability to sacrifice their health in the pursuit of their ends.

Not every pursuit or activity that undermines one's health is an expression of greater health, however, for otherwise we would have eliminated the possibility of ever doing something unhealthy. Constrictions on when health-undermining activities amount to greater

health must therefore also be identified. If people could pursue and realise their ends also without impairing their health, the ability to sacrifice one's health would not generate additional capacities. If the jazz-musician could improvise equally virtuosically without the detrimental quantities of psycho-active drugs, he would not gain additional capacities by sacrificing his health; he would *just* be undermining his health. If the senior desiring to live at home could realise his final good without becoming undernourished, he would equally gain no further capacities in becoming undernourished: he would *just* be damaging his health. Realising ends at the expense of health make for an expression of greater health *only* if these goods could not be realised via health-preserving or less health-undermining means. Actively relinquishing one's health in the pursuit of a final good is therefore expressive of greater health only if the ends could not have been achieved via alternative and less health-compromising means.

The idea that an ability to give up one's health enables the realisation of a much larger range of activities and that this ability constitutes 'greater health' is not only consistent with the proposed account of health, it is also a distinctly Nietzschean idea. In fact, the label 'greater health' is one that I directly adopted from one of his aphorisms. In an aphorism entitled "the great health" Nietzsche writes:

The *great health*—that one does not merely have but also acquires continually, and must acquire because one gives it up again and again, and must give it up.⁴⁴

⁴⁴ Nietzsche, *The Gay Science*, 382.

Like the rest of the aphorism, Nietzsche's words are elusive and open to a variety of interpretations. But the idea that one *acquires* health by being able to *give up* one's health comes out very clearly in this passage and is associated by Nietzsche precisely with 'the great health'. The passage also suggests that acquiring greater health requires a certain practice, *viz.* continually giving up and risking one's health in one's activities and pursuits. In the same aphorisms Nietzsche speaks of living "dangerously healthy," and specifies this is as an ability to inflict harm upon oneself and to risk "suffering shipwreck."⁴⁵ A high level of self-discipline is no doubt required to cultivate a will capable of conditioning health-undermining and possibly even life-threatening activities. Instead of safeguarding one's future existence by living securely and comfortably, Nietzsche point seems to be that actively risking one's health and future existence benefits our health. Nietzsche's insight here is consistent with the idea I just advanced: being able to live without a concern for one's health constitutes greater health, as it conditions a greater potential for activities. In full agreement with Nietzsche, I therefore conclude that the ability to adopt and pursue final goods involving a decline of health and possibly even suffering shipwreck, is indicative of being in a state of great health.

⁴⁵ Ibid.

Chapter 6

Associated and Rival Theories of Health

1. Nordenfelt: The Action-Theoretic Approach

1.1 Summary of Nordenfelt's Theory

An account of health that shares several important features with the theory of health defended above is Lennart Nordenfelt's 'action-theoretic' account of health, which he has spelled out in great detail and relatively consistently over a number of publications.¹ More clearly and decisively than anyone else in the philosophical literature Nordenfelt has defined health and illness at the level of abilities of human beings as a whole. In the literature his view is sometimes referred to as "the capability approach" to health, or "the holistic welfare theory of health."² One commentator labels Nordenfelt's theory of health even as

¹ For the discussion of Nordenfelt's views I rely on: Lennart Nordenfelt, *Quality of Life, Health and Happiness* (Aldershot, Hants: Ashgate Publishing Ltd., 1993); Lennart Nordenfelt, *On the Nature of Health: An Action Theoretic Approach*, 2nd revised & enlarged ed. (Dordrecht: Kluwer Academic Publishers, 1995); Lennart Nordenfelt, *Action, Ability and Health: Essays in the Philosophy of Action and Welfare* (Dordrecht: Kluwer Academic Publishers, 2000); Lennart Nordenfelt, *Health, Science, and Ordinary Language* (Amsterdam: Rodopi B.V. Editions, 2001); and Lennart Nordenfelt, "Understanding the Concept of health," in *Strategies for Health: An Anthology*, ed. Per Nilsen (Linköping: Linköpings Universitet, 2007): 4-15.

² Thomas Schramme, "A Qualified Defence of a Naturalist Theory of Health," *Medicine, Health Care and Philosophy* 10 (2007): 11.

one of only two theories of health that are “of utmost importance in the philosophy of medicine”—Boorse’s bio-statistical theory being the second one.³ Nordenfelt’s theory equally arises out of dissatisfaction with the view that health consists in an absence of disease and functional abnormality, and the continuous efforts to construe this as a strictly descriptive and value-free account of health. He too recognises that dysfunctions of functional parts must be measured against a conceptually distinct level of abilities of an organism considered as a whole, and that pain and suffering cannot be guiding in evaluations of health.⁴ In his works he attempts to provide clear definitions of the concepts ‘ability’, ‘happiness’, and ‘health’, and to demonstrate their inherent conceptual relations. In its simplest form, Nordenfelt defines health as a state in which one has the ability to realise the goals required for one’s own happiness. More precisely, he claims that “A is healthy if, and only if, A has the ability, given standard circumstances, to realize his vital goals, i.e. the set of goals which are necessary and jointly sufficient for his minimal happiness.”⁵ In order to show how his account falls short compared to the account advanced in this thesis, his definitions and theorising have to be spelled out more comprehensively.

Nordenfelt’s starting point is that health refers to an ability of a special kind. He distinguishes between first-order and second-order abilities: first-order abilities refer to the abilities one presently has and second-order abilities refer to abilities necessary for acquiring first-order

³ Ibid.

⁴ See for instance Nordenfelt, *Action, Ability and Health*, 78-80.

⁵ Nordenfelt, *On the Nature of Health*, 90.

abilities.⁶ In his words “A has a second-order ability with regard to an action F, if and only if, A has the first order ability to pursue a training-program after the completion of which A will have the first-order ability to do F.”⁷ Nordenfelt identifies health with an ability of the second-order kind: “to be healthy is to have, at least, a second-order ability to perform a certain set of actions. To be ill is to have lost or, in general, to lack one or more of these second-order abilities.”⁸ He believes the identification of health and illness with second-order abilities is necessary to make health less dependent on one’s particular environment, even though “it does not and cannot completely free us from the relativity of an action to an environment.”⁹ Whereas first-order abilities are relative to an environment, second-order abilities are introduced to capture how one can acquire abilities in new environments.¹⁰ Note that this distinction is different from what I have called basic and broadly conditioning capacities versus more specific capacities. Nordenfelt’s distinction contains a temporal aspect: second-order ability allows one to go through some type of training so that one will have the relevant first-order abilities afterwards. Basic or broadly conditioning capacities are distinguished hierarchically: one cannot

⁶ Nordenfelt, *On the Nature of Health*, 49-53; Nordenfelt, *Action, Ability and Health*, 73-74.

⁷ Nordenfelt, *On the Nature of Health*, 50.

⁸ Nordenfelt, *On the Nature of Health*, 53.

⁹ Nordenfelt, *Action, Ability and Health*, 73.

¹⁰ Nordenfelt’s favourite example is someone migrating to another country who does not have the first-order abilities required for earning a living, but who does have the second-order ability to undergo training that will enable him to acquire the first-order ability of speaking the language. See for instance: Nordenfelt, *On the Nature of Health*, 49.

have certain specific capacities without possessing the underlying and more basic capacities. Moreover, Nordenfelt's second-order abilities are in part defined in terms of the first-order abilities they are required for—they are abilities *for learning* specific first-order abilities—whereas basic capacities are not defined in terms of more specialised capacities, or a guarantee that one can acquire the more specialised capacity.

Having identified health with second-order abilities, Nordenfelt attempts to demarcate the relevant first order abilities for health, the second-order ability for which will determine whether someone is healthy or not. Not all first-order abilities are relevant or necessary for health according to Nordenfelt. Only abilities necessary for the realisation of specific goals are relevant, *viz.* the goals that will produce happiness for an individual once realised. Of the totality of goals and wants that a person may have there is a subset of goals that can bring about a minimum level of happiness when realised. This subset of goals Nordenfelt terms 'vital goals', a notion he defines as follows: "P's vital goals constitute the set of those states of affairs which are necessary and together sufficient for P's minimal happiness."¹¹ Minimal happiness is stipulated by Nordenfelt as corresponding to the "lowest degree of happiness:" a person who has not reached this state is "at least to some degree unhappy."¹² To be healthy, then, is to have the ability to realise the kind of goals that, taken together, will bring about a state in which one is, on the whole, not unhappy. In other words, "to be healthy is tantamount to having the ability, given standard circumstances, to

¹¹ Nordenfelt, *Quality of Life, Health and Happiness*, 8.

¹² Nordenfelt, *Quality of Life, Health and Happiness*, 48.

realise one's minimal happiness."¹³ Given the distinction between first and second-order abilities, however, he should have said that health is tantamount to having an ability to *acquire* abilities necessary for the realisation of goals that will bring about a minimal level of happiness.

Despite the close connection between health and happiness Nordenfelt emphasises that the two are not identical. He thinks health is compatible with unhappiness as well, since, first, a certain environment may prevent one from realising one's vital goals, and second, one may abstain from realising one's vital goals and choose not to be happy. Whether someone is healthy, on Nordenfelt's view, depends therefore strongly on one's vital goals, and thus on what makes someone happy. Individual goals and deeply held desires are built into the meaning of health itself. Of two identical people differing only in vital goals one can be healthy and the other one ill, on Nordenfelt's account.

The implications of this view become apparent at the extremities: cases in which one has extremely demanding vital goals and cases in which one has very easily satisfied vital goals. Starting with the former, cases in which someone's minimal happiness requires practically impossible or unattainable goals will make one per definition unhealthy on Nordenfelt's view, and he is willing to bite the bullet on this point.¹⁴ However, he claims that the 'illness' resulting from extremely demanding goals does not consist in a lack of ability vis-à-vis the demanding vital goals, but in a failure to set *realistic* goals.¹⁵ This move seems *ad hoc*, however, just as it is rather peculiar to call someone with

¹³ Nordenfelt, *Quality of Life, Health and Happiness*, 98.

¹⁴ Nordenfelt, *On the Nature of Health*, 74.

¹⁵ *Ibid.*

ambitious and unrealisable vital goals, per definition, ill. Moreover, an additional criterion would now have to be added to Nordenfelt's definition of health: health is the ability to acquire abilities necessary for the realisation of vital goals and the attainment of happiness, but only if one's vital goals are realistic. This last caveat generates a host of epistemological problems, however, and inevitably renders health relative to sociological, economic, and cultural conditions, since what is realistic in one place and time may not be at another. In addition to one's own state of being, contingent and variable environmental conditions will influence whether goals are realistic and therefore will partly come to determine whether someone is healthy or ill.

