KEELE UNIVERSITY

Thesis submitted for a Professional Doctorate in Medical Ethics

A conceptual analysis of trust in medicine: its definition, decline, and significance

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He cures most, whom most trust.[1]

Galen, ca. 129-199

Die größte Ehre, die man einem Menschen antun kann, ist die, dass man zu ihm Vertrauen hat.[2]

Matthias Claudius, 1740-1815

Not so long ago, the question of trust in the medical profession simply did not arise. Doctors functioned in a quasi-ecclesiastic atmosphere of patient awe and confidence.

[Clark 2002, p.14]

One would have to live on the Mars to be unaware that the medical profession is suffering from a crisis of trust.

[Tallis 2006, p.7]

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1 The quotation is taken from William Osler [Osler 1910, pp.272-273].

2 The biggest honour you can bestow on someone is to offer him your trust (my translation).

To

My wife Erika

In gratitude for her unwavering love, trust, companionship, and support

And to the memory of

My father, Karl Wolfensberger (1918-1990)

Whose honesty and modesty have always been an inspiration to me

Acknowledgements

I want to thank Dr. Anthony Wrigley, without whom this thesis would not be what it is (or perhaps would not be at all!). He has willingly read and re-read draft after draft, pointing to unsound arguments and to too sweeping conclusions, correcting errors of grammar and style. He has made valuable suggestions (many of which have found their way into this thesis) without ever forcing his opinion on me. He has guided my research to important questions and pointed out relevant authors. And, finally, he kept himself in the background, never pushing me, yet was always available when I needed his help.

I am also grateful to Prof. Bobbie Farsides and Dr. Jonathan Hughes for having accepted to act as reviewers and for their comments. In particular, I thank Dr. Hughes for pointing out many inconsistencies and faults in my arguments.

SUBMISSION OF THESIS FOR A RESEARCH DEGREE

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(c) The data and results presented are the genuine data and results actually obtained by me during the conduct of the research
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ABSTRACT[3]

Over the past decades, trust in medicine has steadily declined. The purpose of this thesis is to present a definition of 'trust', which helps us (a) understand what trust means in medicine, (b) analyse whether and if so why we have reason to be concerned, and (c) explain why it has declined.

In the absence of a coherent and comprehensive definition of 'trust', I propose a *'pattern-based definition'* derived from a conceptual analysis of trust. On this account trust is a justified expectation of the truster regarding the trustworthiness (i.e. competence and commitment) of the trustee. It presupposes conditions of uncertainty and the conscious acceptance of the trust-inherent risk by the truster and leads to a feeling of betrayal in case of a breach of trust. This definition enables us to differentiate trust from related concepts (such as confidence and reliance), helps us understand the role of trust in the patient-physician-relationship, and explains the decline of trust as well as the instrumental and moral significance of trust.

The *decline of trust* can be explained by physicians' loss of various types of authority (making trust appear unjustified) as well as changes of risk perception and risk acceptance (making trust appear irresponsible). Trust can be shown to be instrumentally useful (it offers advantages not compensated for by alternative strategies) and morally significant (illustrated by the feeling of betrayal caused by a breach of trust and underpinned by the concept of an 'obligation-ascription').

I *conclude* that this pattern-based account of trust (even though it may not be the only possible definition) is internally coherent and robust. Moreover, it has both discriminatory and explanatory power (i.e., it differentiates trust from related concepts and it helps to explain the decline of trust and the instrumental and moral value of trust).

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[3] A more extended summary can be found in Appendix II.

CONTENTS

PREFACE

Anyone picking up this thesis will probably wonder what motivated me to write it, and why he or she[4] should read it. I can definitely answer the first question, and I will try to answer the second.

Over the more than thirty years during which I have practiced head and neck cancer surgery I have witnessed many changes. One change that has increasingly haunted me is the decline of trust and its replacement by controls, regulations, etc. Some people, e.g. health-economists and managers of for-profit health institutions, welcome these changes. This is hardly surprising since these changes increase their power and influence. I, for myself, am puzzled; I am worried; and I feel somewhat humiliated. I am *puzzled* because I do not understand why patients, who only a few years ago trusted paternalistic physicians, today mistrust doctors who listen to them and who are willing to discuss possible treatment options. Moreover, I find it hard to understand why patients seem so little concerned about this development. After all, the patient-physician-relationship is not just any encounter. It is a special, intimate relationship. In almost no other relationship are we equally vulnerable, do we have to reveal similarly intimate details, and do we have to let ourselves be touched as in the patient-physician-relationship. In this situation, it would appear to be in the patient's interest to trust his doctor. I am *worried* because the vacuum created by the disappearance of trust is filled by bureaucratic regulations and controls and because I know from experience how much easier it is to treat a trusting patient. Finally, I *feel humiliated* because to me trust is a moral good, and unsubstantiated mistrust is an offence to anyone who does his best to justify the other's trust.

This is what motivated me to look into the problem of the decline of trust in medicine and to write this thesis. Now to the more difficult question why anyone should read it.

I think that most people will instinctively agree that trust is important in relationships,

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[4] For the sake of readability, I will use the male form in the sense of a generic pronoun implying both genders equally throughout the text.

especially in such intimate relationship as the one between patient and physician. And yet, the concept of trust has found rather little attention in the bioethical literature:

> "Autonomy has been a leading idea in philosophical writing on bioethics; *trust has been marginal*. … Trust is surely more important, and particularly so for any ethically adequate practice of medicine, science, and biotechnology. … Why then has … trust secured no more than a walk-on part?"[5] [O'Neill 2002a, p.ix, my italics].

Indeed, although there is no dearth of publications on trust there is no coherent, robust theory of trust in medicine. And none of the available definitions of 'trust' enables us to adequately explain what 'trust' means in the patient- physician relationship, why it has declined, and why it is "important for an ethically adequate practice of medicine" [O'Neill 2002a, p.ix,].

Using an analytic approach I have conceived a definition of trust that I believe is internally coherent and comprehensive (even though it may not be the only possible definition), and which I hope enables us to better understand the role of trust in medicine and to explain its importance and its decline.

This is why – I hope – anyone with an interest in the meaning of trust in medicine will benefit from reading this thesis.

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[5] To avoid any misunderstanding I use double quotation marks (") for *verbatim* quotations and single ones (') for those quotations that paraphrase the meaning of what an author says.

INTRODUCTION

In her Presidential Address at the 2004 Scientific Session of the American Heart Association entitled *Rebuilding an Enduring Trust – A Global Mandate,* Alice K. Jacobs said that "One of the most critical issues facing our profession today is the erosion of trust" [Jacobs 2005, p.3494]. I do not doubt that Doctor Jacobs got a thundering applause at the end of her address. After all, everybody is worried about the decline of trust [Shore 2007, p.3ff]. And yet, I am thoroughly convinced that few in the auditorium would have been able to say what exactly they meant by 'trust', what were the reasons for the alleged decline, and why they were worried (apart from the fact that 'doctoring' had become more difficult lately).

This statement may sound surprising, but it is not. As I hope to show, not only the public's understanding of 'trust', but even the definitions of 'trust' we find in the literature are on the whole rather vague and neither sufficient to explain the decline of trust, nor adequate to explain why we should worry about the decline of trust. It follows that our first and foremost need is an expedient definition of 'trust'.

So, the PURPOSE OF THIS THESIS is to present a coherent and comprehensive definition of 'trust in medicine'[6]; a definition which will help us understand what 'trust' means in medicine, what differentiates trust from related concepts such as confidence or reliance, why trust has declined, and why trust is not just a commodity but a moral good. For reasons that I will explain later I have decided to use a conceptual analysis approach.

Although the erosion of trust and its consequences is a concern of many people,[7] not

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6 I use the vaguer term 'medicine' rather than (as has been suggested) 'modern health care', because this would have meant answering the question what 'modern health care' entails; a question, which I do not think I could have answered within the framework of this thesis.

7 See e.g. the book *'The Trust Crisis in Health Care – Causes, Consequences, and Cures'*,

everyone agrees that it is real rather than imagined. Since the claim that trust has declined is a factual claim, it should be possible, at least in theory, to prove or refute it empirically. I have looked at the empirical literature, and there is indeed empirical evidence for the decline of trust. As this is not a thesis on empirical trust research, I have moved the section on the empirical evidence for the decline of trust to the Appendix.

At the end of this introduction, I will make a succinct statement of my goals and give a brief outline of the thesis. Yet before, as it were to set the stage for what is to follow, I want to present *two short model case histories,*[8] which serve to illustrate why I believe that trust has declined and point to some of the consequences of this decline. The beginning is common to both histories: One day a woman notices a small lump in front of her ear. Since it is painless, she is not overly worried, but when it does not go away after a few months, she consults a physician.

Now, here is the first case history. After listening to her history, asking a few pertinent questions, and briefly examining the patient, the doctor tells her that this is almost certainly a so-called 'pleomorphic adenoma' of the pre-auricular salivary gland (the 'parotid gland').[9] He tells her that this is a benign tumour, but that he would nevertheless recommend removing it. After briefly consulting with her family, the patient agrees and goes ahead with the recommended surgery.

And here is the second case history. After listening to her history, asking a few pertinent questions, and briefly examining the patient, the doctor performs an ultrasound exam and then sends her for a fine-needle aspiration biopsy. After he has reassured her that this is a harmless and almost painless procedure, she agrees. A few days later, she is told that the

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edited by D.A. Shore and published by Oxford University Press in 2007.

8 These cases histories are modelled on real cases and are slightly idealised for illustration purposes.

9 Pleomorphic adenomas are the most common tumours of the parotid gland.

cytology (i.e. the result of the needle biopsy) is compatible[10] with a pleomorphic adenoma of the parotid salivary gland. She is told that (in principle) this is a benign tumour, but that no biopsy can ever completely rule out a malignant tumour, because a few per cent of all pleomorphic adenomas have a malignant component that may have been missed by the aspiration biopsy. Moreover, she is told that about five per cent of all pleomorphic adenomas will eventually turn malignant if left in place for ten or more years. For these reasons (uncertainty with regard to dignity of the tumour and risk of malignant transformation), the doctor advises her to have the tumour removed. In addition ('just to make sure'), the doctor will send her for a Computerised Tomography (CT) and/or a Magnetic Resonance Imaging (MRI) exam. Of course, he tells her all about the side effects and potential risks of the surgery. Finally, the conscientious physician tells her that there is no alternative treatment option, and that even after properly performed surgery there is a five per cent risk of a later tumour recurrence. Yet, although this is comprehensive information, the patient searches for further information: At least she will ‘surf the internet’. Perhaps, she will see another physician to get a ‘second opinion’. She also asks the surgeon whether 'he has ever seen such a tumour', and 'whether he has performed the proposed operation before'. If she is brash, she may even ask whether he would also recommend the surgery if she did not have private insurance coverage. Perhaps, she will also consult a practitioner of ‘alternative medicine’ before she eventually decides to go ahead with the operation.

At first glance, the two stories may appear as the short and the long version of the same history, which in a way they are, of course. To understand why I have presented these two histories we must know that the first history is from the 1970s, whereas the second history is from today. Superficially, the main difference between the two histories is the amount of work-up. Yet, on closer inspection, we will see that the two histories differ with regard to

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[10] 'Compatible with’ is common medical usage and is not to be confused with ‘proves that’.

trust and that the increase of work-up in the second case must be ascribed to the mistrust of the patient. Of course, one may argue that this increase of work-up simply reflects 'progress' and the increasing sophistication of medicine. In part, this may be true. Nevertheless, not all of these exams are indicated,[11] and this amount of work-up is definitely not cost-effective.[12] In this situation, the pre-test probability of the lesion being a benign pleomorphic adenoma is well above 90%. Even the fine-needle aspiration biopsy is unlikely to add anything that would alter the treatment recommendation. And the information gained from either CT or MRT is simply redundant. Many of these tests are not administered because they are necessary but because of the physicians' apprehension in the face of what they perceive as the patient's mistrust.[13] I will show that the second history abounds with clues (some subtle, some not so subtle) pointing to the patient's mistrust. *In short*, *the two histories illustrate the decline of patients' trust in physicians*.

Now, let us have a closer look at the two histories. In the first history, the patient takes the physician's trustworthiness for granted just as the physician takes the patient's trust for granted. As it were, trust is the default option. This is no longer true in the second history. The patient's 'have you ever seen such a tumour before?' implies 'can I trust your diagnosis?' and his 'have you performed this operation before?' means 'can I trust your surgical skills?' For the patient these questions are a means of assessing the physician's competence. Yet, the physician perceives them as questioning his professional *competence*. The fact that many, if not most patients today consult the internet after the

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11 'Indicated' is again a standard medical term, meaning there is good evidence that an exam gives essential and new information.

12 If I had such a pathognomonic history and finding of a pleomorphic adenoma, all I would ask for is an ultra-sound exam to make sure the lesion was indeed in the gland, and to know whether it was in the superficial or in the deep part of the gland (because this has surgical consequences).