Cases at the other extreme also expose the problematic implications of Nordenfelt's account. If someone has vital goals that are very easily realised such that even serious injury won't threaten their realisation, it seems Nordenfelt's definition of health is too lax. Rather than just accepting that an unambitious, little desiring, but generally content and happy person is simply healthy, regardless of any injuries and inabilities—insofar as it would still be legitimate to speak of injuries—Nordenfelt chooses to keep his account of health floating via a different route. He argues that such cases should not count as “real happiness.”¹⁶ An “external observer” may question subjective reports of happiness, he writes, “if the conditions of happiness are so poor or on the ground that the behaviour displayed by the agent is unconvincing.”¹⁷ So on Nordenfelt's view someone like a monk who has

¹⁶ Nordenfelt, *On the Nature of Health*, 96.

¹⁷ Nordenfelt, *On the Nature of Health*, 96. For a similar turnaround see also page 74.

liberated himself from most worldly desires and who lives a harmonious, equanimous, and deeply happy life, despite physical frailties and injuries, may be judged unhappy by an external observer, just because the desires and goals would not have been ambitious enough to establish 'real happiness', which apparently must involve wide-ranging and demanding desire-satisfaction. This too is a most problematic move. It implies that individuals have no authority over whether they are happy or not and which goals are indeed vitally important to them. This immediately raises questions concerning the criteria on the basis of which external observers are to determine whether the goal-satisfaction base was substantive enough to bring about 'real happiness'. How many vital goals does one need to fulfil or be in the process of fulfilling, and how difficult do they have to be, to qualify for 'real happiness'? What kind of behaviour must be exhibited to render reported happiness 'unquestionable'? Nordenfelt's use of external observers effectively undermines the framework designed to incorporate subjective values and goals into the meaning of health. Moreover, the disjunction also complicates the definition of health further. In light of Nordenfelt's qualifications about 'real happiness', his account of health must now read: health consists of having second-order abilities to acquire first-order abilities necessary for the realisation of vital goals and the attainment of happiness, but only if one's vital goals are realistic, and only if conditions of happiness are not poor or supported by questionable behaviour in the eyes of external observers.

The final element of Nordenfelt's theory of health is an explication of happiness. Nordenfelt espouses that what a healthy person must be

able to do, or, presumable, what someone must have second-order abilities for, ultimately “rests on the notion of happiness.”¹⁸ Nordenfelt’s account of happiness is also most problematic, however, containing various ingredients, twists, and turns that barely add up to a coherent account. His theory of health could therefore best be evaluated with a non-technical desire-based account of happiness on the background. To do justice to his overall position, however, I will also outline the central tenets of his account of happiness.

From our discussion so far it is clear that Nordenfelt does not work with a hedonistic account of happiness but with an account that combines elements from goal- or desire-fulfilment view of happiness with an objective list theory, especially given his remarks about external observers being able to assess someone’s real happiness. The core of Nordenfelt’s account of happiness is the idea of an agreement between the way reality is and the way one desires it to be. He states that “a person P is happy with life, if and only if P wants his or her conditions in life to be as they are.”¹⁹ And in slightly different phrasing: “A is completely happy, if and only if A wants everything in the world to be just as she finds it to be.”²⁰ The account of happiness centres on an agreement between reality and one’s desires, i.e. “the degree of agreement between the state of the world – as P sees it – and his or her

¹⁸ Nordenfelt, *Action, Ability and Health*, 86.

¹⁹ Nordenfelt, *Quality of Life and Happiness*, 7.

²⁰ Nordenfelt, *Action, Ability and Health*, 86. He introduces this definition as an intuitive starting point, but in subsequent discussion he does not call it into question or revise it.

wants.”²¹ He takes this to mean that “if one's life as a whole is characterised by the fact that one's most important goals are fulfilled or are in the process of being fulfilled, then this life is with great probability a life in happiness or harmony.”²² This latter claim generates problems, for wanting the world to be the way that it is—or at least wanting it to be as one perceives it to be—is something quite distinct from having one's personal goals fulfilled. We can fulfil a wide range of personal goals in a world full of injustices, poverty, wars, cultural decline, environmental catastrophes, etc. It is perfectly possible to fulfil goals without wanting the world to be the way that it is. An agreement between the state of the world and the way someone wants it to be no doubt has some bearing on happiness, but this is hardly connected to fulfilment of personal goals. They would coincide only if personal goals include making the world precisely the way someone wants it to be, which, presumable, amounts to an overambitious vital goal, so an illness on Nordenfelt's view.

On a more charitable reading, though, we may simply suppose that personal goal-fulfilment is more important for happiness than the state the world is in. But the question remains which personal goals are to be fulfilled in order to reach 'real happiness'. The easiest answer to this question would be to revert back to what makes one emotionally happy: happiness would then consist in the fulfilment, or process of fulfilment, of wants and desires that are most effective in generating emotional or experiential happiness. But Nordenfelt chooses a different

²¹ Nordenfelt, *Quality of Life and Happiness*, 7.

²² Nordenfelt, *Action, Ability and Health*, 86.

strategy, and draws a distinction between 'high priority' and 'low priority' desires, whereby only the former are significant for happiness. High priority is not attributed to a desire on the basis of the intensity or longevity of happiness the fulfilment will generate, but on the basis of a cognitive principle. Nordenfelt is adamant about the fact that happiness is—what he calls—“a cognitive state,” as opposed to a feeling. He writes that “to be happy with life one must have a certain set of beliefs (or possibly some stronger cognitive states, such as conviction or knowledge).”²³ And, he continues, the conviction or knowledge involves knowledge about what one would choose if one were presented with a binary choice. A desire has a high priority for the kind of happiness Nordenfelt has in mind if one would choose its fulfilment over the fulfilment of another desire: “P's want for X at t has a higher priority than P's want for Y at t, if and only if P, in a situation of choice at t, where P can choose either X or Y but not both, would choose X, unless prevented by external or internal force.”²⁴ The hierarchy of desires that results from such either/or decisions determines which desires have the highest priority. And the upshot is that one's real happiness is greatest if most of the cognitively preferable desires are fulfilled. The quantity of fulfilled, cognitively preferred, and high-priority wants is what constitutes happiness, according to Nordenfelt—to the point, even, that he claims that “a person may be very happy without feeling happy at all.”²⁵

²³ Nordenfelt, *Quality of Life and Happiness*, 50.

²⁴ Nordenfelt, *Quality of Life and Happiness*, 57.

²⁵ Nordenfelt, *Quality of Life and Happiness*, 62.

To this basic picture of happiness Nordenfelt adds a second dimension, which he calls the ‘richness’ of happiness. If two people have all their high priority wants satisfied they should enjoy equal levels of happy on Nordenfelt’s view. But if one would have fulfilled more ambitious wants than another, Nordenfelt still wants to claim the former is overall happier. And he fleshes this out in terms of happiness being ‘richer’. Happiness is not richer if someone has fulfilled numerically more high priority desires, but only if one has fulfilled more ambitious desires. He thinks it is necessary to include the degree of difficulty of desire-fulfilment into the richness of happiness.

In addition to richness, Nordenfelt asserts that happiness generated by the fulfilment of vital goals must be a long-term and lasting kind of happiness, precisely because having abilities for their fulfilment makes one healthy. He writes that “the concept of happiness-in-the-long-run identifies [...] those states of affairs—indeed deeply wanted by the subject—which last for a long time or contribute to a development over time, which in its turn is still wanted by the subject.”²⁶ With this claim, Nordenfelt seems to be reverting back to long-term happiness *experience* rather than the more objective account of cognitively chosen, ambitious, and high-priority wants. And this is not an accidental mistake or permissible oversight. Nordenfelt is aware that cognitively chosen wants may only give rise to temporary happiness, since people tend to give preference to short-term happiness over more long-lasting fulfilment in their prioritisations of wants. Cognitive choice, he thinks, is insufficient to select and demarcate the kind of goals that

²⁶ Nordenfelt, *Action, Ability and Health*, 91.

people may choose as vital goals—the second-order ability for which would render them healthy. Long-term interests may not be sufficiently accounted for in this set-up, especially in light of the fact that we generally consider long-term interests important in evaluations of health. Nordenfelt concludes, in any case, and taking all considerations into account, that “A is completely healthy, if and only if A is in a mental and bodily state which is such that A has a second-order ability, given accepted circumstances, to realise the states of affairs which are necessary and together sufficient for A’s minimal happiness in the long run.”²⁷

However, taking all disjunctions and qualifications into account, Nordenfelt’s theory of health would add up to the following definition: health consists in having second-order abilities to acquire the first-order abilities necessary for the realisation of realistic vital goals, which, once fulfilled, will result in a state whereby, also in the long-term, one wants one’s conditions to be the way they are, and this happiness should withstand the critical scrutiny of external observers and their judgements about whether the goal-fulfilment giving rise to it was sufficiently rich and ambitious. And importantly, in case these criteria are not satisfied, one is not just less healthy on Nordenfelt’s view, one would actually be *ill*.²⁸ With this final formulation, then, we have covered the most important aspects of Nordenfelt’s action-theoretic account of health.

²⁷ Nordenfelt, *Action, Ability and Health*, 93.

²⁸ He writes that “‘Illness’ (as a general predicate applicable to a person as a whole) and ‘being ill’ will in my own theory be used as synonyms for ‘non-health’ and ‘being unhealthy’”. Nordenfelt, *Quality of Life*, 95.

1.2 *Further Critique and Comparative Notes*

The problems found in Nordenfelt's account of health are no accidents or easily corrigible mistakes; they follow directly from his attempt to define health in terms of abilities required for the attainment of happiness. By hinging health on the idea of happiness conceived of as desire and goal-satisfaction, Nordenfelt imports the problems inherent to desire and goal-based accounts of happiness into his theory of health. People with few or easily fulfilled desires and goals are bound to be healthy, while very ambitious people are guaranteed to come out as unhealthy. To counter these counter-intuitive consequences Nordenfelt includes disjunctions about vital goals having to be realistic; happiness having to be based on the fulfilment of many and challenging goals; external observers being able to judge someone's real happiness, and so on. Without these disjunctions someone with few desires and goals would simply be healthy, independent of other facts about one's physical or mental state, just as ambitious individuals would *de facto* be ill. The various specifications and disjunctions, then, only highlight the difficulties one enters into when trying to delimit the range of abilities constitutive of health to those that will generate individual happiness once fulfilled. The fact that a series of blatantly problematic disjunctions are necessary for maintaining the thesis that 'abilities for attaining happiness' captures the nature of health, demonstrates that the prospects for such a theory are not very promising.