13 I will explain the exact meaning of 'mistrust' as well as the difference between 'mistrust' and 'distrust' in chapter 2.2.

consultation points in the same direction: it serves to assess the physician's epistemic trustworthiness that patients no longer take for granted. The question 'would you recommend surgery if I did not have private insurance coverage?' implicitly expresses doubts about the physician's integrity. From the reaction to this and similar questions the patient tries to gauge the doctor's honesty, to find out whether he has her (i.e. the patient's) interest foremost. In other words, she tries to assess the physician's *commitment* to him. The simple fact that patients ask such questions points to two other important features of the patient-physician-relationship and hence of trust: *uncertainty and risk*. The patient is aware that she can never be sure about the physician's competence and commitment, and that therefore to trust always means to run a risk. By asking such questions she tries to reduce the uncertainty and hence the risk. In sum, we learn from the two histories, that *competence, epistemic trustworthiness, and commitment, as well as uncertainty and risk are important features of 'trust'.*

In addition, *the two histories show that the reasons for which patients trust (i.e. how the patients justify their trust) has changed* over the years. Whereas in the past most patients trusted doctors simply because they were doctors (I will refer to this as 'status trust'), most of today's patients only trust a doctor if they have good reason to assume that the physician merits their trust (I will refer to this as 'merit trust').[14]

Finally, we also learn something important about the *consequences of the decline of trust*. All the above-mentioned questions have become quite standard. Of course, it may be argued that these questions simply reflect the changed self-perception of today's patients with its focus on patient autonomy, patients' desire of taking control and participating in decision-making and finally their increased access to information. Whilst all this is certainly true, there remains the fact that the patients themselves declare to have lost trust

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[14] The terms 'status trust' and 'merit trust' are taken from Buchanan [Buchanan 2000, p191]. I will explain them in detail in chapter 4.

(or confidence) in physicians (as evidenced by the empirical data presented in the appendix). There can be no doubt that very often such questions indicate (particularly in the physician's perception) a certain amount of mistrust.[15] And the doctor reacts to this perceived mistrust by practicing what is called 'defensive medicine', i.e., he orders more tests than he really thinks necessary 'to hedge his bets', to be on the safe side if ever he should be called to account for his actions. This mistrust on the patient's side and the apprehension on the physician's part form a vicious circle with important consequences. *First*, it costs a lot of money, because it encourages doctors to practice defensive medicine and patients to seek 'second opinions'. *Second*, it causes a lot of anxiety and frustration on both sides [Freeman et al. 2009, p.1064]. *Finally*, and this is perhaps the worst consequence, the vacuum resulting from the loss of trust is filled with bureaucratic regulations [Kohn 2008, p.65]. Just imagine what an MP will do if he learns that an increasing number of the inhabitants of his constituency no longer trust the doctors at the local hospital. He will appoint a committee, which will call for an audit, and following the recommendations from the audit commission will issue all kinds of paperwork to 'increase the safety of patients', *nota bene* in the erroneous belief that this will restore the patients' trust.

GOALS AND OUTLINE OF THESIS

As indicated by the title, my OVERALL GOAL is to understand what 'trust' means in medicine, to be able to explain why trust has declined, and to show why trust is useful from a practical as well as from a philosophical ethical point of view.

Since, as I will argue, the literature does not offer a convincing definition of 'trust' in medicine my FIRST GOAL is to present a robust definition. This definition need not be a

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[15] For the exact definition of the term 'mistrust', see chapter 2.2.

universal definition, applicable to all possible situations,[16] but it must be a definition, which is useful in the real world of health care. By 'useful', I mean that it must be internally coherent, comprehensive, and applicable both to individuals and to the institutions these people work in. Moreover, it must be able to discriminate 'trust' from similar concepts (e.g. confidence) and it must help us understand why trust in medicine has declined and why we have reason to be concerned about the loss of trust. Finally, I want it to be an account that defines trust as a moral rather than a merely instrumental concept.[17]

Because many people use 'trust' interchangeably with other terms such as 'confidence' or 'reliance' my SECOND GOAL is to analyse whether the meaning of these other terms is indeed synonymous with 'trust', and if not how they differ from 'trust' and from one another. This will also be an opportunity to test the discriminatory power of my account of trust.

According to my account, trust is a *justified* expectation. To elaborate the concept of 'justification' I will first examine what is probably the most fundamental type of trust (and a constituent part of almost any form of trust), namely trust in information we receive from others (so-called 'epistemic trust'). If we do not trust in what people tell us, we are unlikely to trust them at all. So, unless we can show that epistemic trust is justified, the concept of trust collapses. Consequently, my THIRD GOAL is to specify what 'justified' means and to show whether (and if so how) we can justify epistemic trust.

Of course, patients' trust in physicians implies epistemic trust, but their trust comprises far more than just this. My FOURTH GOAL is to further analyse 'justification' and to show how we can justify trust in physicians. As the two principle justificatory arguments are

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16 Trying to incorporate all possible perspectives of trust into one definition would inevitably lead to an overly complex construct, useless in practice [McKnight and Chervany 2001, p.30].

17 For a detailed description of these conditions, see page 16. In the electronic version of this thesis, all cross-references to specific pages ('see page..') can be accessed directly by clicking on the page number.

'professionalism' and 'trustworthiness' (i.e. 'competence' and 'commitment') of the physician, I will present comprehensive definitions of these two concepts.

Finally, my FIFTH AND SIXTH GOALS are to explain why trust has declined and why trust is instrumentally useful and morally significant. In addition, this will test the explanatory power of my definition of 'trust'.

The OVERALL STRUCTURE OF THE THESIS follows these goals with a chapter devoted to each of the six goals. Thematically, the thesis falls into three parts: Chapters 1 and 2 deal with the definition of 'trust' and with the differentiation of trust from related concepts. Chapters 3 and 4 are devoted to an analysis of the concept of justification and to the justification of trust. In chapters 5 and 6, I will show why trust has declined and why trust is instrumentally valuable and morally significant. In a brief 7th chapter, I will add a few clarifications to my concept of defining trust, present a third option of justifying trust (in addition to 'status trust' and 'merit trust'), and present the conclusions.

In CHAPTER 1, I will start out with an analysis of existing definitions of trust. I will argue that none of them is satisfactory, and that in particular none of them is an explicit definition.[18] I will have to leave the question whether an analysis of trust leading to an explicit definition of trust is at all possible or not without a definitive answer. Before I go on to propose (as an alternative to an explicit definition) an account of trust based on the commonality (or pattern) of what we recognise as 'trust', I will specify five conditions that a robust definition of 'trust' must fulfil: (1) internal coherence, (2) comprehensiveness, (3) applicability to individuals as well as to institutions, (4) discriminatory power, and (5) explanatory power. According to my 'pattern-based account', trust is essentially *a justified expectation*[19] *of the truster on the trustee's contingent behaviour regarding the truster*

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[18] By explicit definition, I mean a definition of the type 'it is trust if and only if'.

[19] Some authors use the term 'justifiable' rather than justified, e.g. [Iltis 2007]. To me there is no relevant difference between the two terms. One follows the other. My belief that it is noon is justifiable (e.g. by having a look at my watch). Once I have looked at my watch, it becomes a

himself. Moreover, it is an account of trust as an intentional and free choice. Finally, this account of trust presupposes conditions of uncertainty and risk, as well as a feeling of betrayal if one's trust is breached. To conclude, I will argue that so far this account fulfils the first three of the five stipulated conditions.

In CHAPTER 2, I will test whether my account of trust is able to differentiate trust from related concepts such as reliance and confidence. I will show that the pattern of trust indeed differs sufficiently from the patterns of these related concepts to warrant the following two claims: *First*, trust has (contrary to most other concepts) not one, but two opposites ('*m*istrust' and *'d*istrust'), which can and should be differentiated. *Second*, confidence, reliance, hope, and believe in something or in someone are (contrary to widespread usage) not synonymous with trust (nor among themselves) and should be clearly differentiated. I will conclude that my definition of trust has the necessary discriminatory power (i.e., that it fulfils the fourth of the five conditions).

CHAPTER 3 will be devoted to the elaboration of the meaning of the term 'justified' by looking at the justification of trust in the testimony of others (so-called 'epistemic trust'). I will define 'testimony' as information which (once we have received it) we regard as our own (albeit second hand[20]) knowledge. I will argue that unless epistemic trust can be justified, the concept of trust collapses (because virtually all forms of trust imply epistemic trust) and that, because of the complexity of the world we live in, epistemic trust is inevitable. Rather than entering into an extensive (and in the end futile) discussion about the rationality of epistemic trust I will show under what conditions epistemic trust is responsible (by which I mean that 'we are able to answer or account for our conduct' [Friedrichsen 1973]).[21] I will do this by shifting from the truth content of testimonies (which

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justified belief.

20 Where 'second' may refer to any number from 2 to n.

21 Throughout the thesis, I will concentrate on the 'responsibility' of trust rather than on its 'rationality'. I do this for two reasons: (a) because I do not want (and it would be beyond the

is the topic of traditional epistemology) to the relevance of testimonies for the recipient. For this purpose I will introduce the concept of 'street-level-epistemology' [Hardin 1993, p.502]. To show how we commonly make sure that our epistemic trust is justified, I will present the concepts of 'epistemic vigilance' and 'epistemic trustworthiness'.

IN CHAPTER 4, I will continue the analysis of the concept of justification and examine how patients justify their trust in physicians. Typically, patients base their trust either on the physicians' professional status or on his personal merits, i.e. his trustworthiness. Since both 'professionalism' and 'trustworthiness' are under-developed, I will devote a section each to the analysis and definition of these two concepts.

IN CHAPTER 5, I will present my arguments for the decline of trust. Since they all tie in with various features of my definition of trust, they underline the explanatory quality of my account. The chapter has five sections, each devoted to one of the five arguments I offer to explain the decline of trust: (a)[22] the discrediting of professionalism, (b) the difficulty of assessing trustworthiness, (c) the disavowal of medical authority, which is at least in part due to a critique of the paradigms of modern medicine (often referred to as the 'crisis of modern medicine'), (d) the commodification of medicine and the (perceived) loss of decision-making independence of physicians, and finally (e) the change of risk perception and the quest for a no-risk society.

CHAPTER 6 has two sections. In the first section, I will show why trust is instrumentally useful. For this purpose, I will list the advantages of trust, outline the consequences of the

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scope of this thesis) to enter into a discussion of 'rational' and 'rationality'. (b) Because (although like most people I prefer to make rational choices), I am more interested in making responsible choices rather than just rational choices. Many choices are both rational and responsible, but some are not. Accepting a small risk is often perfectly rational, and yet it may at times be irresponsible. Given the minimal risk of flying, it is perfectly rational that we all use airplanes. And yet, it may appear irresponsible for a young couple with three small children to run the risk of boarding the same plane while leaving the children with their grandparents.

22 Whenever I list several options, I will use small Roman letters. To avoid any confusion, I will never refer back to these letters. In the very few instances, in which I will come back to the listed items I will use Arabic numerals.

decline of trust, and show that there is no superior alternative to trust. In the second section, I will show why on my account trust is a moral concept. To do so, I will offer two arguments: *First*, the fact that we react to a breach of trust with a feeling of betrayal, a reactive attitude that is limited to moral notions. And *second*, the fact that we can justify the belief in the trustee's moral obligation to be trustworthy with the help of the 'obligation-ascription thesis'. Together, chapters 5 and 6 support my claim, that my definition of trust has the stipulated explanatory power.

CHAPTER 7 has three sections. In *the first section*, I will come back to the concept of 'pattern based definitions' in order to clarify some points and rule out possible misunderstandings regarding the application of my definition of 'trust'. In the *second section*, I will suggest that in addition to 'status' and 'merit', reference to a 'duty to be trustworthy'' might also serve to justify trust. In the *third, concluding section*, I will discuss the contribution, which I believe my thesis, and in particular my definition of 'trust', can make to the contemporary debate about trust and the decline of trust in medicine as well as to medical ethics.

CHAPTER 1 DEFINING TRUST

1.1 INTRODUCTION

We all use the word 'trust' and we all think we know what it is and when its use is appropriate. And yet, if you look at sentences in which people use 'trust' you will find that they use the term in entirely different contexts. Here are just a few examples of 'what people trust'. They trust that the weather will be good on the weekend. They trust the brakes of their motorbike. They trust that their car will keep going for another year. They trust that their partner will be faithful, and some people say that they trust in homeopathy.[23]

Obviously, people use the term 'trust' differently, and as long as everyone uses 'trust' in his or her own way, any discussion about the meaning, the decline, and the value of trust becomes futile. It was therefore clear that my first goal had to be to find a robust definition of trust, a definition that is relevant in the real world of the patient-physician-relationship and not just for theoretical discussions. To present such a definition is what I intend to do in this chapter. This sounds like a simple enough statement, and yet it is treacherous, because "there is no agreed-upon definition of the term ‘definition'" [Moore 2009, p.2]. So, I first had to decide what kind of definition I was looking for. Interesting as it would be, it is beyond the scope of this thesis to enter into an in-depth analysis of the term 'definition'.[24] I will therefore limit myself to a brief discussion of those few types of definitions that I will mention later on.

I will start with a few words on the terminology.[25] *'Definiendum'* refers to the term that is to

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[23] Of course, people also trust in God. I leave will this aside, because it belongs to the discourse of religion and faith, two topics, which are outside the scope of my thesis.

[24] Anyone interested in a detailed analysis of the term 'definition' is referred to [Swartz 2010].