In addition to the problems arising out of a desire and goal-based account of health and happiness, there is an epistemic problem to be added to the list of concerns. The kind of happiness that health should enable, as we saw, is not a temporary or fleeting sense of happiness, but precisely a future and lasting sort of happiness. The question is how one can ever know what will generate this kind of happiness. It is difficult enough to know what makes one happy in the short term, but it seems almost impossible to know what will generate future and lasting individual happiness. Given the near impossibility of knowing how individuals are going to be happy in the long run, it is nearly impossible to determine what people's vital goals are, and thus nearly impossible to know whether one currently has the abilities required for realising one's vital goals, and thus nearly impossible to know whether someone is healthy or ill. The epistemic difficulties inherent to normative theories relying on happiness were already recognised by Kant. In his famous passages on the indeterminacy of happiness, Kant writes that someone pursuing happiness "is not capable of any principle by which to determine with complete certainty what would make him truly happy, because for this omniscience would be required."²⁹ If health requires knowledge of what will make someone truly happy, omniscience would also be required for evaluations of health.

The advantage of defining health as a range of capacities vis-à-vis a maximum is that it does not rely on someone's individual goals and desires and that it does not depend on a state as elusive and indeterminate as human happiness. My proposed capacity account

²⁹ Kant, *Groundwork*, 4:418.

allows for the possibility that one can be healthy without being happy and happy without being healthy, and these options do not have to be explained in terms of unfavourable circumstances or failures to realise certain second-order abilities. It also implies that someone can be relatively healthy without having the ability to realise goals that will generate a lasting and true sense of happiness. And it also avoids the epistemic problems involved in determining what will generate this kind of happiness. On my proposed account of health, we may simply say that we may become *aware* of the restrictions to our health the moment we lack the abilities required for attaining happiness. This recognition is crucially different from the idea that being able to become truly happy is *constitutive* of health. Lacking abilities for attaining happiness, on my view, at best, only *reveals* constraints to health—constraints to health that would also obtain if they didn't happen to obstruct one's path to happiness.

One final disadvantage of Nordenfelt's view worth pointing out is its failure to capture the meaning of health for non-human organisms. Rather surprisingly, Nordenfelt agrees that one of the requirements of a viable theory of health is that it "should be able to account for the similarities as well as the differences between human health and the health of animals and plants."³⁰ Nordenfelt may of course retort that health was defined as the ability to realise 'vital goals', whereby 'vital' could also refer to the abilities enabling individual survival for non-human organisms. In the context of plants and animals, health would then only require having the abilities necessary for self-preservation.

³⁰ Nordenfelt, *On the Nature of Health*, 5.

But since this would play on two distinct and unconnected senses of 'vital', this would be a fallacious equivocation and turn his theory into a complete theoretical hodgepodge. Vital goals were stipulated as goals that will generate happiness once fulfilled, whereby happiness was defined as a cognitive notion involving certain beliefs about the world. It is impossible for organisms other than human beings to have vital goals understood on this definition. My capacity account of health that does not rely on happiness or individual goals, by contrast, but purely on the quantity of dispositions does not face these difficulties and can capture the nature of health for every possible living being.

2. Sen and Nussbaum: The Capabilities Approach

2.1 *Summary of the Capabilities Approach*

A theory prominent in political philosophy and welfare economics that shares even more similarities with my proposed capacity account of health is the so-called 'capabilities approach' developed by Nobel laureate Amartya Sen and Martha Nussbaum.³¹ Their view is worth

³¹ For the present discussion I shall rely on the following selection of Sen's works: Amartya Sen, "Equality of What?" in *Tanner Lectures on Human Values*, ed. Sterlin M. McMurrin (Cambridge: Cambridge University Press, 1980), 195-220; Amartya Sen, *The Standard of Living: The Tanner Lectures*, ed. Geoffrey Hawthorn (Cambridge: Cambridge University Press, 1985); Amartya Sen, "Capability and Well-Being," in *The Quality of Life*, ed. Martha C Nussbaum and Amartya Sen (New York: Oxford University Press, 1993), 30-53; Amartya Sen, *Commodities and Capabilities* (New Delhi: Oxford University Press, 1999); Amartya Sen, *Development as Freedom* (New York: Knopf, Random House, 1999); Amartya Sen, *The Idea of Justice* (Cambridge Massachusetts: Belknap Press of Harvard University Press,

considering in some detail not just to identify convergences with the account of health defended here, but mainly because the capabilities approach faces a number of similar difficulties and challenges. After introducing the most important features of the capabilities approach, I will suggest various ways in which the capabilities approach could benefit from the arguments presented in this thesis.

Perhaps the best question to start with is what Sen's and Nussbaum's capabilities approach is actually an approach to, as this question has no immediately available answer. Sen has presented the capabilities approach as an approach to describe the 'interests' of people, their 'standard of living', their 'well-being', their 'quality of life', their 'freedom', as well as being a theory of 'welfare', 'justice' and 'human development'. Nussbaum unites these target-concepts, at least to some extent, when she states that the capabilities approach is an approach to "comparative quality-of-life assessment" and "to theorising about basic social justice."³² In asking what someone's quality of life or standard of life is, the question to ask is "what is each person able to do and to be?"³³ The approach, then, is concerned with assessments and comparisons of inequalities and social justice, as well as identifying a task to governments and public policy makers to improve people's quality of life framed precisely in terms of people's capabilities.³⁴

2009). For Nussbaum's contributions I will rely on Martha Nussbaum, *Creating Capabilities: The Human Development Approach* (Cambridge, Massachusetts: The Belknap Press of Harvard University Press, 2011).

³² Nussbaum, *Creating Capabilities*, 18.

³³ Nussbaum, *Creating Capabilities*, 18.

³⁴ Nussbaum, *Creating Capabilities*, 19.

The capabilities approach has been designed as an alternative to more common ways in which quality of life is assessed in welfare economics, especially measures of wealth and utility, and arises out of a critique of these more commonly used approaches. The arguments Sen and Nussbaum provide against measuring the quality of life on metrics of wealth are fairly straightforward. The first point of critique is that measures like GDP per capita generally do not take distribution of wealth into account and therefore risk concealing inequalities and low living standards of large segments of a given society. Also if these shortcomings were corrected with more fine-tuned measures of wealth, however, it is quite obvious that quality of life will depend on what someone is able to do with their possessions and the kind of life material wealth actually makes possible. For if there are no possibilities for utilising commodities, being wealthy or having a large number of possessions is useless and will not impact one's quality of life. Moreover, nations equal in wealth, distribution of wealth, and possibilities for using commodities, may still diverge in terms of standards of health care, public education, levels of security, availability of leisure time, and so on, and therefore diverge widely in the quality of life enjoyed by its citizens. And finally, one's 'internal' states will also influence quality of life, including one's medical condition.³⁵ To adequately measure quality of life the mere assessments of wealth, on

³⁵ Sen offers the example of someone rich enough to be able to buy and consume food but who also happens to have a high metabolic rate and some parasitic disease, and compares this person to someone who is poorer but who does not have the parasitic disease and high metabolic rate. Despite being richer, the former may find herself more undernourished and debilitated than the latter. See for further discussion: Sen, *The Standard of Living*, 15-16

individual as well as aggregate levels, will therefore not suffice.³⁶ Sen concludes that “the standard of living is not a standard of opulence, even though it is *inter alia* influenced by opulence. It must be directly a matter of the life one leads rather than of the resources and means one has to lead a life.”³⁷ Sen quotes Marx on the “commodity fetishism” that continues to dominate economic theory and argues in favour of a general reorientation in welfare economics, even for a shift of paradigm, towards functionings and capabilities of people.³⁸ In a nutshell, *being well* and *being well-off* are simply not the same “and may possibly diverge a good deal.”³⁹

Sen and Nussbaum’s critique of measuring quality of life and well-being in terms of utility is more complex, mainly because of the different strands within utilitarianism itself.⁴⁰ Sen claims that goal or preference satisfaction is the strongest and most defensible form of utilitarian approaches to well-being. But also this strongest form of utilitarianism falls short in two important respects: first, it is completely dependent on the mental attitudes of people; and second, it avoids reference to people’s own values. The first shortcoming he calls the “physical-condition neglect” and the second the “valuation neglect.”⁴¹

The physical-condition neglect comes out clearest and most problematically in interpersonal comparisons of well-being. Sen writes

³⁶ Nussbaum, *Creating Capabilities*, 50.

³⁷ Sen, *The Standard of Living*, 16.

³⁸ *Ibid.*

³⁹ Sen, *The Standard of Living*, 15. See also Sen, *Commodities and Capabilities*, 19.

⁴⁰ For a more extensive discussion Sen, see: “Equality of What?,” 198-213; and *The Idea of Justice*, 272-282.

⁴¹ Sen, *Commodities and Capabilities*, 14.

that “a person who is ill-fed, undernourished, unsheltered, and ill can still be high up in the scale of happiness or desire-fulfilment if he or she has learned to have ‘realistic’ desires and to take pleasure in small mercies.”⁴² Someone who enjoys a much better quality of life and higher standard of living, by contrast, may have less personal desires fulfilled and therefore end up lower on utility scales. Utility conceived of as desire-fulfilment therefore falls short in covering the relevant factors of someone’s well-being. Sen’s argument evidently echoes the concerns I raised earlier about Nordenfelt’s action-theoretic account of health: having modest, easily fulfilled, and overall unambitious desires almost automatically renders one healthy on Nordenfelt’s view and in a state of well-being according to the utilitarian view that Sen criticises, while in actuality people may be relatively unhealthy, low in well-being, and suffering from poor standards of living. And, as Sen highlights, contrary to Nordenfelt, having ‘realistic’ desires *exemplifies* the shortcomings of desire-based accounts of welfare. The ways in which people adopt ‘realistic’ goals and desires expose the mechanisms by which desires and preferences adapt to one’s circumstances, rather than compensate for the weakness of desire-based accounts of welfare in the way that Nordenfelt thinks.⁴³

⁴² Ibid. Sen writes similarly, “A poor, undernourished person, brought up in penury, may have learned to come to terms with a half-empty stomach, seizing joy in small comforts and desiring ‘no more than what seems ‘realistic’.” Sen, *Commodities and Capabilities*, 20.