[25] I am indebted for this and the following paragraphs to [Moore 2009].

be defined and *'definiens'* refers to a term (or group of terms) used to explain the meaning of the definiendum. In the statement, 'an adversary is someone who takes up a position of antagonism', 'adversary' is the definiendum; 'someone who takes up a position of antagonism' is the definiens. *'Extension'* (or 'denotation') designs a class of objects (i.e. examples) sharing the same attributes. Ale, Lager, or Pilsner are extensions of (and thus may be used to define) the term 'beer'. *'Intensions'* (or connotations) describe a set of attributes that define the definiendum. 'A brew / produced by fermenting malt / and spicing with hops' is a set of attributes which serve to define the term 'beer'. So, both extensions and intensions may be used to define a term. In addition, "it is commonly held among logicians that the intension determines the extension of the term",[26] i.e. 'a brew produced by fermenting malt and spicing with hops' always refers to 'beer'. "The reverse, however, does not hold. The extension does not determine the intension, since different intensions may have the same extension". 'Amber nectar', e.g., would be another intension referring to 'beer'. So, whereas 'a brew produced by fermenting malt and spicing with hops' always refers to 'beer', the term 'beer' may also be used to refer to 'amber nectar'. As I will show in chapter 1.2, 'the expectation that the trustee will act in the truster's interest' is an intension defining 'trust', but 'trust' may also refer to other intensions, such as 'trust means that my interests are encapsulated in your interest' [Hardin 2002, p.3ff].

Now, here are some types of definitions: *Stipulative definition*s assign a meaning to the defined term. They are typically used to show how we intend to use a term in a given context. 'Let an adversary be someone who takes up a position of antagonism' would be a stipulative definition. *Lexical definitions* show how a term is commonly used. 'An adversary is someone who takes up a position of antagonism' is an example of a lexical definition. Neither of these types of definition plays a role in defining 'trust'. *Denotative definitions* make use of the extension of the class of object sharing some attributes: i.e., they define a

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[26] This and the following quotation are taken from [Moore 2009, p.3]. The examples, however, are mine.

term by citing typical examples (e.g. Mount Everest, Kilimanjaro, or Matterhorn for 'mountain'). Aware that defining 'trust' is no easy task, many authors avoid the issue by resorting to denotative definitions, i.e. to give examples, such as 'trust means expecting caring, honesty, or responsiveness' [Mechanic and Meyer 2000, p.660], 'trust means that my interests are encapsulated in your interest' [Hardin 2002, p.3ff]., or 'to trust someone is to lower one's guard, to refrain from taking precautions against an interaction partner, even when the other could act in a way that might seem to justify precautions' Elster 2007a, p.344]. Such definitions are too limited and do not fulfil the conditions that I think a comprehensive definition must fulfil.[27]

This brings me to a final type of definitions:[28] *Analytic definition*s make use of the intensions of a definiendum. They define a term by "reducing it to simpler meanings" [Strawson 1992, pp.17-18], i.e. by breaking it down into its constituent elements (football is a game / in which two teams of eleven players / try to drive a ball / into the opponent's goal / using only their feet or head, etc.). The advantage of analytic definitions is that they convey the meaning of a term as well as some of its characteristics without attributing more to the subject than is already conceptually contained in the subject.[29] Now, according to the 'standard theory of definition' a 'proper' analytic definition states the necessary and jointly sufficient conditions [Belnap 1993, p.117]. This is the most demanding type of definition and is often referred to as an 'explicit definition' or a definition

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27 See below for a list of five conditions, which I believe a definition (of trust) must fulfil.

28 Of course, there are yet other types of definitions (none of which, with the exception of Wittgenstein's, however play a role in the present context): *Synonymous definitions* define a term by giving another word with a very similar meaning that is (more) familiar to the reader and has (roughly) the same general sense (e.g. 'enemy' for 'foe'). *'Theoretical definitions'* are commonly used in physics, e.g. to define 'radiation' in the light of some physical theory. *'Persuasive definitions'* serve to influence the attitude or behaviour of others. Although they (are made to) look like lexical definitions, they are not. Not surprisingly, they are very commonly used e.g. in political debates [Swartz 2010, chapters 5.4 and 5.7]. Finally, there is Wittgenstein's *'meaning as use'* approach [Wittgenstein 1953, §43], to which I will come back on page 24.

29 The term 'football' embraces the entire phrase 'football is a game, in which two teams of eleven players try to drive a ball into the opponent's goal using only their feet or head, etc.'.

of the type 'it is x if and only if'.[30] A typical example is 'x is a triangle if and only if it is / a closed figure / with three straight sides / linked end-to end'.[31] The disadvantage of this type of definition is that it is often difficult (or impossible) to come by. Furthermore, the 'standard theory of definition' stipulates that there are analytical definitions for each class of terms we use. This claim has been challenged among others by Wittgenstein, who also proposed an alternative.[32] In chapter 1.2, I will show that there is no explicit definition of 'trust' to be found in the literature and explain why (irrespective of whether an explicit definition is at all feasible) it is unlikely that I could come up with one.

Faced with the situation that there is no 'ready-for-use' definition of trust in the literature, I had to decide upon what approach to use to come up with my own definition. And even before that, I had to decide what conditions this definition would have to fulfil. Since I want it to be a definition that is relevant in the real word of the patient-physician-relationship and not just for theoretical discussions, a definition that will help us distinguish trust from related concepts (such as confidence) and that moreover will help us understand what trust means in medicine, why it has declined, and why it is useful, I stipulated that it must fulfil the following five conditions:

- It must be internally coherent. By this, I mean, that 'trust' can be understood by previously understood terms[33] and that the definition leads neither to inconsistencies nor to anything new.[34]
- It must be comprehensive, i.e., it must encompass all *relevant* features of trust (which is not to say *all* features).[35]

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30 Commonly abbreviated as 'it is x iff'.

31 The example is taken from [Moore 2009, p.7].

32 I will come back to this on page 24.

33 Belnap calls this the 'eliminability' criterium …

34 … and this the 'conservativeness' criterium of a good definition [Belnap 1993, p.117].

35 I am aware that by insisting on 'coherence' and 'comprehensiveness' I may underplay the

- It must be applicable both to individuals (physicians and other health care professionals) and to the institutions these individuals work in.
- It must have discriminatory power, i.e., it must be able to differentiate trust from similar concepts.
- It must have explanatory power, i.e., it must help explain the decline of trust and the instrumental and moral value of trust.

I think that (if any) only an analytic definition can fulfil these conditions. I therefore decided to use an analytic approach to develop what I will call a 'pattern-based definition (or account) of trust'. To avoid any misunderstanding, this is not an explicit definition. It is not even a definition based on 'necessary conditions'.[36] Rather than saying *'it is trust if and only if' (as in an explicit definition)*, I will say *'it is not trust if it does not fulfil at least some of a number of criteria'.*[37] This approach is commonly used in medicine to define and to diagnose diseases. Sjögren's syndrome (another disease of the salivary glands) e.g. is diagnosed if at least four out of six symptoms and at least one out of four signs (including one out of two laboratory findings) are present. It is important to note that (contrary to an explicit definition) not all criteria necessarily have the same weight and that a criterium may be the absence of a specific feature (in the example of the pleomorphic adenoma a typical feature is the *absence* of skin infiltration). I hope that by the end of this thesis I will have convinced the reader that such an account is feasible, able to fulfil the five criteria set up above, and helpful to anyone, who wants to understand 'trust in medicine'.

OUTLINE OF THE CHAPTER: The chapter has three sections. In the *first section,* I will critically discuss the most prominent definitions of 'trust' found in the literature. I will show

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significance of the ordinary usage of these terms.

For this and the previous condition, see also [Wrigley 2014, p.3].

36 See chapter 7.2 for some explanatory comments on this.

37 It will become clear further down why I use this double negative phrasing rather than the simple 'it is trust if it fulfils certain criteria'.

that none of them fits the bill, because not one of them is comprehensive and has the necessary discriminatory and explanatory power. Given that there is no explicit definition in the literature, I will try to answer the question whether an explicit definition is at all possible. In the *second section,* I will (as an alternative to an explicit definition) propose to define 'trust' by looking at the commonality of what we understand by 'trust' (what I will call 'the pattern of trust'). In the *third section,* I will present a 'pattern-based definition of trust'. I will end the chapter by arguing that this account is internally coherent, comprehensive, and applicable to both health care professionals and institutions.

1.2 CRITICAL DISCUSSION OF EXISTING DEFINITIONS

In this section, I will do three things: *First*, I will present the most prominent analytic definitions of 'trust in medicine'[38] found in the literature and show that none of them is comprehensive and has the necessary discriminatory and explanatory power. *Second*, I will discuss Hardin's postulation that rather than defining 'trust' we should define 'trustworthiness' [Hardin 2006, p.17]. Finally, *third* I will try to answer the questions why there is no explicit definition of 'trust' and whether an explicit definition is at all possible.

ANALYTIC DEFINITIONS: Several authors have presented analytic definitions of 'trust'. Probably the most popular of them describes trust as the expectation that the trustee (i.e. the doctor) will act in the truster's (i.e. the patient's) interest [Norris 2009, p.32], or that the trustee will act as the truster's agent (see e.g. [Goold 2001; Illingworth 2002; Iltis 2007; Mechanic 1998; Rhodes 2000]). Along similar lines, trust is seen as a "commitment to an on-going relationship" [Calnan and Rowe 2004, p.5], as an "open-ended commitment on the physician's part to continue the relationship through the unexpected, even though the form that it takes cannot be certain in the original agreement" [Quill 1983, p.229], or as

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38 The academic literature abounds with definitions of 'trust' from diverse fields, such as economy, political science, and psychology (for examples see [Misztal 1996, pp.12-15]). However, since my interest is in 'trust in medicine', I have limited my review to the context of medicine.

"the expectation that individuals and institutions will meet their responsibilities to us" [Mechanic 1998, p.662]. These are all, albeit very limited, analytic definitions. Yet, they are all fraught with serious problems: (a) Specifying that trust has to do with 'the patient's best interests' opens the definition to radically different interpretations, depending on how one defines 'best interest'. (b) All these definitions suffer from the fact that they define 'trust' solely with regard to the commitment (or agency) of the trustee.[39] However, a definition of 'trust' limiting 'trust' to the commitment of the trustee is insufficient. Here is why: Assume that you bring your car in for the annual service. If, in the past you have been happy with the owner of your garage, you trust him to do only what needs to be done, and not to boost the bill by exchanging a few perfectly good parts as well. In other words, you trust his commitment to your interests. Yet, in addition to trusting that he does not cheat you, you also expect him to do 'a good job', i.e., you trust his competence as car mechanic. As I will show in chapter 1.4.2, a useful account of trust must (with few, well-defined exceptions) relate to the commitment as well as the competence of the trustee.

DEFINING 'TRUSTWORTHINESS' RATHER THAN 'TRUST': The counterpart of trust on the truster's side is trustworthiness on the trustee's side. So, rather than trying to define 'trust', Russel Hardin proposes to approach the problem from this perspective. He claims that

> "… the literature would be much clearer and less confused if all proponents of all extant theories [of trust] recognised that their theories or conceptions are about trustworthiness and only derivatively about trust" [Hardin 2006, p.17, my insertion[40]].

Of course, I agree that to say 'I trust you', usually (but not always, as I will show below) means 'I believe you to be trustworthy' and that, therefore, trustworthiness plays an important role in the debate about trust. And yet, I will focus on trust and not on

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39 This is equally true for Hardin's "I trust you because I think it is in your interest to take my interests in the relevant matter seriously" [Hardin 2002, p.1].

40 Square brackets [ ] within quotations denote my own insertions.

trustworthiness. I have two reasons for this. The *first reason* is very pragmatic: everyone else (except Hardin) does so; and looking at something from the same perspective as others makes it easier to engage in comparative critical analysis. The *second reason* is more substantial. The relationship between trust and trustworthiness is not symmetric. A symmetric relationship would imply that (a) if you are trustworthy, I trust you, and (b) if I trust you, you are trustworthy. This is the position of Hardin. I argue that neither condition has to be fulfilled: Trust is possible in the absence of trustworthiness, and trustworthiness does not *a priori* lead to trust. Just because someone is (or appears to be) trustworthy does not mean that I automatically trust him (or, more strongly, that I have to trust him) [Miller 2000, p.47]. And while trustworthiness is a prerequisite for trust to be responsible, it is not *a sine qua non* condition for trust *per se*: sometimes we are imprudent enough to trust someone who is not trustworthy. Trustworthiness does not so much explain what trust is but what justifies our trust: I trust you *because* I believe that you are trustworthy. It justifies my trust in you. I will therefore discuss trustworthiness in the chapter on the 'justification of trust'.[41]

ABSENCE OF AN EXPLICIT DEFINITION: Obviously, there is no lack of definitions of 'trust'. Yet, all focus on one (or at best a few) aspects and not one of them comes close to meeting the required standard of being genuinely comprehensive. Most importantly, there is no explicit definition. This is surprising if we consider that most of the definitions mentioned so far clearly try to reduce trust to other concepts (e.g. respect, autonomy). In fact,

> "… it is hard even to imagine a conception of trust that is non-reductive and still plausible" [Hardin 2002, p.57].

Indeed, analytic philosophers have typically tried to clarify the concept of 'trust' through conceptual analysis, i.e. by reducing 'trust' to simple meanings and hopefully coming up with a definition stated in necessary and sufficient conditions [Simpson 2012, p.550]. And

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41 See chapter 4.3.

yet, there is no explicit definition. Jackson proposes two possible explanations for this lack of an explicit definition [Jackson 2010, p.183]: (a) There is an analysis, but we have not found it, perhaps because (to use Simpson's words) "…no one has given it a really decent shot yet" [Simpson 2012, p.553]. This explanation is not very plausible, given the fact that so many philosophers have addressed the issue. (b) There is an analysis, but we have not found it, because it is beyond us. This is possible but hard to prove. Whatever the explanation is, the fact remains that we have no explicit definition.

This leaves us with the alternative that 'trust' is not analysable, despite all the arguments in favour of it being reducible. It may be that several different concepts masquerade under the single term 'trust', i.e., that we are under what Jackson calls a "recognitional illusion" [Jackson 2010, p.183]; in which case it is not possible to find a single definition that covers all concepts. This explanation is the one that Simpson favours:

> "The ways that the word [trust] is used are simply too various to be regimented into one definition. Sometimes ‘trust’ is naturally understood as referring to a sort of affective attitude (‘I will trust my husband, I will not be jealous’); at other times to a conative one (‘Come what may, I will trust you to the end’); and at yet others to cognitive ones (‘I know you are an honourable woman, so I trust you’). … Similarly, it is used in situations where the motivation to trustworthiness is dramatically varied: love, mutual gain, or considerations may all count as reasons not to betray someone’s trust. These all support the inductive argument against the plausibility of analysing of trust. Counter-examples can be given so easily because there are so many ways the word may permissibly be used, and so it would be foolish to seek a single definition” [Simpson 2012, pp.553-554, his italics].

According to Simpson, 'trust' refers to a 'cluster concept', which means that the term is (and can permissibly be!) used in many different ways. Because of this, he argues, it is easy to come up with counter-examples to any definition, making it unlikely that a single definition can be found. Although I can see his point, I do not agree with him for three

reasons: *First,* his examples do not illustrate the different ways we use trust. Rather, they describe different aspects of trust, such as the consequences of trust ("I trust, therefore I am not jealous"), the intention to trust ("come what may, I will trust him"), the reason why we trust ("you are honourable, therefore I trust you"), and possible motivations to be trustworthy ("love, mutual gain, etc."). I do not see why this should prove that it is impossible to define trust. One of the best-known examples of an explicit definition is 'knowledge as justified true belief'. There may be counter-arguments to this definition,[42] but the fact that we can describe the consequences of knowledge (e.g. the development of nuclear warfare), the intentions we have to acquire knowledge (e.g. 'knowledge is power'), or the reasons why we know, certainly do not count among them. *Second*, although counter-examples are strong arguments against the validity of any given definition, they do not rule out the possibility that there exists a valid definition. Take for example the definition 'a king is a hereditary, male ruler of an independent state'. It is easy to find examples of kings that do not fit this definition, such as the king of chess or the lion as king of the animal world. These counter-examples show that the proposed definition is wrong. Yet, they do not prove that there cannot be a conceptual definition of 'king'. Finally *third*, just because people use 'trust' in different ways, does not prove (and Simpson does not supply proof) that these uses are indeed *permissible* (as he claims).

To illustrate why the fact that people use a term in different ways does not prove that these uses are *a priori* permissible, I briefly leave 'trust' and move to something more mundane. In my ignorance, I call any bug that crawls around on more than two pairs of legs 'spider'. Of course, any one with just some basic knowledge of zoology can come up with counter-examples, e.g. bugs that crawl on more than four legs and are not spiders. This does not prove that we cannot define 'spider'. All it proves is that I am using 'spider' far too indiscriminately. Similarly, I argue that we use 'trust' too indiscriminately: not

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[42] Such as those proposed by Gettier [Gettier 1963].

everything that 'has trust on the label has trust inside'; not every use of 'trust' is permissible. As I have said earlier, 'we trust that the weather will be good tomorrow', 'we trust that our car will keep running another year', 'we trust the brakes of our bike', 'we trust in the faithfulness of our partner' and we (or at least some people) trust in homeopathy. I claim that it is not permissible to use the term 'trust' in all these statements: it would be far more appropriate to say 'we *hope* that the weather will be good', 'we are *confident* that the car will keep running another year', 'we *rely* on the brakes of our bike', and 'we *believe in* homeopathy', and limit the use of 'trust' to the trust in the faithfulness of our partner.[43] Of course, even if we weed out the non-permissible uses of 'trust' (such as using it instead of confidence, reliance, etc.), trust may still refer to a cluster of different concepts (and Simpson may still be right). But at least we have removed a number of arguments against the possibility of a single definition of 'trust'.

1.3 PATTERN-BASED DEFINITIONS IN GENERAL

Irrespective of whether there is an analysis of 'trust' (which we have not found, or which is beyond us) or whether an analysis of 'trust' is impossible (because it is not a single concept), *the fact remains that we can recognise trust* just as we can recognise (to use Jackson's example) a 'liberal society':[44]

> "Each of us uses 'is a liberal society' to capture a pattern in nature, and we know a good deal about which societies satisfy the pattern, and which don't, and why. However, we will never find anything of the form 'x is a liberal society if and only if …". It is enough that we can recognise a liberal society if we have enough data about it" [Jackson 2010, p.183].

Stated more generally:

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[43] I will present my arguments why I believe that we can and should discriminate between 'trust' and these other concepts in chapter 2.3.

[44] I am indebted to F. Jackson for this entire section [Jackson 1998].

> "We pick up terms like 'knowledge', 'free society', 'pain' and so on by being exposed to examples and somehow latching onto the relevant commonality. We recognise the relevant pattern and thereby acquire mastery of the terms" [Jackson 2010, p.179].

The key term here is *'pattern'*. A pattern is what all examples of a concept share 'to some extent'.[45] Patterns are something we can recognise, even in cases, in which there is no 'if-and-only-if' type definition. 'Liberal society' is such a "pattern in nature", and so (I argue) is 'trust'.[46] Although Jackson does not refer to it, I think[47] that there is a certain similarity (or even indebtedness?) to Wittgenstein's concept of 'family resemblance'.[48] Here is an example of 'family resemblance': We all know what 'animals' are. Take e.g. fish, dolphins, and rabbits. Whereas fish and dolphins live in the water, rabbits do not. Whereas dolphins and rabbits are mammals, fish are not. And whereas some fish and dolphins are carnivores, other fish and rabbits are vegetarians. Obviously, there is no single feature, which is common to all of them and which is unique to them, and yet, we recognise them as animals. To use Wittgenstein's words, "what we see is a complicated network of similarities overlapping and criss-crossing" (i.e. a 'family resemblance') [Wittgenstein 1953, §§66-67].[49]

Now, let me turn to medicine: Clinical diagnoses are typically made by looking for the

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45 I will come back to this reservation further down.

46 Here I want to insert a small caveat. I am afraid there is a snag in this concept: Since we have no gold standard to tell us which examples are indeed examples of the construct under scrutiny there is a risk of circularity.

47 Actually, this resemblance was pointed out to me by Anthony Wrigley.

48 Or 'Familienähnlichkeit', as Wittgenstein calls it in the original German text. Wittgenstein himself uses the example of 'games' to illustrate what he means by 'family resemblance'.

49 Apart from the concept of 'family resemblance', Wittgenstein also proposes that "the meaning of a word is its use in the language" (often shortened to 'meaning as use') [Wittgenstein 1953, §43]. Apart from the fact that both deal with concepts with vague boundaries, I think they should not be conflated: 'Family resemblance' is an analytic definition, whereas 'meaning as use' is not. I hope to show in chapter 2.3 that the way the word 'trust' is used in ('folk') language confuses rather than clarifies the meaning of 'trust'.

diagnosis that fits (or best fits) the pattern of symptoms and signs presented by the patient. Here is the pleomorphic adenoma example again: There is no definition of the type 'it is a pleomorphic adenoma of the parotid if and only if'. But the presentation of pleomorphic adenomas follows a typical pattern: most of them are slow-growing, painless, firm, well-defined, and mobile swellings in front of the ear. Firmness, painlessness, slow growth rate, etc. are parts of the typical pattern of a pleomorphic adenoma. None of these features is limited to pleomorphic adenomas and few pleomorphic adenomas will show all features to the same degree, although all will show some of them. If none of them is present, or if a feature is present that does not fit the pattern (such as an infiltration of the overlying skin) it is almost certainly not a pleomorphic adenoma. Because our patient with the pleomorphic adenoma of the parotid presented with a typical pattern, the clinical diagnosis was justified. Had the lesion e.g. been tender, or fixed to the underlying tissue, it would not have fitted the pattern, and the clinical diagnosis would have had to be revised.

Over the years, the practice of recognising patterns has become so much second nature with me, that when I started to examine different examples of trust, I immediately began to search for 'the common pattern'. And I tried to find out whether (and if so, in what way) the pattern of trust differed e.g. from the pattern of a related concept such as confidence.

In the next section, I will present an account of trust that is based on what I believe to be the typical pattern (the relevant commonality) of trust. At heart, this is conceptual analysis.[50]

> "The kind of conceptual analysis I am discussing in this essay … is about capturing patterns ascribed by certain descriptive terms in a language using other terms in a language in ways that illuminate the structure of ascribed

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[50] Jackson himself writes "We analytical philosophers might describe it [i.e. this approach] as 'conceptual analysis using the method of intuitions about possible cases' but that should not disguise that it is folk wisdom and not some arcane bit of technology special to our profession" [Jackson 2010, p.174].

patterns" [Jackson 2010, p.186].

The individual features that make up a pattern are indeed similar to the individual conditions of an analytic definition or even of an explicit definition. However, I want to emphasise that I do not claim to present an 'if and only if' type definition. There are two major differences between my approach and an explicit definition. *First*, in an explicit definition, the individual conditions (definientes) are individually necessary to define the definiendum; and since all conditions are necessary, there is no hierarchy among them. In a pattern-based definition, not all conditions have to be fulfilled[51], and the features do not necessarily have the same value. Some may be essential ('must have' features[52]), whereas others may be of a more or less supporting character ('nice to have' features). To illustrate what I mean, I return once again to the example of the pleomorphic adenoma of the parotid. A pleomorphic adenoma of the parotid gland is *always* a firm, well-defined pre-auricular swelling, it is *virtually always* growing slowly; and it is *usually* non-tender and mobile, but it is *never* infiltrating the skin. *Second*, in an explicit definition, the individual conditions are jointly sufficient to define the definiendum. A 'justified true belief' *is* knowledge.[53] In a pattern, they may be sufficient, but they need not necessarily be sufficient. A slow-growing, firm, mobile, and painless swelling in front of the ear is usually a pleomorphic adenoma, but may on occasion be something else (e.g. a malignant tumour). Consequently, patterns are often used in a negatively formulated way: 'if it does not live in water and does not spawn, it is not a fish' (which is true) rather than 'if it lives in water and spawns, it is a fish' (which is false, because frogs fulfil these conditions as well). With a grain of salt, one might say that explicit definitions are about certainty, whereas patterns are about probability.

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51 In chapter 7.2, I will discuss the importance of this in more detail.

52 In the example of Sjögren's syndrome cited above, at least one of two laboratory findings must be present.

53 Leaving aside objections of the Gettier type [Gettier 1963].

There is an obvious snag with this approach: Where do we draw the line? What does still count as trust, and what does not? Again, I think this is a problem, which Jackson's and my approach have in common with Wittgenstein's concept of 'family resemblance':

> "What still counts as a game and what no longer does? Can you give the boundary? No. You can draw one; for none has so far been drawn. (But that never troubled you before when you used the word 'game')" [Wittgenstein 1953, §68].

In other words, there is no clear-cut boundary. But we can 'draw one', and the way we do this, is by comparing the patterns of different concepts. In chapter 2.3, I will compare the pattern of trust with the patterns of confidence and reliance, thereby 'drawing the boundary' of what still counts as trust. And in chapter 7.3, I will show that by 'moving this boundary' we can obtain both very narrow and wider definitions of trust and thus adapt it to different situations and needs.

SO FAR, I have looked at the existing definitions of 'trust', only to find them all wanting. I have had to leave the question open whether an explicit definition is possible or not. I then went on to show that despite the fact that we have no explicit definition, we can recognise trust, and that one way of doing this is by recognising the pattern (or 'family resemblance') common to different examples of trust. In the following section, I will present such a pattern-based definition of trust.

1.4 A PATTERN-BASED DEFINITION OF TRUST

In this section, I present a definition of trust that is based on what I believe to be the pattern (i.e. the commonality) of trust. I start with a sub-section briefly outlining the individual features of the pattern.[54] Once I have completed this outline, I will flesh out each

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[54] In order not to clutter this short introductory presentation, I will leave out references. They will all be given in the later sub-sections. For the same reason, I will usually give the references when I discuss a topic in detail, but leave them out in introductory paragraphs.

feature in separate sub-sections.

1.4.1 PRELIMINARY OUTLINE

To find out what 'trust' means let us look at the sentence 'I trust my doctor' and see what the sentence implies. In principle, this sentence refers to a belief I have regarding the contingent behaviour of my doctor. However, I felt that this was too unspecified and that to me the sentence 'I trust my doctor' had a more specific meaning: I *expect* my doctor to be *competent* and to be honest. She is available when I need her, and she is *committed* to my interests. I know that (although I believe she is competent and motivated to help me), there remains some *uncertainty*. So, by trusting her I run a certain *risk*. Whether I trust her or not is my *free choice*. If she fails to fulfil my expectations, I will *feel betrayed* (or let down) by her. The italicised terms are the primary key features of the pattern of trust. For the discussion, I will group these features under four headings: (1) expectation, (2) uncertainty and risk, (3) free choice, and (4) a feeling of betrayal if the expectation is not fulfilled. From these four features follows another feature: (5) trust always refers to a relationship between competent, autonomous agents.