⁴³ In Sen’s words: “The utilitarian calculus based on happiness or desire-fulfilment can be deeply unfair to those who are persistently deprived, since our mental make-up and desires tend to adjust to circumstances, particularly to make life bearable in adverse situations. It is through ‘coming to terms’ with one’s hopeless

The valuation neglect of utilitarian approaches to well-being arises out of a distinction that Sen draws between values and desires. He writes that “valuing is not the same thing as desiring, and the strength of desire is influenced by considerations of realism in one’s circumstances.”⁴⁴ Although it is not obvious this distinction holds up under all circumstances, especially if valuations are understood as based on our desires, Sen seems right that desire-fulfilment *as such* does not necessarily mean one can engage in the kind of activities one values.⁴⁵ And Sen believes that quality of life is greatly influenced precisely by the ability and possibility to live the form of life one values. Sen’s argument is that utilitarian approaches to well-being do not necessarily correspond to the kind of activities and forms of life people would value if they were to engage in the valuational exercises. Utilitarian approaches neglect facts about whether people succeed in doing and being what they would value to do and to be if they would have had the possibility to reflect on what they actually value. And the conclusion he draws from this arguments is, again, that “how well a

predicament that life is made somewhat bearable by the traditional underdogs [...] The hopelessly deprived people may lack the courage to desire any radical change and typically tend to adjust their desires and expectations to what little they see as feasible. They train themselves to take pleasure in small mercies.” Sen, *The Idea of Justice*, 282-283.

⁴⁴ Sen, *Commodities and Capabilities*, 14.

⁴⁵ One possible way to draw the distinction between desires and subjective values is to regard values as ‘desires for certain desires’. Even though valuations would be based on desires, they would be distinct from first-order desires. Such an account could support Sen’s distinction between desires and values while maintaining that values depend on desires, *viz.* on second-order desires. See for further discussion David Lewis, “Dispositional Theories of Value,” in *Proceedings of the Aristotelian Society, Supplementary Volume 104* (1989): 113-137.

person is must be a matter of what kind of life he or she is living, and what the person is succeeding in 'doing' or 'being'."⁴⁶

The alternative to wealth and utility measurements that Sen proposes centres on what individual human beings are capable of 'being' and 'doing', which he refers to with the technical term 'functionings'. In my conceptual set-up I limited the use of 'functioning' to the functioning of parts and organs of an organism, and reserved the terms 'capacity'—specified as 'dispositions' and 'powers'—to describe properties of the organism as a whole.⁴⁷ Sen and Nussbaum use 'functioning' also at this higher and more general level, and in a sense that is even wider than my usage of capacities and dispositions. Functionings do not just refer to the activities people have the potential to carry out, but also to factors like "escaping morbidity and mortality, being adequately nourished, having mobility," and complex matters like "being happy, achieving self-respect, taking part in the life of the community, appearing in public without shame."⁴⁸ Functioning is what Sen calls an 'achievement' of a person: "that what she manages to be or to do."⁴⁹ Functioning is distinguished from having goods or wealth, to which functioning is posterior, as Sen points out, and also from utility, to which functioning comes prior.⁵⁰ Functionings are directly related to one's living conditions; in fact, they capture virtually all aspects of one's living condition. People's well-being, then, must be viewed and

⁴⁶ Sen, *Commodities and Capabilities*, 19.

⁴⁷ See §1.3 of Chapter Three.

⁴⁸ Sen, "Capability and Well-being," 36-37.

⁴⁹ Sen, *Commodities and Capabilities*, 7.

⁵⁰ *Ibid.*

measured in terms of the kinds of functioning they have managed to achieve—a functioning resulting from a combination of their own abilities, social and economic circumstances, commodities, and external opportunities. ‘Functioning’ captures the full matrix of factors involved in what one has achieved to be and how one manages to act, and only this complete matrix of factors captures how well one is doing, according to the central thesis of the capabilities approach.

Functionings are only one part of the picture, however, and although it is the most elementary concept, Sen and Nussbaum argue it has to be supplemented by a second concept. In some texts Sen calls this additional concept ‘advantage’ while in others he calls it ‘capabilities’.⁵¹ The additional element, in either case, refers to the “alternative combinations of functionings the person can achieve, from which he or she can choose one collection.”⁵² The idea is that someone’s functioning achievement—that which determines their degree of well-being—is only one way in which someone *could* function given their own abilities and external circumstances. Capabilities refer to the various alternative kinds of life available to an individual; it refers to the scope of options one can choose one’s actual mode of functioning from. Capabilities capture what Sen and Nussbaum call one’s degree of ‘freedom’: the

⁵¹ On page 30 of *Commodities and Capabilities* Sen defines ‘advantages’ as “the set of potential achievements and not just the actual one” —a term he employs similarly in *The Idea of Justice*, for instance on page 231. In most other works he refers to potential achievements and alternative functioning achievements with the term ‘capabilities’. As far as I can discern capabilities and advantages have exactly the same meaning. For the sake of simplicity, I shall use only ‘capabilities’ and will make no further mention of ‘advantages’.

⁵² Sen, “Capability and Well-Being,” 31.

freedom one has to choose one life over another, i.e. one way of functioning instead of another. A functioning achievement is therefore nothing other than the realisation of just one combination of capabilities that one can choose from; or in Nussbaum's words, "a functioning is an active realisation of one or more capabilities."⁵³ Now, crucially importantly, Sen and Nussbaum think one's interests, standard of living, and quality of life are determined not just by one's actual functioning achievement but also by the capabilities one has, i.e. the alternative ways of functioning one can choose from. To illustrate the point, Sen considers a case in which someone can choose between different forms of life—*A*, *B*, *C*, and *D*—from which the person happens to choose *A*. The functioning achievement will then be of a certain kind, namely *A*, and determines the degree of well-being. However, if the other options—*B*, *C*, and *D*—somehow become unavailable to her without losing the opportunity to choose *A*, something important has been lost, even though her functioning achievement remains identical. And the loss would be extremely significant in their view, as it effectively reduces the quality of life and standard of living. One would lose capabilities; that is, non-actualised functionings that one could have realised had one so chosen. The focus of the capabilities approach, Sen emphasises, "is thus not just on what a person actually ends up doing, but also on what she is in fact able to do, whether or not she chooses to make use of that opportunity."⁵⁴ And precisely at this point, it should be clear, Sen and Nussbaum's theory converges strongly with the account

⁵³ Nussbaum, *Creating Capabilities*, 24-25.

⁵⁴ Sen, *The Idea of Justice*, 235.

of health developed and defended over the last three chapters. I have argued that having a relatively large range of capacities constitutes good health, also if certain dispositions never get manifested and also if one subjectively attaches little value to the non-actualised dispositions. Sen and Nussbaum have defined the capabilities approach on the basis of the same basic principle, but in their terminological set-up one has a better 'quality of life' if one has greater 'freedom', that is, if one has more capabilities to choose one or more forms of functioning from.

The question why Sen and Nussbaum think more capabilities and alternative functionings indeed increase the quality of life, however, does not have an easy answer. Nussbaum and Sen also seem to disagree on this matter. Nussbaum states unreservedly that "capabilities [i.e. alternative functionings] have values in and of themselves, as spheres of freedom and choice."⁵⁵ And similarly, "options are freedoms, and freedom has intrinsic value."⁵⁶ Sen does not think this claim is sustainable. He thinks it would imply that "freedom must be valued independently of the values and preferences of the person whose freedom is being assessed."⁵⁷ The value of freedom would concern "just the 'range' of choice a person has—*not* how she values the elements in that range of what she chooses from it."⁵⁸ The size of the range of which one can choose does not have independent value according to Sen, in the way that Nussbaum claims it does. The main reason behind Sen's resistance is an idea that we encountered before, *viz.* the idea that the

⁵⁵ Nussbaum, *Creating Capabilities*, 25.

⁵⁶ *Ibid.*

⁵⁷ Sen, "Capability and Well-Being," 34.

⁵⁸ *Ibid.*

value of the elements included in the range of options matters more than the mere *number*. If someone can choose between three alternatives that one considers terrible, while someone else can choose between three alternatives that she sees as excellent, Sen thinks the freedom of the latter must be greater than the freedom of the former.⁵⁹ This is a strange claim to make, however, as the freedom and scope of choice is clearly identical. One does not have greater freedom the moment one likes the choices one has, nor does one become less free if one disvalues the available choice. At most, the freedom *to do what one values* is smaller if one's options are subjectively judged as poor. Nevertheless, Sen's point does demonstrate that freedom does not have intrinsic value in the way that Nussbaum claims, and in the way that I have argued as well. On Sen's view more capabilities and greater spheres of choice—which amount to the same thing—are valuable and add to the quality of life *only if* the capabilities are valuable.

Sen's position on the relation between values and capabilities generates important questions. If one could be functioning in a way that includes all valuable capabilities, or at least an optimal combination of the most valuable capabilities, why would having more capabilities still have value and significance for one's quality of life, especially given the fact that having more capabilities does not have intrinsic value? One answer Sen provides to this question is that people change their view over time about which capabilities they find valuable. Having a wider capability set allows one to reconsider which capabilities one values and

⁵⁹ Ibid.

wishes to realise in one's future functioning achievements.⁶⁰ The uncertainty of one's future values and tastes bestows value on having a wider range to choose from, without thereby admitting that a wider range of capabilities is valuable in and of itself, and independently of how the capabilities in the set are valued. Nevertheless, as Sen points out, if, hypothetically, one would already know one's future values and preferences, this would still eliminate the value of having a wider set than the set that includes the capabilities one would value over one's complete lifetime. Only the capabilities one will value and seek to realise in the course of one's life would have to be included in one's capability-set; having a greater range to choose from outside of this set would have no additional value or increase the quality of one's life. Sen thinks that having valuable options to choose from still has value, however, also under this hypothetical scenario, and therefore proposes an alternative explanation why this is so.

The route Sen suggests is to think of freedom and substantial acts of choosing as *itself* belonging to the doings and beings that comprise one's functioning achievement. He suggests that aspects of freedom are to be incorporated *among* the valuable functionings.⁶¹ This does not make the approach any more transparent however, for now functioning is no longer just a matter of realising one or more capabilities: capabilities themselves are to be regarded as part of one's functioning. So the idea Sen proposes is that choosing *A* when *B*, *C*, and *D* are available is a different form of functioning—one that is more valuable—

⁶⁰ Sen, *Commodities and Capabilities*, 42.

⁶¹ Sen, *Commodities and Capabilities*, 44-45.

than choosing *A* when *B*, *C*, and *D* are not available. But, to be clear, this would be the case only insofar as *B*, *C*, and *D* are capabilities that are positively valued, for otherwise we would fall back to the view that freedom and more capabilities have intrinsic value. Sen writes that “among the beings and doings are activities of choosing, and thus there is a simultaneous and two-way relationship between functionings and capabilities.”⁶² In resisting the idea that a larger range of capabilities to choose from, i.e. a bigger capability-set, is always more valuable and per definition beneficial to quality of life, Sen practically collapses the distinction between functionings and capabilities. And, as he is fully aware, the question why having of wider capability-sets is valuable is still not fully resolved. For if certain choice-capabilities are included in one’s functioning, we may still question whether alternative and wider capabilities outside the sphere of choice would benefit the person and increase the quality of his or her life. Although going to the heart of the capabilities approach, Sen deems these problems “ultimately not very important” and rests content with the thought that freedom-type considerations are relevant in evaluations of conditions of life.⁶³

Given the way Sen formalises the capabilities approach, it is clear that the value of capabilities must be determined independently from the scope, range, quantity, or number of capabilities people have, and that the *value* of the options included in the capability-set will ultimately

⁶² Sen, *Standard of Living*, 37. Elsewhere Sen writes similarly that “if choosing is seen as a part of living [...] then even ‘well-being achievement’ need not be independent of the freedom reflected in the capability set.” Sen, “Capability and Well-being,” 39.