I start with a preliminary look at these features. Some of the following statements or claims may be obvious. Others may be less so. I will try to vindicate each of them in the later subsections.

(1) TRUST EXPRESSES AN EXPECTATION. This statement is very vague and in need of considerable specifying. It implies the following: (a) If the patient says that she trusts her physician, it implies that she expects him to do certain things and/or to be something (e.g. honest). (b) As an expectation, trust is per definition future oriented. (c) The expectation in trust must regard something, which we perceive as positive, something we wish. (d) It does not make sense to say that one trusts someone, if the trustee is not (at least implicitly) aware of what is expected of him. (e) The expectation can never be general (you cannot trust 'wholesale') but must be specified. The expectations are generally referred to as trust domains. (f) The expectation must encompass both the competence

and the commitment[55] of the trustee. In other words, the expectation refers to characteristics of the trustee; it is agent-related. (g) The expectation must be realistic, i.e., it must refer to something that the trustee is capable to do. This must not be confused with whether he has the competence to do so or not. Finally, (h) saying ‘I trust A to do x’ generally (although not necessarily always) means ‘I believe A to be trustworthy with regard to x’. Consequently, trustworthiness like trust must encompass both competence and commitment.

(2) TRUST ALWAYS IMPLIES UNCERTAINTY OF OUTCOME AND RISK FOR THE TRUSTER. Here is what this implies: (a) Whereas an expectation in general may refer both to something that we know will happen (we expect the sun to rise at four o'clock tomorrow morning) as well as to something of which we are not sure that it will happen, trust always refers to something that is uncertain. More formally, 'I expect you to do x' can only mean 'I trust you to do x' if 'I expect' cannot be replaced with 'I know'. (b) Since trust always implies uncertainty, the truster runs the risk of being disappointed. In particular, if a patient decides to trust a physician, he runs the risk of being ill advised or badly treated. (c) If it does not matter (or if we do not care) whether our expectation is met, we do not trust; we simply wait and see.

(3) TRUST IS A FREE CHOICE. Although you occasionally hear people say 'I just happen to trust him', this does not mean that they trust fortuitously. The phrase 'I just happen to trust' simply means that the speaker trusts without too much deliberation. Trust is never accidental. Nor does it follow automatically from the fact that you believe someone to be trustworthy. Trust is always intentional. You decide to trust someone. If you decide to trust someone, this implies that you consciously accept the risk inherent in trust. Moreover, the decision to trust is not only intentional; it is also free. You may be forced by circumstances to rely upon someone or to cooperate with someone, but you cannot be forced to trust

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[55] As we will see later, there are two exceptions to this claim.

someone.

(4) A BREACH OF TRUST LEADS TO A FEELING OF BETRAYAL on the part of the truster. In general, if something that I expect to happen does not happen, I feel disappointed. However, if I trust someone and he breaches my trust, I feel betrayed rather than just disappointed. The fact that a breach of trust is always accompanied by a feeling of betrayal suggests that trust is a moral notion.[56]

From what we have seen so far, it is obvious that on this account trust is about a relationship between two competent and autonomous agents. Here is why:

(5) TRUST PRESUPPOSES A RELATIONSHIP BETWEEN TWO MORAL AGENTS. Since trust refers to what one person expects another person to do, trust must be relational. Trust always implies a relationship between one who trusts (the truster), and one, who is trusted (the trustee). This relationship may vary from a hearsay relationship (e.g. you trust the physicians at the local hospital, whom you do not know personally) to an intimate or longstanding relationship. Both truster and trustee must be autonomous and competent because only autonomous and competent persons can make free decisions and show commitment.

IN SUMMARY, this is an account of trust as an expectation of the truster on the trustee's contingent behaviour regarding the truster himself under conditions of uncertainty and risk. Moreover, it is an account of trust as free choice and conscious acceptance of the risk inherent in trust. This means that in order to be responsible trust has to be justified or grounded in a reasonable belief in the trustee's trustworthiness.[57] In other words, trust is not only a reasonable expectation, but also a justified expectation.[58] This account

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56 I will elaborate on this claim in chapter 6.3.1.

57 As I will show in chapter 6.3.2, this may also be the belief that the trustee has an obligation to be trustworthy.

58 I will explain the difference between a merely rational belief or expectation and a justified belief

presupposes a feeling of betrayal if one's trust is breached. Finally, trust is a moral notion and refers to a relationship between competent autonomous agents.

In the following sub-sections, I will analyse each of the individual features that make up the pattern of trust in detail. For each feature I will (a) show why I believe it to be important, (b) try to refute possible objections, and (c) specify the feature if necessary.

1.4.2 TRUST AS (SPECIFIC) EXPECTATION

I want to start this section with another quotation from Russel Hardin:

> "In virtually all conceptions of trust, there is an element of expectation" [Hardin 2006, p.29].

Indeed, the statement 'I trust you' implies that I expect you to behave in a certain manner, to do or to be something. Note that the expectation refers to the person acting in a certain way and not to the outcome. On this account, *trust is agent-related* and not outcome-related. 'I trust you to help me repair my bike' means that I expect you to help me and not necessarily that I expect my bike to be repaired in the end. More precisely, trust is based on the expectation

> "… that the person, who has a degree of freedom to disappoint our expectations, will meet an obligation under all circumstances over which they have control" [Misztal 1996, p.24].

As an expectation, *trust is per se future-oriented* or forward-looking. Quite aptly, Sztompka calls trust "a bet about future contingent actions of others" [Sztompka 1999, p.25]. Statements like 'I trust the show last night was good' express the speaker's belief that the show was good but not trust, because it refers to something in the past, i.e. to something he can know.

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or expectation in detail in chapter 2.3.

Moreover, the expectation in trust always refers to something that has a *positive value* for the truster.[59] The statement 'I trust you will be late as usual' only makes sense if it is to my advantage if you come late (it is what I hope for). Otherwise, it is simply a statement about my distrust or about my unfavourable beliefs regarding you.

An expectation may be vague, but it cannot be general. You cannot expect *'tout court'*. Nor can trust be general or absolute [Iltis 2007, p.45], you cannot 'simply trust'. Both *the object of trust (the trustee) and the content of your trust* (i.e. what you expect of the trustee) must be *specified.*[60] If we trust someone, we expect him or her to do (or to be) something particular. We may also say that we always trust someone with regard to something particular. These 'regards' are usually referred to as 'trust domains'.[61]

The following quotation directs us to two key expectations (or trust domains):

> "… trust definitions generally combine expectations about the ability or competence of the other with expectations about her value orientation, that is her ethics, integrity, and motives [Gilson 2006, p.360].

In other words, the expectation of the truster always refers to both the 'competence' (knowledge, skills) and the *'commitment'* (or motivation) of the trustee.[62] Since 'competence' and 'commitment' together define 'trustworthiness', one could also say that trust is an expectation regarding the trustworthiness of the trustee. There are two exceptions to this rule, to which I will come back in the next paragraph. As we have seen

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59 This does not imply that the value is morally positive. In the example of a wife trusting her lover to kill her husband, the expectation may be positive (i.e. wished for) for the wife, but is clearly morally reprehensible.

60 Hardin therefore talks of a three-part relation [Hardin 2002, p.9].

61 Some authors also use the term 'trust dimensions'. I prefer not to use the term 'dimension', because it has too many connotations.

62 McKnight and Chervany add another domain (they call them 'trust referents'), namely predictability [McKnight and Chervany 2001, p.31]. While I agree that predictability is important, I would subsume it under the domain 'commitment': If I am not predictable, I am not committed.

earlier, many authors define 'trust' solely with reference to commitment. I believe that this is wrong. In addition to being committed, you want your doctor to be competent. The patient does not want a top-notch surgeon, who (without telling her) lets his junior assistant do the surgery because she is not a private patient. Nor does she want a fine, empathic doctor, who is only a poorly trained surgeon.

I now come back to the two exceptions to the rule that trust always refers to the competence and the commitment of the trustee [Kohn 2008, p.59]. *First*, if we trust someone to have a certain attitude (such as open-mindedness) or to be something (such as to be honest), competence obviously plays no role. We must be careful, however: 'to be' has to refer to something which we are intrinsically (e.g. honest), and not to something which we are because we are doing something ('I trust you to be knowledgeable' really means 'I trust you to know a lot') or which itself expresses a competence (such as to be skilled). *Second*, if we trust someone to abstain from doing something, competence again plays no role. If I trust you not to lie to me, you do not need any particular competence. All you need is a commitment to veracity. In these two (and only in these two) cases trust refers to commitment alone.

To construe trust and trustworthiness with reference to competence and commitment sounds so intuitively right that surprisingly few people have had a closer look at what 'competence' and 'commitment' actually mean in the real world of the patient-physician relationship. The competence and the commitment of the physicians together define his trustworthiness. Trustworthiness is so important that it deserves a special section,[63] in which I will discuss how exactly competence and commitment define trustworthiness in physicians.

The trustee must be *aware* of what is expected of him. The statement 'I trust my son to water the garden during my absence' does not make sense if he does not know that I

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[63] See chapter 4.3.

expect him to do so. What this sentence means is 'I assume (or I hope) my son will water the garden'. However, the awareness may be (and in many cases is) implicit. You do not have to tell your doctor that you expect him to help you. The fact that you consult him implies your expectation.

There is an important limitation of what we can expect of the trustee:

> "Trust demands … that the party being trusted … is capable of the actions required" [Kohn 2008, p.59].

In other words*, trust presumes capability*[64] on the part of the trustee. Capability must not be confused with competence. Capability simply means that the trustee is (in principle) in a position to do what he is trusted to do (irrespective of whether he has the competence to do so or not). Alternatively, one might say that the *expectation must be realistic*. This condition is similar to Kant's "duty commands nothing but what we can do", often cited as "ought presupposes can" [Kant 1793, p. 94 in referenced edition]. It does not make sense to trust your neighbour to look after your garden during your absence if he is on vacation at the same time. Or, to take an example from medicine: if you are not willing to tell your physician honestly what worries you, he will not be capable to help you, because (not knowing what bothers you) he is not in a position to do what you trust him to do despite his competence as a physician. Of course, it is often difficult for the truster to know what lies within the trustee's capability. In fact, many patients overestimate the capabilities of a physician. In most cases, this will not be a problem. The 'misunderstanding' will be resolved during the discussion. It does become a problem, however, when patients have irrational expectations regarding the physician's capabilities. In Hertzberg's words, "trust can only concern that which one can rightfully demand of another" [Hertzberg 1988, p.319]. If a patient with an incurable cancer trusts her doctor to cure her, she expects him

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64 Tuomela and Hofmann call this the 'ability condition' oft trust [Tuomela and Hofmann 2003, p.165].

to achieve something which is not within his capabilities, and which she cannot demand of him.

To have specific expectations is an essential feature of trust, although in everyday life they are often not consciously spelt out. In many situations, we have 'default' expectations. If you ask a stranger for directions to the railway station, you expect him to indicate the correct way and to tell you honestly if he does not know himself. Similarly, your expectations are mostly implicit rather than formulated when you consult a doctor.

1.4.3 TRUST PRESUPPOSES UNCERTAINTY AND RISK

Here I will argue that trust is a concept which only makes sense (a) under conditions of uncertainty and (b) if there is a risk for the truster. In other words, you do not have to trust someone to do something if you already know that he will do it.

TRUST IMPLIES UNCERTAINTY

If we are certain how the other will act, we do not have to trust. Trust only comes into play, if we cannot be sure of how the other will act:

> "The need to trust presumes a state of incomplete knowledge. A state of complete certainty regarding a partner's future actions implies that risk is eliminated and trust is redundant" [Johnson and Grayson 2005, p.501].

Likewise, you do not have to trust someone to do something he would do (or abstain from doing) anyway. Theoretically, you do not have to trust your friend who is a strict Moslem not to drink your whisky. Admittedly, this example shows that there is a certain leeway, because even a Moslem may drink alcohol. It would be a sin, but then, who does not sin occasionally? In many cases, the uncertainty may be minimal, but at least it exists.

Uncertainty is so relevant in trust that trust can be seen as a strategy of "coping with uncertainty over time" [Dunn 2000, p.73]. Admittedly, trust is not the only strategy we can adopt in the face of uncertainty. Alternatively, we can (a) abstain from interacting, or (b) resort to some form of contract. Abstaining from action may be all right if done

occasionally. Used as a general strategy it will paralyse us. And if we abstain from action because we are habitually unable to trust, the lack of trust will eventually lead us to withdraw from society [Luhmann 2000, p.104]. So, this leaves us with the alternative of a contract. Contrary to what many people think trust and contracts may complement each other, but contracts to not increase trust. Setting up controls, regulations, and contracts may increase reliability. However, it will not increase trust[65]. In fact, it will more likely decrease trust. Just imagine that you ask your friend to sign a receipt when you lend him £10. At best, contracts will replace trust (in fact, this is what they are often intended to do). Yet, as I will show in chapter 6.2.3, contracts are poor substitutes for trust.

While I agree that we do not have to trust if we know what the other will do, I am not sure that I agree with Hardin, who contends that we do not have to trust if we know that the other shares our interests [Hardin 2006, p.17]. I think that whether we still need to trust or not depends on the extent to which the other shares our interest. Even if both parties have an interest in cooperating, you can rarely be sure that the interest is equal on both sides. And as long as there remains some uncertainty, there is room for trust.

Finally, there is the question whether we 'truly' trust if the trustee has an obligation[66] to do what we trust him to do. I would argue that the answer is 'yes' if we are talking about a moral obligation (because we can never really know whether he will behave morally). If, however, we are talking about a legal (or contractual) obligation, there is no need for trust, because the other is bound to do what we expect him to do by the law or by the contract.

TRUST IMPLIES RISK

Acting under conditions of uncertainty implies running a risk. Since the uncertainty of trusting pertains to the behaviour of the other this risk is a 'moral risk' or a 'moral hazard'

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65 See chapter 2.3.3 as well as chapters 6.2.2 and 6.2.3.

66 I will come back to this problem in chapter 1.4.4.

[Smith 2005, p.300]. If we do not care how 'the other' will act, we do not run a risk. Therefore, we do not have to trust him. Here is an example: If I invite you to my birthday party, but do not care, whether you come or not, I do not trust you to come. I simply wait and see. In the words of Luhmann, "trust is only required if a bad outcome would make you regret your action" [Luhmann 2000, p.98], i.e. if there is a risk. A statement like 'I trust you will win the competition tomorrow' does not express trust because there is no risk to me.[67] Such a statement simply expresses my opinion. Similarly, if the worst possible outcome is no worse or even better than the present situation (i.e. if things can only get better), there is no need for trust because there is no risk; one would chose this action anyway [Brown 2008, p.356]. The incurable cancer patient does not have to trust a healer because he will be no worse off if the hoped-for 'miracle cure' does not work.

In many people's mind, uncertainty and risk are synonymous. However, although they may have a lot in common, risk is always about a potential loss (you would not say 'you risk winning in a lottery'), whereas uncertainty may refer to wins and losses. Negative uncertainties are usually referred to as 'dangers', positive ones as 'chances'. Whereas risks can be assessed and/or quantified, uncertainty 'just is'. Uncertainties are inherent; they are ‘simply there’ [Luhmann 2000, p.100]. Risk presupposes uncertainty. If I know that I will fail an exam because I have not prepared myself, it does not make sense to talk of a risk of failing. Without uncertainty, there is no risk; but (and this is important) uncertainty does not necessarily imply risk. With any surgical procedure there are inherent uncertainties (e.g. will the surgeon be able to remove the tumour without injuring the facial nerve?). Yet, this uncertainty only leads to a risk when the patient decides to undergo the operation.

Because I will come back to the concept of risk throughout my thesis, I want to give a

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67 … unless I have made a heavy bet on your win. And even then, I can only trust you to play as well as you can, and not to win (see page 32).

clear definition. I define:

> the risk (of a scenario)
>
> as a function of the probability (of an adverse event happening)
>
> and the consequences (of the adverse event).

As an example, let me use the scenario of skiing down a slope: the adverse event happening could be falling or colliding with someone else; and the consequences could range from a few bruises to far less attractive injuries [Huang 2013, p.393]. If I know (or can calculate or estimate) the probability of the adverse event happening and its consequences, I can calculate or estimate the risk. To avoid any misunderstanding: by 'adverse effect', I refer to something, which we know may happen, either because it has happened in similar situations, or because it is bound to happen eventually. 'Adverse effect', however, does not refer to anything unknown of which people are afraid that it might happen (but have no good reason to do so). I will expand on this in chapter 5.6, in which I will discuss changes of risk perception.

Trusting implies two risks: The first risk is that my trust is breached. This risk is inescapable. The second risk is that an inherent risk (e.g. of a surgical procedure) materialises (becomes reality). An example of this second risk would be that the patient wakes up after a parotidectomy with a facial palsy. So, part of the overall risk is secondary to trusting (the risk of a breach of trust), and part of it is prior to trusting (the physician's competence is independent of whether he is trusted or not) [Sztompka 1999, pp.31-32].

Somehow, we feel that the two risks are tied together, and yet they do not necessarily come together. I come back to the same example. Let us assume that the surgery has gone well. There was no complication. But the patient finds out that the surgeon has lied about his qualification regarding the operation (he has never done it before). So, the first risk has materialised (because the patient's trust was breached), but fortunately the second risk has not materialised. Unfortunately, it may also be the other way round; the complication materialises despite the fact that the physician was competent and that therefore the patient's trust was justified. I will come back to this second example in

chapter 5.6, where I will argue that one of the major reasons why trust has declined is that patients are less and less willing to accept that complications can happen (i.e. that risks can materialise) even if nobody is at fault.

The fact that to trust means to run a risk does not imply that trust is an 'incalculable risk': on the contrary. We only trust if we are reasonably confident that the trustee deserves our trust. We assess the trustworthiness of the trustee, we weigh the possible gains, and losses, taking into account the respective probabilities of losses and gains. Obviously, there is interplay between these various factors. The higher the potential gain is (especially in comparison with the potential loss), the lower the evidence for (or the probability of) the trustee's trustworthiness need be for trust to be responsible[68] (and vice versa).

Uncertainty and risk are essential features of trust, although most of the time we are not aware of them. This is fortunate, because if we were aware of the risk all the time, we would probably loose 'trust in trust'.

1.4.4 TRUST AS FREE CHOICE

In this section, I posit that I can freely choose whether (and to what extent) I want to trust someone. This presupposes that trust is an act (or more cautiously formulated that trust may also be an act). To be able to defend my position I will have to refute claims that trust is purely cognitive (i.e. a mental state) or solely non-cognitive (i.e.an affective attitude).

Before I started looking into the philosophy of trust, it never even entered my mind that I might have no control over whom I was going to trust. So, it came as a big surprise when I hit upon statements like the following two:

> "All three extant standard conceptions of trust are therefore cognitive, … *If*

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[68] See footnote on p.10.

> *trust is cognitive, then we do not choose to trust"* [Hardin 2006, p.17, his italics].
>
> "I defend an account of trust according to which *trust is an attitude of optimism* that the goodwill and competence of another will extend to cover the domain of our interaction with her" [Jones 1996, p.4, my italics].

If, as Hardin claims, trust is solely cognitive, or if, as Jones claims, trust is purely an attitude of optimism, I agree that we cannot choose to trust. However, I disagree that trust is purely cognitive or purely an attitude of optimism. In what follows, I will try to refute the two claims.[69] I have two motivations to defend the position of 'trust as choice': *First*, the position that we cannot choose whether to trust or not is not plausible to me. *Second*, conceiving trust as choice has serious implications. Or, inversely, trust loses important qualities if we cannot choose whether we want to trust or not.

Here is a little thought experiment to illustrate why I think that it is *not plausible* to claim that I cannot choose whether I want to trust someone: I believe that you are a veracious and competent ethicist. Therefore, I trust you to help me with my thesis. But then (for whatever reason) I suddenly realise that my belief might be false and that you might betray my trust. It dawns on me that to trust means to run a risk, and since I am risk-averse, I decide that it is safer not to trust you after all (better be safe than sorry), despite the fact that I still believe that you are veracious and competent. Now, if I can choose to mistrust (i.e. not to trust) I must also be able to choose to trust, even if this only means that I can 'not choose' to mistrust.

Moreover, it is *not trivial* whether we conceive trust as something we can choose or not: (a) If trust means choice it becomes part of the discourse of agency, and thereby gains a moral dimension which it would not have otherwise. (b) To trust means to take a risk; and

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[69] To forestall any misunderstanding: I do not deny that cognition and attitudes are important aspects of trust. All I claim is that they are not sufficient.

if you do this at your own choice, you want to make sure you have good reasons. So, to be responsible, trust has to be well grounded. (c) If, on the other hand, trust is purely cognitive, any decline of trust must be due to a decline of trustworthiness (on which trust is based) and thus be external to the truster. In this case, we would have to explain why trustworthiness has declined rather than why trust has declined. All three points need further elaboration. I will address the issue of how we justify trust in chapters 3 and 4, answer the question whether trustworthiness rather than trust has decreased in chapter 5.1, and expand on why I believe trust to be a moral notion in chapter 6.3.

TRUST AS ATTITUDE VERSUS TRUST AS CHOICE

In the literature, 'trust' is often seen either as a cognitive mental state or as an attitude:

> "To fix ideas, let us call our trust '*cognitive*' if it is fundamentally a matter of our beliefs or expectations about others' trustworthiness; it is *'non-cognitive*' if it is fundamentally a matter of our having trustful attitudes, affects, emotions, or motivational structures" [Becker 1996, p.44, my italics].

Although this seems intuitively intelligible, it is in fact confusing: *First*, because "trust is having trustful attitudes" is circular and *second*, because the term 'attitude' is ambiguous and must be defined properly. Bem pointedly writes that "our attitudes are our likes and dislikes" ([Bem, 1970], cited in [Schwarz and Bohner 2001, p.436]). This may sound a bit simple, but it illustrates once again that very often "we recognise the relevant pattern and thereby acquire mastery of the terms" [Jackson 2010, p.179].

It is beyond the scope of this thesis to go into the immense scholarly literature on what attitudes are or how they can be defined. There are a few points, however, which I want to make.

Probably the most often cited definition of 'attitude'[70] is from Gordon Allport, according to whom an attitude is a

> "… mental and neural state of readiness, organized through experience exerting a directive or dynamic influence upon the individual's response to all objects and situations …" (Alport, 1935, cited in [Lind 1984, p.5]).

So, on this definition, an attitude has a cognitive component ('it is a mental state') and a behavioural component ('exerting an influence'). Moreover, it is acquired ('organized through experience'). This definition was later expanded e.g. by Rokeach and Smith to include an affective component [Rokeach and Smith 1968, no page numbering]. Moreover, it has been noted that attitudes (like trust or trustworthiness) are not general, but must have an object [Koballa 1988, p.117]; i.e., they must refer to someone or something. Whereas 'most young people have a negative attitude' does not make sense, 'most young people have a negative attitude towards old people' would make sense.

IN SUM, attitudes are acquired; they have a cognitive component and/or[71] an affective as well as a behavioural component; and they must refer to an object.

The fact that *attitudes are acquired* and may be modified (mostly through learning processes) distinguishes them from personality traits (which remain mostly stable throughout life). The *cognitive component* refers to such mental states as knowledge and beliefs, to what we know or believe about others. The *affective component* refers to our stance or disposition towards others. It may, but does not necessarily have to, follow from the cognitive component. Finally, the *behavioural (or conative) component* refers to how we behave towards specified others.

So, rather than saying that trust is *cognitive* if it is fundamentally a matter of our beliefs

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[70] The statement refers to the social science literature and is taken from [Lind 1984, p.5].

[71] I say 'and/or' because an attitude does not necessarily concern all components (see below).

and *non-cognitive* if it is fundamentally a matter of our affective attitudes, it would be less confusing if we talked of trust as a matter of the cognitive or of the affective component of our attitude, or (in short) of our cognitive or our affective attitudes.

I start with a discussion of **COGNITIVE ATTITUDES.** One of Hardin's major arguments against 'trust as choice' is that "just as you cannot look at the evidence and then decide to know, you cannot [assess the other's trustworthiness and then] choose to trust" [Hardin 2002, p.58]. Of course, I agree that I cannot look at the evidence and then decide whether I want to know or not. However, there is a major difference between 'knowledge' and 'trust': If I am told that the average distance from the Earth to the Moon is 384'400 km, I know this (in the vernacular sense of the word). I cannot choose whether I want to know it or not. Once I have been told, I know it. So, 'to know' is purely cognitive. I may forget the exact figure, but as soon as you mention it, I will say that of course I know this. Similarly, once I have assessed your trustworthiness, I believe that you are trustworthy. So far, this is no different from 'to know'. In this sense, trust is cognitive. But whereas 'to know' only refers to the content of what we know (the distance from Earth to Moon), 'to trust' also refers to how we interact with others based on our beliefs. In other words, whereas 'to know' is only self-referential, 'to trust' is also relational. 'I believe that you are honest' expresses my belief, but has nothing to do with our relationship. 'I trust you to be honest' expresses my belief and in addition informs about our relationship. I cannot choose whether to believe that you are trustworthy (if according to my assessment you are trustworthy), but I can choose to trust you or not.

Of course, Hardin admits that somehow we have to apply our belief of trustworthiness if it is to have any practical use. So he proposes that we should distinguish between 'trust' and 'acting on trust':

> “That trusting someone and acting on that trust are different is trivially evident” [Hardin 2002, p.58].

I agree with this statement, but not with the conclusion he draws, namely that 'to trust' cannot itself be an act. To underpin his point, Hardin argues that I may trust you (which for

him means that I believe that you are trustworthy), but not act on this trust. Here is an example: You may trust your doctor always to tell you the truth, but in fact never ask him to do so, because, being healthy, you see no reason to do so. So, for Hardin you trusted but did not act on your trust. Along similar lines, Simpson claims that

> "… defining trust as an action, which one places or not, fails to describe situations where trust is latent" [Simpson 2012, p.553].