⁶³ *Ibid.*

determine the quality of life—more so than the scope of choice. As I will elaborate below, this is where the biggest disagreement lies between the capabilities approach to well-being and my proposed theory of health. Sen writes resolutely that “the arbitrariness of choosing the *number* of elements as a reflection of the ‘extent’ of choice [would] make this a very limited approach, since the ‘quality’ of the elements must also make a difference.”⁶⁴ How one may go about valuing capabilities and determining which capability sets constitute a minimally acceptable quality of life is left completely open by Sen. He recognises that some capabilities are more ‘basic’ than others, but does not develop this thought further. He maintains that valuations may come from the person whose quality of life is being assessed, from accepted social standards, as well as from public reasoning, but he does not provide any further indications about which capabilities are valuable and to be promoted. Sen thinks that the capabilities approach only specifies “an appropriate ‘space’ in which the valuation has to be performed, rather than doing the valuation itself.”⁶⁵

Further developments of the capabilities approach will have to state which capabilities are valuable and which capability set corresponds to minimal standards of living, if the approach is indeed going to be helpful in promoting well-being and social justice. Nussbaum has developed the capabilities approach precisely in this direction and has provided a list of capabilities that would make

⁶⁴ Sen, *Capabilities and Commodities*, 44.

⁶⁵ Sen, *Standard of Living*, 107-108.

possible, what she calls “human dignity.”⁶⁶ She has specified a list of ten capabilities aimed to promote and protect areas of freedom so central that, as she says, “removal makes a life not worthy of human dignity.”⁶⁷ The list consists of 1) being able to live to a normal age; 2) having good health; 3) maintaining bodily integrity; 4) being able to use one’s senses, imagination and thought; 5) being able to have and express emotions; 6) being able to critically reflect on conceptions of the good; 7) having social affiliations; 8) being able to live with concern for animals and plants; 9) play and enjoy leisure time; and 10) having control over political and material environment.⁶⁸ Although the items on Nussbaum’s lists are no doubt vitally important for people’s quality of life and almost impossible to disagree with from a first-order normative point of view, the key question remains why this list of capabilities covers the minimal standards of living rather than any other list. What grounds or justifies these capabilities as central and minimally required for a dignified life? If someone from another part of the world were to disagree that a dignified life has to include these capabilities, would there be any ground or reason to favour this list over any alternative? If someone were to claim that a dignified life consists in constraining emotional expressions, for instance, or that play and leisure are just a waste of time and resources and therefore opposed to the dignity of life, on the basis of which considerations could Nussbaum defend the list? Nussbaum and Sen are clear about the fact that a list of essential or basic capabilities follows from a free-standing valuational exercise, but what

⁶⁶ Nussbaum, *Creating Capabilities*, 29.

⁶⁷ Nussbaum, *Creating Capabilities*, 31.

⁶⁸ For the full descriptions, see Nussbaum, *Creating Capabilities*, 33-34.

provides the justification of the outcome of this valuational exercise? Nussbaum's list of central capabilities is but one way in which the capabilities approach has been developed, of course, but it points directly to the Achilles heel of the approach: how it is possible to determine which functionings and capability sets are valuable? Only once this has been resolved, either substantially or methodologically, can the approach be employed to measure and promote quality of life and standards of living.

2.2 Four Key Differences

The similarities between the capabilities approach to quality-of-life assessment and my capacity account of health are numerous and striking. Most importantly, both theories share the conviction that the relevant items in evaluating a person's state of being are facts about what the person is capable of doing. Rather than subjective values, experience of pain and pleasure, measures of desire-satisfaction, material wealth, or social advantage, common ground is found in the idea that the scope of people's potential for activities captures best how well a person or organism is doing.⁶⁹ More interesting and illuminating, however, are the discrepancies between the two views, of which I will describe four. Working out these differences will throw the capabilities approach and the MPA account of health into sharper relief, which will enable me to point out some of the merits of the theory of health defended in the present thesis.

⁶⁹ Nussbaum thinks the capabilities approach also lends itself to analyses of the standards of living of non-human animals. See Nussbaum, *Creating Capabilities*, 28-29; 160-161.

The first and most important difference is that the capabilities approach is a compound theory, involving capacities of human beings themselves *as well as* possibilities and opportunities afforded by material and social environments. The MPA account of health, on the other hand, is strictly limited to the range of dispositions of human beings and organisms themselves. Nussbaum makes it clear that capabilities are “not just abilities residing inside a person but also the freedoms or opportunities created by a combination of personal abilities and the political, social, and economic environment.”⁷⁰ She does allow for a distinction between ‘combined capabilities’ and ‘internal capabilities’, but also the latter are reserved for abilities that are *developed*—effectively excluding what she calls “innate equipment.”⁷¹ The distinction between combined and internal capabilities serves to identify two different tasks for governments and societies: the promotion of internal capabilities and opportunities to utilise these capabilities. A society should not only provide education to its members, for instance, but also provide opportunities by which to utilise the capabilities acquired through education—e.g. by allowing freedom of speech on political matters. The dispositions referred to in our theory of health, by contrast, consist of innate and acquired internal dispositions alone, with the explicit exclusion of the possibilities provided by material, political, social, and economic environments. Significant though this discrepancy between the two theories is, it ultimately follows from the fact that the capabilities approach is an approach to well-being and quality of life,

⁷⁰ Nussbaum, *Creating Capabilities*, 21.

⁷¹ *Ibid.*

aimed at the promotion of standards of living and social equality— while the capacity account defended in the present thesis aims to capture the nature of health. Possession of material goods and opportunities to utilise them may bear on someone’s well-being and quality of life, and no doubt should be included in evaluations of standards of living, social justice, and analyses of social inequalities— but it does not affect one’s health, as I already argued in §1.4 of Chapter Four. Likewise, living in a society where one can express one’s emotions and political views will no doubt contribute to one’s quality of life, but is not something directly related to, or constitutive of, one’s health. The capability to appear in public without feeling shame may be important for social justice and equality, but lacking the opportunity to do so does not impair one’s health. Living in a society where minorities are discriminated against reduces the well-being, standard of living, and quality of life of the disadvantaged communities, but it does not render them less healthy. What emerges, then, is a useful and clear-cut distinction between ‘health’ and ‘well-being’: while health refers to the scope or quantity of capacities possessed by human beings themselves, well-being depends on the scope or quantity of capacities possessed by ourselves *in combination with* the possibilities and opportunities provided by a material, economic, and social environment. If we accept this distinction between health and well-being and push it to its extreme, it is possible to claim that someone could be in superlative health while being deprived of many possibilities and opportunities, when being imprisoned for instance, while one’s well-being and quality of life would be greatly impoverished under such circumstances.

The idea that health only refers to capacities of an organism itself and not to opportunities provided by an environment renders the MPA account of health immune to some of the criticisms that have been levelled against the capabilities approach. Bernard Williams, for instance, argues that there is a danger of trivialisation if one can generate capabilities from commodities. Every time commodities multiply, so would our capabilities. Williams's example is the creation of a new washing powder named 'Bloppo', which would automatically create a new capability, *viz.* "choosing Bloppo."⁷² Contrary to what advertisers want us to believe, Williams points out that our freedom isn't extended by this additional choice. Sen responds to Williams's objection that a valuational exercise of capabilities is called for in such instances, which would enable us to distinguish important capabilities from trivial ones like choosing Bloppo.⁷³ On my account of health, by contrast, and in line with the reply given to a similar objection in §1.4 of Chapter Four, I could maintain that the creation of Bloppo only makes for a change of circumstances (or conditions) without affecting the capacities (or dispositions) that we ourselves have and that constitute our health. Sen and Nussbaum's capabilities approach, incorporating circumstances (or conditions) *within* its set of relevant capabilities, must invoke valuative differentiations in order to render the invention of ever-more washing powders insignificant to well-being and quality of life. My MPA account of health rules out inventions like Bloppo as

⁷² Williams, "Interests and Capabilities," 98.

⁷³ Sen, *The Standard of Living*, 108.

increases of potential activity from the very start, regardless of how washing powders are subjectively or collectively valued.

It should be clear that Sen and Nussbaum's capabilities approach therefore cannot serve as a model for health—other than pointing to facts about what someone is capable of doing are the appropriate informational focus. Nevertheless, in a recent paper and well-received book publication, Sridhar Venkatapuram has suggested precisely this; *viz.* that the capabilities approach could be used as a theory of health.⁷⁴ Venkatapuram argues that Nordenfelt's theory of health comes close to a viable account of health but that the vital goals invoked by Nordenfelt form an empty set: they are dependent on people's goals and desires, and have no further content outside of these goals and desires. Venkatapuram thinks we are better off replacing this empty set of vital goals by "a core, stable, species-wide definition of vital goals."⁷⁵ He argues that Nussbaum's list of essential capabilities could fill in the blank spaces of Nordenfelt's vital goals. On Venkatapuram's view, health consists of "having abilities to achieve a certain cluster of capabilities and functionings," a cluster that "arises out of the values of human liberty and equal dignity."⁷⁶ This suggestion makes for an absolute non-starter, however, and hopelessly confuses the difference between measures of health and measures of quality of life. If someone cannot express one's political opinions due to oppressive political

⁷⁴ Sridhar Venkatapuram, "Health, Vital Goals, and Central Human Capabilities," *Bioethics* 27 (2013): 271-279. For a more elaborate discussion, see Sridhar Venkatapuram, *Health Justice*, (Cambridge: Polity press, 2011), 64-72 and 148-172.

⁷⁵ Venkatapuram, "Health, Vital Goals, and Capabilities," 275.