To use the same example: Assume that you told your physician always to tell you the truth (even if it is bad news) and you trust him to do so. Luckily, until now he never had to give you bad news. Therefore, so Simpson argues, you were never exposed to risk; your trust was only latent. So, you did not trust.

To me, both arguments are flawed. To trust (in a relational sense) is something I do, irrespective of whether my trust is ever put to test or not. When you decided to trust your doctor, you could not know whether you would ever have to rely on his integrity or not. So, you did put yourself to risk. In both examples, you trusted, but your trust was not put to test; in Hardin's case, because you had no reason to act on your trust; in Simpson's case because the situation did not arise.

Linguistically, Hardin claims that 'to trust' like 'to know' is a stative verb.[72] To the contrary, I argue that whereas 'to know' is indeed purely stative, 'to trust' is both, stative (with regard to my belief in your trustworthiness) and non-stative (in as much as it refers to my relationship with you).[73] To limit the concept of trust to the belief component is insufficient and neglects an important aspect of 'trust'.

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[72] Contrary to this, McKnight and Chervany argue that 'trust' is an action verb, the truster being the subject, the trustee being the direct object [McKnight and Chervany 2001, p.40].

[73] See: Stative verbs may be non-stative if they refer to an action in progress (e.g. I am thinking about …) [http://www.annies-annex.com/dynamic_verbs.htm, accessed 28-5-2013].

Rather than always saying 'I act on trust' I think that at a 'street level'[74] we may safely use 'to trust' when we refer to the relational aspect of trust. Whether I say that I trust you to behave in a certain manner, or that I act on my belief that you are trustworthy does not make a difference. Either way, and that is the important point, I can choose whether I want to act, i.e. to trust you or not.

To end this discussion on cognitive trust I want to add a final argument for the concept of 'trust as choice'. I think that there is a major difference between knowing the distance from earth to moon and believing in your trustworthiness: the former is an empirical fact, whereas the latter is a judgement; even more to the point, it is my personal judgment. Everyone who measures the distance to the moon will come up with the same result (if he uses a reliable measuring method). Trustworthiness, however, is not definite; it has degrees, and it is situational. It is the patient's choice whether she considers the available information adequate to believe in the physician's trustworthiness. So, even if (as Hardin argues) trust inevitably follows from the assessment of trustworthiness, this assessment is subjective and hence subject to my choice.

Next, I will turn my attention to the **AFFECTIVE (I.E. NON-COGNITIVE) ATTITUDES**. As we have seen, Karen Jones, who is one of the major proponents of 'trust as an affective attitude'[75] writes:

> "I defend an account of trust according to which *trust is an attitude of optimism* that the goodwill and competence of another will extend to cover the domain of our interaction with her" [Jones 1996, p.4, my italics].

I am not happy with this definition. According to Garrard and Wrigley, "optimism is the belief that everything will turn out for the best. It focuses on some better future in a way which is detached from the individual; it is a stance which is ultimately that of the

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[74] This is a term, which Hardin himself uses in the context of epistemology.

[75] This is the title of one of her papers.

spectator" [Garrard and Wrigley 2009, p.42]. If we are optimistic, our optimism usually pervades most of our actions. [76] Attitudes, however, tend to be more specific. My political attitude may be left- or right-wing; but this has nothing to do with whether I am an optimist or a pessimist. Admittedly, people with a more optimistic outlook on the world[77] are likely to trust more easily. But simply to equate trust with optimism is not plausible.

I prefer to start from Eagly and Chaiken's definition of (affective) attitudes as

> "… a psychological tendency that is expressed by *evaluating* a particular entity *with some degree of favour or disfavour*" [Eagly and Chaiken 2007, p. 582, my italics].

Using this definition, what is commonly called 'identification based trust' [Goold 2002b, p.79] becomes the 'psychological tendency' to judge the trustworthiness of people with whom we share e.g. values, gender, or ethnicity 'with a degree of favour'.

I think it is fair to say that a 'benign (or malign) affective attitude' often influences our choice to trust. However, I would not go as far as Govier:

> "Trust *is in essence* an attitude of positive expectation about other people" [Govier 1998, p.6, my italics].

Just as I disagree with Hardin that 'trust is solely a rational assessment' (i.e. purely cognitive) I disagree with Govier that 'trust is purely affective'. I believe that for trust to be responsible our decision to trust must be grounded in some belief;[78] i.e., it *must have* a cognitive component,[79] and that in addition it *may be* (and often is) supported by a

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76 I admit that 'optimism' may also be specific (e.g. 'I am optimistic that on this occasion it will not rain again').

77 McKnight and Chervany use the term 'faith in humanity', by which they mean the general belief that others are trustworthy [McKnight and Chervany 2001, p.39].

78 I will show why in chapters 3 and 4.

79 In a very recent paper, Karen Jones has changed her position to a position very close to what I have just outlined: "Perhaps sometimes there is an affective component to trust, and sometimes not, but trust always works by shaping the agent's interpretation of reasons…. Call

positive affective attitude.

Having said all this, I want to clarify that I do not claim that trust is always a deliberate, conscious choice. Rather, I agree with Holten who says that

> "… I think that in some circumstances we can decide to trust. I do not say that every case of trust is a case of a decision to trust" [Holton 1994, p.69].

In most cases, our choice is unconscious. In fact, most of the time we are not even aware that we are trusting [Lagerspetz and Hertzberg 2013, p.32]. There are far too many situations, in which we simply have to trust in order to function efficiently. Since this limitation is nowhere as evident as in the continuous necessity to trust other people's testimonies, I will discuss this in detail in the chapter on epistemic trust.[80] What is important is not so much that we choose to trust in every case but that we have the option to choose if we want to.

SO FAR, I have argued that trust is a cognitive mental state in so far as it refers to my beliefs (i.e. the assessment of your trustworthiness), and that it is an act in as much as it refers to how I interact with you. Whereas I cannot choose to believe (this is the cognitive part), I can choose to act on what I believe (this is the relational part). Moreover, I have argued that the decision to trust may be supported by (but cannot be solely based on) an affective attitude.

So far I have presented arguments to underpin my claim that we can chose whether we trust or not. Now, I will now go a step further and claim that we cannot only chose but chose freely, i.e. that trust is a *free* choice. It will come as no surprise that 'free choice', being a concept, needs to be defined.

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these 'trusting interpretations'" [Jones 2013, p.16].

[80] See chapter 3.

TRUST AS FREE CHOICE

To avoid any misunderstanding, I use the term 'free' in a descriptive rather than in a normative sense. Here is an example of what I mean by this: If 'coercion' is used descriptively, it refers to any form of external influence irrespective of whether this influence is morally wrong or not. If it is used normatively, it refers only to those cases where the influence is morally wrong. Similarly, if 'free' is used descriptively, it refers to any act performed in the absence of controlling influences; if it is used normatively, it assigns some moral value to the act. In this latter case to say that 'trust is a free choice'' would imply that trust is a moral notion [Wilkinson 2013, pp.85-87].

Moreover, (after a lengthy internal and external debate) I decided I have to use the term 'free' rather than 'voluntary'. I am well aware that the two terms are not synonymous (although they overlap to some extent). However, because much of the literature is on 'voluntariness', I will occasionally use the term 'voluntary' in lieu of 'free'.

In the previous section, I have shown that we can choose whether we want to trust or not. Yet, the fact that we choose something does not necessarily imply that our choice is free. The mugger's 'your money or your life' obviously leaves me a choice (albeit one that is definitely not 'free'). I could even argue that I hand over my wallet intentionally (after all, I do not accidently drop it). Yet, it would be stretching the truth to claim that I hand over my wallet freely. Obviously, 'intention' alone does not make my choice free. So, how can we define 'free choice'? Nelson *et al.* offer the following (explicit) definition of 'voluntary' action:

> "We propose that the concept of voluntary action be understood in terms of two necessary and jointly sufficient conditions: intentional action and the absence of controlling influences" [Nelson et al. 2011, p.6].

If he is correct, 'voluntary' implies both intention and absence of controlling influences. As we have just seen (in the example of the wallet), intention alone is not sufficient to define 'voluntary'. As regards the necessity of the second condition (absence of controlling influences), I think that it is undisputed, although, as we will see, it is often difficult to

decide what exactly counts as a controlling influence. So, the question that remains to be answered is, whether we need the first condition (i.e. intention) at all, or whether doing something without controlling influences is implicitly intentional, in which case 'absence of controlling influence' would be sufficient to define a free choice. Obviously, Nelson thinks it is not. To the contrary, I hold that whatever I do in the absence of controlling influences, I do intentionally. Here is why: If no controlling influence induces me to do 'x', I have two options: I can abstain from doing 'x', or I can do 'x'. No matter what I choose (to do 'x' or not to do 'x'), my acting and my non-acting is intentional. Therefore, I argue that 'absence of controlling influence' is not only the *key feature of 'free choice',* it is also a sufficient condition. I admit, though, that a controlling influence may at times be difficult to detect,[81] (a) because not all influences are *per se* controlling, and (b) because there are external as well as internal influences (which may be more difficult to detect) [Nelson et al. 2011, p.8].

Having defined 'free choice', I will now turn my attention to its practical application. In the medical context, the concept of 'free choice' is often referred to as 'voluntary choice' or 'voluntariness of choice' and discussed within the framework of 'informed consent'. Consent is considered ethically valid if the patient is given the necessary information, has the competence to understand this information, and acts voluntarily [Wilkinson 2013, p.76]. Even if trusting someone and consenting with what someone proposes is not necessarily the same, much of what is said about voluntariness in the context of informed consent is useful in the trust context.

According to the Nuremberg Code of 1949

> "… voluntariness is the free power of choice without undue influence or coercion" (cited in [Miller et al. 2009, p.25]).

This sounds intuitively right, and yet it is not very helpful, because it replaces one

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81 One might add 'and to define': the question whether dipsomania is a vice or a disease largely depends on how we define (and hence, what we regard as) 'controlling influence'.

unknown with another. Instead of having to define 'voluntariness', we now have to define what we consider as 'undue influence' or 'coercion'. Whereas coercion may be relatively obvious, it is rather difficult to decide what counts as 'undue influence'. Since we are not making decisions in the void, I think it is reasonable to assume that all our decisions are made under *some* influence (even if at times we may not be aware of it). This influence may be external (i.e. coming from outside) or internal (i.e. relating to our own beliefs or feelings) [Nelson et al. 2011, p.8]. Irrespective of whether influences are external or internal, they may be fully controlling (in which case our decision is not free), partly controlling (in which case the voluntariness is questionable), or not controlling. So, voluntariness is not black or white; it admits of degrees. One may say that

> ".. voluntariness is the degree of control that an agent has over his behaviour" [Wall 2001, p.130].

Moreover, influences may be objective/objectifiable (e.g. if a doctor makes it clear to the patient that unless she follows his recommendations he will refuse to see her again) or subjective (e.g. if the patient fears that the doctor will abandon her if she does not follow his advice). Whereas the first case is clearly one of coercion, the second case is more difficult to judge. *Being free* and *feeling free* from controlling influences are not the same [Berghmans 2011, p.23]. In the first case, the patient is not free, in the second case, she may be free, but does not feel free. The opposite situation (i.e. a patient, who feels free although in reality he is not free) is also possible, probably more common, and certainly more problematic.

In other words, there is not just free and not free; there are all shades in between. So, where should we set the cut-off point? The same applies to influences: they are not just harmless or coercing; they may be anything in between. Nor are influences either entirely objective of purely subjective; many of them have a touch of both. Moreover, are objective or subjective influences worse? And which of them trumps? Rather than trying to answer these questions (which I believe would be futile), I will discuss three potential limitations of the 'freedom of choice': (1) How much persuasion is permissible? (2) Do obligations *a*

priori render choices unfree? And (3) what if there are no alternatives?

(1) The art of **PERSUASION** (i.e. the physician's ability to persuade the patient to follow his advice) is part of what makes up the physician's trustworthiness. If he does not try to persuade the patient, she may think that he is not sure (or convinced) himself. However, it is often difficult to decide when exactly persuasion becomes coercion. Whether an argument is perceived by the patient as persuasive or as coercive often depends on what the patient prefers to hear. If the patient with the pleomorphic adenoma goes to see her physician with the idea of 'having the thing removed', she will freely agree to the proposed surgery. If, however, she does not feel inclined to undergo an operation, she may think that the doctor is trying to bully her into consenting to surgery. Or, to paraphrase Appelbaum *et al.* 'applying pressure may be reprehensible, but, if it is not causally related to the decision, it does not render the decision involuntary' [Appelbaum et al. 2009, p.34]. To come back to my example: if the patient's decision to undergo surgery is *not* due to the physician applying some 'pressure' but to her preconceived idea 'to have this lump removed', the decision may be considered her free choice.

(2) Trust does not exist in a void. It happens in a relationship (see below); and in relationships, people have **OBLIGATIONS**. Now, does a patient trust freely, if she has (or thinks she has) an obligation towards her physician? The first impulse would probably be to say no. But if any obligation automatically renders an act unfree, then all actions, which we perform because we feel that we have a moral obligation, become unfree. This cannot be right. So, I would agree with Wertheimer that a (real or imagined) obligation *per se* does not render a decision unfree [Wertheimer 2012, p.238].