⁷⁶ Venkatapuram, "Health, Vital Goals, and Capabilities," 276.

circumstances, one is not automatically less healthy; if one is not free to wear the clothes one wishes to wear in public without shame, quality of life may be compromised but people would not *ipso facto* be unhealthy on nation-wide scales; and if people are discriminated against on the basis of their skin colour or sexual orientation, those discriminated against are not less healthy. Furthermore, health and bodily integrity are listed on Nussbaum's list of ten essential capabilities, which would create an obvious circularity: individuals would have to be healthy in order to be healthy. And finally, if Venkatapuram were right, being ill or disabled would be a loss of human *dignity*, which is downright offensive to incapacitated and impaired individuals: one certainly can live a dignified life while suffering from a disability or disease. The capabilities approach has been designed to expose, analyse, measure, and counteract social inequalities and injustices. If the most important and essential capabilities are lacking people live in *poverty* and *undignified* conditions, not in a state of ill-health or illness. Sen makes it clear that deprivation of capabilities amounts to poverty, not to unhealthiness or disease—although poverty could of course precipitate and increase the likelihood of disablements and diseases.⁷⁷ If Venkatapuram were to argue that health consists in having various essential capacities that are species-wide and cut across societies, then this would indeed be a claim compatible with my MPA account of health. But importing Nussbaum's list of essential capabilities to fill in the openness of Nordenfelt's vital goals is a radically different thesis. In any case, the first key difference between the capabilities approach and

⁷⁷ See Sen, *Development as Freedom*, 87-110; and Sen, *The Idea of Justice*, 254-257.

the MPA account of health is that the latter evaluates only the range of capacities possessed by organisms themselves, disregarding the freedoms and opportunities afforded by social, economic, material, and political environments—factors that do in fact play a pivotal role in the capabilities approach, and rightly so.

A second key difference between the capabilities approach and my theory of health is the way in which the value of capacities is to be determined. Especially Sen makes it unmistakably clear that on his view valuations of capabilities are to be conducted *independently* from the scope or range of capabilities. He argues that the source of valuations must involve “a mixture of ‘nature’ and ‘convention’.”⁷⁸ The valuation of capabilities must involve the values of the persons whose quality of life is being assessed as well as forms of, what he calls, “public reasoning” and the “reach of public discussion.”⁷⁹ He thinks the capabilities approach is consistent with “partial rankings and limited agreements,” and that it does not need any “given weights” of functionings or “fixed lists of relevant capabilities.”⁸⁰ Many have taken his quietism about the values of capabilities as a weakness of the approach—a weakness that Nussbaum tried to overcome by proposing a relatively fixed list of essential capabilities. In specifying the MPA account of health I argued that the value and rank of capacities could be determined on the basis of the scope or range of capacities they make possible, thereby avoiding an additional and free-standing moment of valuation and escaping the reliance on socially relative preferences.

⁷⁸ Sen, *The Standard of Living*, 108.

⁷⁹ Sen, *The Idea of Justice*, 242.

⁸⁰ Sen, *The Idea of Justice*, 242-243.

Capacities for specific activities require the possession of more basic activities, and these more basic activities take priority in rankings of capacities. What I have suggested, then, is a principle to determine which capacities are most valuable, without constructing the ranking from scratch, anchoring it in another normative notion like 'dignity', or resorting to the outcome of public debate. Certain capacities are just more basic, independently of consensus or subjective preference. Individuals and societies can subjectively or collectively decide to value one capacity over another, but what is most basic and thus objectively valuable can be determined on the basis of a hierarchical analysis of capacities, whereby the most broadly conditioning capacities and least conditioned capacities are most basic, and thus most valuable.

This solution to the valuation problem, it seems to me, could also be employed by defenders of the capabilities approach. The capabilities most fundamental and important for social justice and social equality are those that condition the biggest range of further capabilities for members of any given society. Equal opportunity, education, safety from violence and crime, escaping morbidity, freedom of speech, and decent health care, for instance, are basic and highly valuable capabilities *not* because public reasoning happens to converge towards them in certain societies, as Sen thinks, *nor* because a first-order normative exercise on the nature of human dignity would favour these capabilities, as Nussbaum claims, but because these capabilities provide the widest range of further capabilities in *any* form of social arrangement. If someone were to disagree with this verdict on the basis of certain cultural prejudices, I could say their prejudices are simply off

the mark and misguided, rather than merely non-consensual or based on misunderstandings of the nature of human dignity. What is most basic, for an individual organism as well as for a society, is a factual matter and follows from an analysis of which capabilities enable and condition the largest quantity of further capabilities. The capability to choose Bloppo is insignificant because it does not condition any further capabilities, not because of consensus or subjective normative considerations. I would therefore suggest that the capabilities approach could benefit from adopting the principle developed in the context of the capacity account to health, and in doing so, not only work towards a relatively fixed list of essential capabilities, but also gain a ground and justification for why precisely these capabilities are most valuable. Phrased in the terminology of the capabilities approach: the capabilities most basic for social justice are those that secure the greatest range of freedom for individuals in a society; or, conversely, capabilities most basic for social justice are the capabilities that if eliminated would most significantly reduce and undermine the freedom of citizens.

The third key difference is related to the previous idea and has to do with the value of the range, scope, and quantity of capacities *as such*. According to Sen, as we saw, the number or quantity of capabilities has no value *per se*: the value of a capability-set is determined by the value of the items it includes, not by its size—even though he thinks a larger set of valuable capabilities is preferable over a smaller set. On the view I developed in §1.1 of Chapter Four, however, two sets cannot be identical in scope while containing elements radically different in value. The objective value of the capacities included in the capacity-set, I

argued, is determined by the extent to which they enlarge the size of the set itself. So if a capability-set is significantly larger than another it must contain more valuable items on my view, since otherwise it could not have been a significantly larger capability-set. A set containing only worthless capabilities must be a small capability-set, as that is what it *means* for capabilities to be worthless. The consequence of this view is that a wider set of capacities is indeed always better than a smaller capability-set, independent of how a subject or society happens to value the items included in the set. Nevertheless, this view does not imply, as Sen protests, that freedom is valued independently of the capabilities one can choose from.⁸¹ On the view I suggest the degree of freedom and the objective value of capabilities are intertwined: if one has more objectively valuable capabilities to choose from one is automatically freer, since objectively valuable capabilities are objectively valuable *because* they imply a greater degree freedom—i.e. a greater number of potential activities one can engage in.

This proposal could eliminate the problem Sen faces in trying to account for the value of additional capabilities, which he tried to solve by making capabilities part of one's functioning. A capability set is widened most significantly, I would suggest, when objectively valuable capabilities are included in it. The greater the width of the capability-set, the more valuable functionings one can achieve. A set comprising only unimportant and worthless capabilities, by contrast, is per definition a small or narrow set of capabilities. Analysing the scope of one's capabilities and the value of one's capabilities are not two distinct and

⁸¹ Sen, *Capability and Well-Being*, 34.

unrelated exercises; the scope gives an indication of whether basic capabilities are available, and the value of one's capabilities tells something about the scope of the doings and beings that are possible. My suggestion that the objective value of a capability depends on the range of other capabilities it makes possible therefore not only provides a method by which to rank capabilities, it also explains why a wider range of capabilities—or greater degree of freedom—is always preferable: the greater the capability-set, the more objectively valuable capabilities it includes, and *vice versa*.

The fourth and final difference worth pointing out relates to a more specific statement of Nussbaum's. She writes that the capabilities approach sees the task of government as the promotion of spheres of freedom, rather than making "people lead healthy lives, do worthwhile activities, exercise religion, and so on."⁸² She claims that "there is a huge moral difference between a policy that promotes health and one that promotes health capabilities—the latter, not the former, honours the person's lifestyle choices."⁸³ On the account of health put forward in the present thesis, however, the 'huge moral difference' has collapsed entirely. Improving health means increasing the multiplicity of potential activity, i.e. increasing the range of activities one can engage in. Health-improvements consist in widening the scope of activities that people can engage in, so the promotion of human health is tantamount to enlarging individual freedom and autonomy—insofar as freedom is determined by one's own potential for activities and not by external possibilities and

⁸² Nussbaum, *Creating Capabilities*, 25.

⁸³ Nussbaum, *Creating Capabilities*, 26.

opportunities. The final point of disagreement is therefore that health and health capabilities mean precisely the same thing on my proposed account of health. Paternalistic and petty forms of 'health-promotion' that Nussbaum thinks are challenged by the capabilities approach have already been overcome in my account of health: health-promotion is always a matter of increasing one's potential for activity—or, if one prefers, an expansion of individual freedom and autonomy.

Conclusions

1. Value

Of all the things that can be considered good or valuable I have argued one subset allows for a naturalistic reduction, meaning that certain values are grounded in a combination of natural facts. Amongst the totality of things that we can call good there are things that are good for our own sake and that serve our own interests. Amongst these 'egoistic' goods there are things and events that are good because they benefit our health. If, as I have argued, health consists in a quantity of dispositions or capacities, then a species of the good can be reduced to objects and events that increase the quantity of dispositions and capacities of organisms. That is to say, when an object or event is non-morally good for an organism there is nothing extra going on than it maintaining or expanding an organism's quantity of capacities—by increasing the diversity of activities it can perform, the variety of conditions under which it can perform these activities, or the period of time in which it can perform the activities. The reduction of goodness to a quantity of capacities and dispositions is therefore a *double* reduction, with health as an *intermediate* concept. The reduction of goodness to health is a reduction of one normative concept (good) to another (health), while the reduction of health to capacities and dispositions reduces a normative concept (health) to non-normative concepts (quantity of capacities). Because of this second reductive step one category of the good has been reduced to a combination of natural facts.

Perhaps a less technical and more intuitive way of stating what it means to reduce a subset of goods to naturalistic features of organisms and their material environments in this two-stage way, borrowed from Kripke, is the metaphor of God creating the world and thinking about what he would have to create in order to determine the features that we are trying to understand.¹ Creating the material universe without living beings is not sufficient for anything to have value. The material universe would have to contain beings organised in such a way that they are alive. If God creates all the material elements of a universe in which some beings are indeed living beings, then the mere creation and ordering of the material elements would suffice for fixing the facts about what is good-for and bad-for organisms in a non-moral health-promoting way. There would be no need to create anything *in addition* to the material world to fix these facts. There would also be no need to endow living beings with consciousness (insofar as this would require endowing) so that certain objects or events can be experienced as valuable. What is valuable in a relational and non-moral way, therefore, is fixed by the creation of the material world alone. Moreover, when there are living beings there are kinds or species to which each organism belongs, and so there would also be facts about species-bound maximal capaciousness. Facts about the health of organisms are therefore also determined by the very same act of creating the material universe. So facts about organisms' health and facts about what is non-morally valuable for an organism would come automatically with the creation of the fundamental elements of the material world.

¹ Saul Kripke, *Naming and Necessity* (Oxford: Blackwell Publishing, 1981), 153-154.

This does not mean that the same objects and events are good for everyone in the way that morality traditionally designates the same actions as morally good, independently of individual differences and situational factors. The objectivity of non-moral values does not lie in a universal *validity* of certain actions or objects being good, but in the *source* of values, *viz.* an organism's as a whole, including its functional parts, in relation to objective features of external reality. Insofar as organisms are identically constituted, similar things will be non-morally valuable. Insofar as organisms are differently constituted, different objects and events will be objectively valuable. Yet, objects and events are objectively valuable in a non-moral way only if they promote the health of the organism as a whole.

Although I argued that a subset of non-moral goods can be reduced in this way, I maintained this does not entail that other values are similarly grounded in natural facts. Not only subjective non-moral values, but also the *moral* values that contemporary philosophers are typically interested in fall outside of the reductive picture. When God creates the material universe this may determine the facts about what is non-morally good for a living being, but it does not automatically determine the facts—if there indeed are any—about what is morally right and wrong. Whether typically moral claims like 'one ought not to kill' can be grounded in the nature of life, perhaps in a more indirect way, is something that I left open. But the groundedness and objectivity of non-moral goods does not, in any case, entail that there are moral facts equally grounded in a combination of natural facts and therefore similarly objective.

It should therefore also be recognised that a *tension* is possible between what is objectively non-morally good for a human being (health-promotion) and what could be considered to be the morally right way of acting. Nietzsche recognised the possibility of a tension between these two types of goodness as well and expressed it in terms of an opposition between moral ‘good and evil’ (*gut und böse*) and non-moral ‘good and bad’ (*gut und schlecht*)—a tension he portrayed as two opposing forces engaged in a historical struggle:

The two *opposing* values ‘good and bad’, ‘good and evil’ have been engaged in a fearful struggle on earth for thousands of years; and though the latter value has certainly been on top for a long time, there are still places where the struggle is as yet undecided.²

Nietzsche’s portrayal of moral goodness and non-moral goodness as engaged in a ‘fearful struggle’ results from his concern that morality can form a threat to human health. And we must conclude in agreement with Nietzsche that *if* morality results in the *elimination* of human capacities, morality is indeed inimical to health and something that can be criticised for reasons of health. Nietzsche is probably right to point out that morality can have disabling effects and oppose what is naturally good for us as living beings: it can weaken us and make our capacities for activities dwindle, especially capacities for activities and ways of thinking typically considered immoral.

² Nietzsche, *Genealogy of Morals*, §1.16.

To be clear, the idea is *not* that practicing moral constraint is unhealthy or that acting on the basis of a conception of what is morally right is necessarily antagonistic to life; the idea is that if morality transforms us, collectively or individually, so that we cannot carry out certain activities anymore—also if these activities are generally considered to be morally bad—morality will have reduced the total range of human capacities and thus compromised our health. With this in mind, we could perhaps appreciate Nietzsche’s warnings for the physiologically and psychologically degenerating effects of morality:

These are the blessings of Christianity!—Parasitism as the *sole* practice of the Church; with its ideal of green-sickness, of ‘holiness’ draining away all blood, all love, all hope for life; the Beyond as the will to deny reality of every kind; the Cross as the bade of recognition for the most subterranean conspiracy there has even been—a conspiracy against health, beauty, well-constitutedness, bravery, intellect, *benevolence* of soul, *against life itself*.³

The claim that objective non-moral goods are *distinct* from conceptions of moral goodness, and the Nietzschean idea that the morality can *oppose* the cultivation of health, do not, however, render the conception of objective non-moral goodness *anti-moralistic*; that is, I do not think that the conception of health is inherently morally bankrupt in its proclaimed non-moral status. There are three reasons I would point to if the charge of immoralism were indeed levelled against the present

³ Nietzsche, *Anti-Christ*, §62.

thesis. First, health has been identified at the level of *capacities* for activities and therefore does not make a claim on which actions one must realise. Second, capacities for activities usually deemed morally good are also part of health; the account of health favours neither moral nor immoral conduct within its own definition. And third, a capacity for behaving immorally seems *prima facie* a condition of possibility for morality itself: someone who has the capacity to act immorally but chooses not to exercise it is a morally better person than someone who does not have the capacity to start with; a person who can be cruel but who does not exercise it is *benevolent* and *merciful*—virtues unavailable to someone lacking the capacity for cruelty. The account of health and non-moral value is therefore not necessarily objectionable from a moral point of view; it is, indeed, an entirely extra-moral account.

A more general conclusion following from the enquiry into the nature of health is that different values have different ontological and epistemological characteristics. One subset of non-moral values is grounded in the constitution of living beings and its relation to an environment, and captures what promotes an organism's health. Subjective non-moral values, by contrast, depend on subjective attitudes and preferences and the objects that are subjectively valued. The status of moral values I have made no claim on. But all three kinds of values can be evaluated in terms of one another, and indeed, stand in direct conflict to one another. The common presumption in meta-ethics that one set of terms, so-called 'value terms', or 'moral concepts', have an identical ontological and epistemological status, I therefore conclude, is one that is better abandoned.

2. Health

I have argued that health consists in an organism's range of capacities relative to a maximum of realisable capacities, and specified this in terms of an organism's multiplicity of potential activity vis-à-vis its factual limitations. The greater an organism's range of capacities, or the greater its multiplicity of potential activity, the greater the organism's health. This account of health captures the *normativity* of health by stating that health consists in an organism's potential activities relative to a norm—the norm being the factual limitations to potential activities set by the species, the individual organism, or the individual organism at some stage in its life. The account of health captures the *objectivity* of health by relying on properties and norms that do not depend on subjective attitudes, preferences, or cultural standards. And it is *naturalistic* in that capacities and dispositions are properties that also figure in, and are required by, scientific explanations of the world.

For non-human life this means that an organism is healthy if it is capable of performing all species-specific activities, and it was in this relatively simple context that the capacity account of health most clearly suggested itself. But I argued that human health can be understood on the basis of the same principle; a human being is healthy if it is in a physical and mental condition such that it is capable of carrying out the largest possible range of activities under the widest set of circumstances. *Homo sanus* is therefore not characterised merely by an absence of disease or illness, nor by functioning within the bounds of statistical normality, but in a sense, closer to the Renaissance ideal of a *Homo universalis*: a versatile human being with expertise, knowledge, and

skills in virtually all domains of life, who excels in creativity, and who demonstrates a high degree of self-sufficiency and resilience in his or her pursuits. At the same time, I claimed this ideal will always be out of reach and impossible to completely realise as a result of the intrinsic limitlessness of human potential. The human condition is characterised by the possibility of always being able to become healthier in virtue of always being able to acquire more capacities, realisable under a wider range of circumstances, and sustainable for a longer period of time. Due to the possibility for an ever-greater potential for activity, it is possible for human beings to expand their health in diverging and even opposite ways; people can be equally capacitated on a quantitative scale but yet be capable of different activities. Although health is conceived of as *uniform* in meaning, human life permits of a plurality of ways in which one can be healthy. Especially when it comes to more specialised capacities, i.e. those that do not form a pre-condition for many other kinds of activities, people can differ significantly in what they are capable of and yet possess comparable degrees of health. Despite this element of pluralism inherent in human health, the having of basic and broadly conditioning capacities does form a universal requirement for healthiness, and variations in these more fundamental capacities do invariably signify substantial disparities in health. Although human health can be realised in different ways and take on different forms, there are many basic requirements for health that apply equally to all human beings. And the development and maintenance of these basic capacities does require a roughly similar and uniform regime of education, bodily training, nutrition, and so on.

In allowing for a degree of variation in the way that human beings can be healthy, the proposed account of health circumvents Nietzsche's concern that a universal theory of health inevitably becomes a homogenising and normalising force, constricting the diversity in ways of living that he considers so important for individual flourishing and cultural vitality. At the same time, the account of health steers away from the unreserved health-relativism that Nietzsche and Korsgaard endorse, first, by not having the nature of health depend on subjective factors, and second, by setting relatively clear limitations to the ways in which people can differ from one another while being healthy. The proposed account of health nevertheless contains a number of distinctively Nietzschean features: self-preservation and reproduction are not considered to be the defining features of health; pain and suffering are viewed as a requirement for health rather than its analytic opposites; health involves an ability to fall sick and convalesce; morality can pose a threat to human health; human health is characterised by autonomy and self-sufficiency; pursuing subjectively chosen ends is necessary for health; and being able to give up on one's concerns for future life and health conditions greater health. This does not mean, however, that the account of health can retrospectively be attributed to Nietzsche. His meta-normative subjectivism and his commitment to individual variation in his middle period writings thwart any attempt to formulate a universal account of health. And the reduction of life to will to power put forward in his later works takes health into quite a different direction, *viz.* one where health corresponds to levels of power and domination over one's material and social environment.

A further consequence of identifying human health with the full range of one's potential for activities is that *every* possible capacity and *all* potential activities are constitutive of health. This may be taken to imply that all aspects of human life are drawn within the scope and purview of medical knowledge, practice, and power—effectively *medicalising* all of human life.⁴ That is, the proposed theory of health may be taken to facilitate what some have called the “the tyranny of health” or even a “medical nemesis”: a dystopia where medicine and psychiatry permeate, control, and legislate virtually all dimensions of human life.⁵ Concerns about medicalisation following the proposed account of health can be countered with four reasons, however. First, I argued that a lessening of health does not necessarily signify the presence of illness or disease; diseases and illnesses are but one way of losing one's health. If medicine and psychology are restricted to the prevention, curing, or alleviation of pathology, there is no direct

⁴ ‘Medicalisation’ here may be defined as “a process by which nonmedical problems become defined and treated as medical problems, usually in terms of illness and disorders.” Peter Conrad, *The Medicalization of Society: On The Transformation of Human Conditions into Treatable Disorders* (Baltimore: The Johns Hopkins University Press, 2007), 4.

⁵ Daniel Callahan, “The WHO definition of ‘Health,’” in *The Roots of Bio-Ethics: Health, Progress, Technology, Death*. (Oxford: Oxford University Press, 2012): 68. Ivan Illich, *Limits to Medicine, Medical Nemesis: The Expropriation of Health* (London: Marion Boyars Publishing, 1976). Among the numerous authors expressing concerns about the ways in which medicine and psychology have infiltrated areas of human life, the most trenchant articulations can still be found in the works of the post-war social critics Ivan Illich and Thomas Szasz. See especially Illich, *Limits to Medicine*, Chapter 2; Thomas Szasz, “The Therapeutic State: The tyranny of pharmacy,” *The Independent Review* 5:4 (2001): 485-521; Thomas Szasz, *The Medicalization of Everyday Life: Selected Essays* (New York: Syracuse University Press, 2007).

concern about medicine and psychology infiltrating other spheres of life. Second, I argued that health consists in the dispositions that human beings possess *without* technological or pharmaceutical aid. Good health is characterised precisely by an *independence* from medical power and medical technology and therefore directly opposes any reliance on it. Third, perhaps most importantly, on the proposed theory of health the study and the promotion of health are extricated from the monopoly of medicine and psychology; if health consists in a range of dispositions and capacities a much wider range of disciplines must be recognised as contributing to the understanding and improvement of human health, including fields like sociology, anthropology, pedagogics, history, art, political science, etc. Instead of a ‘medicalisation’ of everyday life, therefore, the theory of health could provide the basis for what we may loosely call the *humanisation* of medicine and psychology—the idea that medicine and psychology belong to a larger number of humanistic disciplines engaged with the study and promotion of our health. And fourth, I argued that autonomy is essential to human health. If promotion of health is tantamount to promoting individual autonomy and independence from medical power and technology, any form of medical paternalism would be self-defeating: it would only promote its own undoing. The proposed positive account of health, which does indeed encompass the full spectrum of human capacities, therefore neither reinforces the medicalisation of human life in any straightforward way nor justifies the intensification and proliferation of medical power; if anything, it supports the emancipation from any such medical forces and powers.

3. Ethics

Relatively little has been said about the ethical ramifications of the proposed theory of health, other than that an account of objective non-moral goodness has ethical significance only in the context of human life. Only for human beings can beliefs about what is valuable and what it means to be healthy influence the way we go about living our lives, and so only for human beings does non-moral goodness translate into ethical goodness. There are nevertheless also reasons why a theory of health has limited ethical significance and why it cannot simply be inflated into a wholesale ethical theory. The first reason is that health, also on the expansive definition that I have argued for, does not enjoy hegemony over the good. In addition to health-promoting goods there are objects, events, and ways of living that people subjectively value and that are good from a subjective point of view. Furthermore, the account of health leaves entirely open *which* ends one is to pursue, and asserts only that adopting and pursuing ends *as such* is an important condition for health and hence objectively valuable. Moreover, the account of non-moral goodness does not rule out the possibility of there being *moral* goods or *moral* constraints to be imposed on one's conduct. A comprehensive ethical theory, answering the question how to live a good human life, should probably accommodate subjective values and moral constraints as well, and nothing in what has been said so far implies that values unrelated to health should not be allowed to play an integral role in our ethical theorising and practical deliberations.

But perhaps the biggest obstacle to deriving a full-fledged ethical theory from the account of non-moral value and theory of health is that health and health-promoting goods are, in virtue of being *objective*, not of superior *importance* than things that are subjectively valued or morally required. The objectivity of health-promoting goods does not imply that other values and considerations cannot be, or should not be allowed to be, overriding in one's practical deliberations—or *vice versa*. Even if error theory is true for all moral statements, this does not imply that moral considerations are less important than the sustenance of one's individual health in reflections on how to act. The objectivity of the being and value of health only means that truth about the goodness of health-promoting objects, the positive value of being in a state of health, and what it means to be in a state of health, all do not depend on subjective attitudes, preferences, or experiences. In other words, objectivity refers to the metaphysical and epistemological status of, in this case, health and health-promoting goods, not to a hierarchy of what is, or should be, most important in practical deliberation.

Are we then entirely duped in thinking that a positive account of health has ethical significance? Not at all, but the limitations to what has been claimed must be recognised from the outset. I think the ethical ramifications of the theory of health come out strongest when it is applied to the various aspects of human life that ethical theory traditionally seeks to be instructive about. Only when working out the consequences of the proposed account of health, and so, in a sense, only *post hoc*, are we in a position to assess what the conception of health can offer in terms of a genuinely ethical theory.

A few examples could demonstrate what a health-based ethics would involve, although these should not be taken as anything more than speculative thoughts on the matter. We could for instance consider what a healthy *social* life would look like, or healthy friendships in particular. On the capacity account of health, a healthy friendship would be one whereby both parties promote the growth of each other's action-potential while simultaneously preventing a dependency on each other for realising the various activities—and in general, one whereby autonomous decision making is both promoted and respected. We could also consider the implications for our comportment towards our own individual *future*, and our own finitude in particular. The account of health implies, as we saw, that overcoming the anxiety and even concern for one's own death gives rise to a substantial expansion of MPA and to a state we called 'greater health'. Although overcoming anxiety for death has been degraded to a mere platitude of popular psychology by now, it was a central theme in ancient ethical thought, and no doubt requires a complex practice of self-discipline, reflection, meditation, and perhaps even actively risking one's health from time to time—a practice, in any case, that would traditionally be viewed as a distinctly ethical practice.

We could further think of our individual and collective *histories*, and the ways in which historical narratives can either promote or inhibit our potential for action—presenting us with a task of working through experiences that continue to exert an inhibitory effect on us, and equally, as Nietzsche points out, a task of *forgetting*, as he seems right to claim that “the unhistorical and the historical are necessary in equal

measure for the health of an individual, of a people and of a culture.”⁶ Likewise, we could consider the role and importance of *knowledge*—self-knowledge as well as knowledge of the external world. It is obvious that understanding the workings of the external world increases one’s potential for acting in the world, in the same way that self-knowledge is an important requirement for individual autonomy and self-control. At the same time, as Nietzsche was keen to point out, ever-increasing knowledge can also be hostile to life and our powers for action: too much self-knowledge can make us “gravediggers of the present”, he writes, in the same way that ever more scientific knowledge of the world could destroy the conditions required for adopting and pursuing subjective ends.⁷ That is to say, forgetfulness, biases, and illusions may equally turn out to be conducive to one’s potential for action, and an ethics based on an ideal of human health probably requires the setting of limitations to our striving for ever more truth and self-knowledge.

What these comments suggest, I think, is that a rich ethical picture can be built on the basis of the proposed account of health, but that its strengths and potential appeal, together with its limitations, will only become visible once the details are worked out. Although Nietzsche’s philosophy is very instructive and a rich source for a health-based ethics, the details cannot be determined by armchair philosophy alone; the task of discovering under which conditions we develop the largest action-potential is first and foremost an empirical task.

⁶ Friedrich Nietzsche, “On the Uses and Disadvantages of History for Life,” in *Untimely Meditations*, trans. R. J. Hollingdale (Cambridge: Cambridge University Press, 1983), 62.

⁷ *Ibid.*

The ethics we might be able to develop on the basis of the proposed account of health would be an ethics directed at the cultivation of oneself and one's own capacities, i.e. it would be an ethics oriented towards the betterment of one's own state of being, in both physical and mental respects. Such a health-based ethics could therefore best be viewed as standing in a lineage with the ancient conception of ethics, now standardly referred to as 'virtue ethics'. Rather than returning to the Aristotelian virtues or the ways of life professed by the Hellenistic schools, I think the proposed account of health enables us to approach this tradition of ethical theorising afresh, and determine which virtues and forms of living are indeed conducive to health, with individual autonomy and the ability to adopt and pursue self-chosen final goods as corner stones. This is all to say, then, that the proposed account of health holds a promise for a rich ethical theory, but that all the substantial work still remains to be done. And it is only with a more detailed and worked out picture that we can assess the precise nature and scope of the ethical implications of the capacity account of health.

An ethics based on an ideal of health would nonetheless face some of the challenges that virtue ethics in general faces. By disconnecting non-moral goodness from individual desires, attitudes, and preferences there is no direct link between the good and motivational structures for acting. If there are mind- and desire-independent facts about goodness, as I have argued, then there is no direct connection between these facts and one's motivations to act in certain ways. If the claims about non-moral value and health are to be extended into an ethical theory, merely stating something as good does not suffice; a further argumentative step

is required to support the idea that we indeed have reasons to act in accordance with the species of the good that we have discovered. Or more simply, if someone were to ask why he should invest in his own health, merely stating that health is objectively good is not a fully satisfactory answer. Philippa Foot overlooks this rather essential step, it seems to me, and jumps from recognising something as good to the conclusion that we must indeed act accordingly. She writes:

For surely human beings, who are capable of judging which states of affairs are better and which worse, could never be right to choose to produce a worse state of affairs when they could produce a better? Mustn't they always choose the better over the worse? To this one should reply roundly that it is no doubt a truism that they *should* act as *well* as they can.⁸

The truism she refers to is not a truism at all, however, and is question-begging with regard to the question *why* we should act in accordance with what we judge to be a good or better state of affairs.⁹ A moral psychology is required to support the claim that we *must* indeed act in

⁸ Foot, *Natural Goodness*, 49.

⁹ In her famous paper "Modern Moral Philosophy", inaugurating the rebirth of virtue ethics in 20th century Anglophone philosophy, Elizabeth Anscombe also underscores this point. She writes: "In *this* sense the notion of 'norm' brings us nearer to an Aristotelian than a law conception of ethics. There is, I think no harm in that; but if someone looked in this direction to give 'norm' a sense, then he ought to recognize what has happened to the notion 'norm', which he wanted to mean 'law—without bringing God in'—it has ceased to mean 'law at all; and so the notions of 'moral obligation', 'the moral ought', and 'duty' are best put on the Index, if he can manage it." G.E.M. Anscombe, "Modern Moral Philosophy," *Philosophy* 33 (1958): 15.

accordance with what is judged to be a better state of affairs. A moral psychology of this kind can be found in Kantian ethics, especially in the ‘Doctrine of Virtue’, in which Kant argues that we have an imperfect duty to promote our own powers and capacities, which, on my account, would be tantamount to having an imperfect duty to cultivate one’s own health. According to Kant, our rational nature obliges us to develop our capacities, and so our *rationality* would explain why we must invest in our health.

A human being has a duty to himself to cultivate (*Cultura*) his natural powers (powers of spirit, mind, and body), as a means to all sorts of possible ends.—He owes it to himself (as a rational being) not to leave idle and, as it were, rusting away the natural predispositions and capacities that his reason can some day use. [...] It is a command of morally practical reason and a *duty* of a human being to himself to cultivate his capacities (some among them more than others, insofar as people have different ends), and to be in a pragmatic respect a human being equal to the end of his existence.¹⁰

Kant’s argument supporting the claim that our rational nature obliges us to develop our capacities is notoriously complex and relies on deeply controversial assumptions about the nature of the human will. If an ideal of healthiness is indeed to serve as the basis for an ethics of self-

¹⁰ Immanuel Kant, *The Metaphysics of Morals*, in *Practical Philosophy: The Cambridge Edition of the Works of Immanuel Kant*, ed. and trans. Mary J. Gregor (Cambridge: Cambridge University Press, 1996), 6:444-5.

cultivation, I think ultimately the best way to present it, in keeping with ancient Greek forms of ethics, is as a fundamental choice: either live in accordance with what is naturally good for you as a living being, develop your capacities and powers in the broadest possible manner, attain a high degree of autonomy and self-sufficiency in your actions, in short, live a flourishing human life, or forego this opportunity and let your natural powers and dispositions wither and rust away.

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