(3) Perhaps even more difficult to answer are the following questions: Is the patient's trust his free choice if he has **NO (ACCEPTABLE) ALTERNATIVE**? And, does it matter whether the patient effectively has no alternative or just thinks he has no alternative? From a legal standpoint, Appelbaum *et al.* argue that

> "… constraints - such as poverty, [or] the lack of alternative treatment options…. - may have a profound influence on … choice, but with the

> possible exception of some extraordinary cases, they do not make the choice involuntary" [Appelbaum et al. 2009, p.33].

Of course, legal arguments are not necessarily congruent with ethical arguments. Yet, even from an ethical standpoint, I believe that he is right. The standard example used in discussions of informed consent is the patient with a life-threatening disease who has to undergo emergency treatment. Is this patient's consent to the treatment free, and is the consent valid? There are three possible answers to these questions [Wertheimer 2012, p.236]: (a) The consent is not free. This means that the consent is not valid. I think that this is clearly inacceptable, because it would render a major part of medicine *a priori* unethical. (b) The consent is not free, but the consent is still valid. Again, this is not satisfactory, because it would query the entire concept of informed consent, which would be too high a price to pay. (c) It is free despite the lack of choice, and hence the consent is valid. Even if no one is probably completely happy with this answer, I think it is the best possible solution. The main reason for accepting this solution is

> "… that it will be difficult, if not impossible, to specify non-arbitrarily what counts as a sufficient good number of sufficiently good alternatives" [Wilkinson 2013, p.80].

Now, if consent is free in the absence of an alternative, trust must be equally free in the absence of an alternative. Moreover, I do not think it matters whether the absence of an alternative is real or surmised. Nor does it matter whether there is no alternative or simply no time to evaluate potential alternatives (as in emergency cases).

IN SUMMARY, trust is essentially a free choice. Even if in the great majority of situations trust is not a deliberate choice, having the option to choose is an important feature of trust. Moreover, neither obligations on the part of the truster, nor lack of alternatives render our choice to trust *a priori* unfree.

1.4.5 FEELING OF BETRAYAL AFTER A BREACH OF TRUST

In chapter 1.4.3, I argued that to trust means to accept the risk of a breach of trust. This is nothing special. We all run risks all the time. What differentiates the risk in trust from other risks is our reaction if the risk materialises. If something we simply rely upon fails, we are just disappointed (or, depending on the situation, angry). A breach of trust, however, brings about a feeling of betrayal or deception. To illustrate this, here are two examples: *Example 1*: Every morning at ten you go to the post office to pick up your mail. So far, it has always been ready by that time – but today it is not. *Example 2:* Your friend has promised to help you set up your new computer. Having known him for years, you expected him to show up – but he did not come. Both times your expectation was not fulfilled. Yet your reaction was different in each case. When your mail was not on time, you were somewhat annoyed; but when your friend did not show up, you felt let down, or betrayed. So, what is the difference between the two cases? The answer is that you trusted your friend but relied upon the mail service. Your friend's breach of your trust leads to a feeling of betrayal on your part, whereas the unreliability of the postal system only leaves you disappointed or annoyed. It is this feeling of betrayal[82] that distinguishes trust from other types of expectations [Baier 1986, p.235]. If you are uncertain whether you trust or rely on someone simply ask yourself whether (if your expectations were not met) you would feel betrayed or merely disappointed.

Admittedly, the answer that we feel let down in the case of trust but not in the case of reliance somewhat begs the question. It does not explain *why* we feel betrayed in one case but not in the other. My answer to this question is that the feeling of betrayal (which is often referred to as a 'reactive attitude') is limited to 'disappointments of moral expectations'. You feel betrayed if your friend does not keep his promise (keeping a

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82 The fact that the feeling of betrayal admits of degrees does not change this: even a minimal feeling of betrayal differentiates trust from other expectations.

promise is a moral obligation), but not if the mail is not on time (delivering the mail on time is not a moral obligation).

This reactive attitude of feeling betrayed has significant consequences: since you feel betrayed if your trust is breached it follows that trust (like promise keeping) is a moral notion. I will come back to this in chapter 6.3.1.

1.4.6 TRUST AS RELATIONSHIP

From what I have said so far, I think it follows that (on this account) trust is always relational and can only prevail between competent autonomous agents[83].

The *relationship character between truster and trustee* is obvious in the case of a patient and his physician. Yet, we also trust doctors (or other professionals) qua role representatives [Schermer 2002, p.171]. We trust hospitals or other medical institutions, and we can even trust health care payers (at least theoretically). In all these instances, the relationship is neither immediately evident nor is it personal. And yet, I hold that in all these cases there is a relationship between the truster and the trustee. To explain why I believe this to be so, let me use another example: You may hear people say that they trust the BBC weather forecast. I am sure that most of these people have no personal relationship with the forecaster (or the meteorologist responsible for the forecast). Their statement about their trust in the BBC forecast means that they believe in the competence and the commitment of the meteorologists. So far, there is no difference between trust in your doctor and the trust in the meteorologists. And yet, I claim that you *trust* your doctor but *rely on* the competence of the meteorologist.[84] Now, you not only trust your own doctor, you also trust the doctors at your local hospital to be medically competent and to

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83 I will qualify this statement further down.

84 I will have a closer look at the (important) differentiation between trust and reliance in chapter 2.3.3.

be committed to their patients. After all, this is what they profess to do. Of course, you may say that the meteorologists are competent and committed as well; which is certainly true. So, where is the difference? The difference lies in the relationship aspect of trust. The commitment of the hospital doctors is to their patients, i.e. to you personally, if ever you become a patient at this hospital. So, there is a (potential) relationship between you and the hospital. This is also true in the case of e.g. an insurance company, and even in the case of a health authority. In all these instances you trust their representatives to be competent and, (what is more important) to make decisions that are in your (or at least your fellow humans') interest. In the case of an insurance company, this may e.g. mean that you trust its personnel to put your personal interests above the company's financial gain. In sum, trust in institutions is possible via trust in representatives [Sztompka 1999, p.19-20].[85] In contrast, the meteorologists may be committed to do a competent job, but they are not committed to you (or any of us). It is not their job to make a prognosis that is in your (or actually in anyone's) interest, because there is no (not even a potential) relationship between them and the listeners of the BBC. In the words of Lagerspetz and Hertzberg "trust means we are prepared to enter in some kind of cooperation" [Lagerspetz and Hertzberg 2013, p.34], and whereas there is 'some kind of cooperation' between you and your doctor, hospital, or insurance company, there is clearly no cooperation between you and the meteorologist.

From the fact that trust is relational follows that we can only trust in persons (interpersonal trust) and (indirectly, through representatives) in institutions (institutional trust), but not in technology or in 'medicine', where 'medicine' refers to a body of knowledge or to a mode of decision-making and of judging medical interventions.[86] Moreover, the fact that trust is

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85 Contrary to this view, which is also held by Giddens, Luhmann argues that trust in the institution must precede trust in institutional members (see [Meyer et al. 2008, p.182]).

86 As I will show in chapters 2.3.2 and 2.3.3, we can believe in medicine and we can rely on technology, but we cannot trust in them.

about a relationship does not imply that the beneficiary of the trust is always the truster himself [Holton 1994, p.65]. If I trust you to help your sister the relationship is between you and me, but the beneficiary would be your sister.

Both truster and trustee must be autonomous and competent (not in an absolute sense but with regard to what trust is about in the specific case)[87], because only autonomous and competent persons can make free decisions and show commitment. Moreover, since only an individual can make an autonomous choice the truster must always be an *individual*. If a group of individuals (or 'the public') claims to trust 'A', this may mean either that each individual has decided to trust 'A' based on his or her own assessment of the trustee's trustworthiness, or that the members of the group individually trust the assessment of 'A's trustworthiness by one member of the group'.[88] Contrary to this, it is possible to trust a group of moral agents or even institutions (e.g. a health-care organisation) on the assumption that the members of the group are jointly committed and jointly have the necessary competence.

1.5 SUMMARY OF CHAPTER 1

In this chapter, I have looked at the existing definitions of trust and found that, although definitions of trust abound, none of them fulfils my five conditions for a satisfactory theory of trust.[89] In particular, there is no explicit definition. I have had to leave the question open, whether there is an explicit definition of trust (which we have not found, or which is beyond us) or whether an explicit definition of trust is impossible (because trust is not a single concept).

In this situation I have proposed an account of trust based on the pattern or common

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87 This may reduce the scope of 'trust of' and 'trust in' children but does not rule it out. I will discuss this in more detail in chapter 7.2.

88 Sztompka refers to this as second order trust [Sztompka 1999, pp.46-47].

89 See page 16 for a list of the five conditions.

features (or 'family resemblance') of what we recognise as trust. In an explicit definition, all criteria are essential and together they are sufficient. In other words, an explicit definition would unequivocally identify trust (if all criteria are met), and it would unmistakably *exclude* everything which is not trust (if not all criteria are met). In a pattern-based definition not all criteria are essential (it may still be trust if not all criteria are met). And even taken together they may not be sufficient to identify all possible cases of trust. In other words, whereas an explicit definition would identify trust with certainty, a pattern-based definition identifies trust with a certain probability, but the better a case fits the pattern, the more likely it is trust. Moreover, whereas in an explicit definition all criteria are essential and have the same importance, in a pattern-based definition some features may be essential while others are not.

Starting from an analysis of the sentence 'I trust my doctor', I have stepwise identified the following common features of trust:

- Trust is an expectation regarding the trustworthiness, i.e. the competence and commitment of the trustee[90]
- Trust is responsible if this expectation is justified[91]
- This expectation must be realistic (i.e., the trustee must be in a position to do what he is expected to do)
- Trust presupposes a situation of uncertainty and risk
- Trust is a free choice and implies the (at least unconscious) acceptance of the trust inherent risk
- A breach of trust causes a feeling of betrayal on the part of the truster
- Trust refers to the relationship between agents, who are competent and autonomous

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90 I will present a detailed analysis of the concepts of 'competence' and 'commitment' in chapter 4.

91 I will present an analysis of the concept of 'justification' as well as my arguments under what conditions trust is justified in chapters 3 and 4.

with regard to the topic of trust.

So far, this definition fulfils the first three of the five conditions for a satisfactory definition I set up in the introduction to this chapter: *First*, it fulfils the eliminability and conservativeness criteria of a good definition [Belnap 1993, p.117]. I.e., 'trust' can be understood by previously understood terms (expectation, competence, commitment, risk, etc.); and replacing these previously understood terms with 'trust' leads neither to inconsistencies nor to anything new. *Second*, I believe it is comprehensive, i.e. it encompasses all relevant features of trust. I admit that there may be other features, which I have not identified, but I doubt whether adding additional features would improve the power of the definition to identify cases of trust.[92] *Third*, it is applicable both to individuals (physicians and other health care professionals) and (through representatives) to the institutions these people work in. It remains to be shown whether it also fulfils the *fourth* and *fifth* conditions, i.e., whether it has the discriminatory power to differentiate trust from related concepts and the explanatory power to explain the decline of trust and the instrumental and moral value of trust. I will address the discriminatory power in the second and the explanatory power in the fifth and sixth chapter.

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92 Some time ago, I did an in-depth study of the prognostic value of more than 20 parameters of aero-digestive tract carcinomas with the goal of creating a model predicting the prognosis. It turned out that three or four parameters were sufficient to make an accurate prognosis. Adding additional parameters to these key parameters did not significantly improve the prognostic accuracy of the statistical model [Wolfensberger 1992].

CHAPTER 2 DIFFERENTIATING TRUST FROM RELATED CONCEPTS

2.1 INTRODUCTION

I have started in chapter 1 with the claim that we must know what trust is. I think it is equally important that we know what it is not, i.e. how it differs from similar concepts. The purpose of this chapter is to defend my claim that 'confidence', 'reliance', hope', and 'belief in something or someone'[93] are (contrary to widespread usage) not synonymous with 'trust' (nor with each other), and should be clearly differentiated in order to avoid misunderstandings. At the same time, this offers an opportunity to test whether the pattern-based account of trust has the discriminatory power to unequivocally differentiate between trust and these related concepts.

Of course, one may ask why I want to differentiate between trust and some other terms that are so clearly used interchangeably by many people. In chapter 1.2, I have argued that 'not everything that has trust on the label has trust inside',[94] i.e., that not all uses of the term 'trust' are permissible, and that in many situations the use of confidence, hope, reliance, or belief-in would be more appropriate than the use of trust. In this chapter, I defend the position that a differentiation between trust and confidence, reliability, hope, and belief-in is not only possible but also advisable, both from a conceptual standpoint as well as for practical reasons, because the indiscriminate intermingling of these terms leads to confusion and misunderstanding. Here is an example which shows that the equation of trust with belief-in leads to false conclusions: the often-heard statement 'I don't trust in medicine any more' is usually interpreted to mean that patients have lost trust in physicians, when in fact it only means that patients no longer *believe in* the paradigms of

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93 I will refer to the concept of a 'belief in something (or someone)' as 'belief-in'.

94 See page 23.

modern medicine.[95]

Apart from being related to confidence, reliance, etc., trust is also closely related to its opposite. In this chapter, I defend the position that trust has not one opposite (such as 'false' in the case of 'true'), as one might expect, but two (*m*istrust and *d*istrust), and that these two concepts can and should be differentiated. I probably do not have to defend my intention to analyse the difference between trust and its negative counterpart. It may be somewhat less obvious, however, that on my view mistrust and distrust (which are often used interchangeably) are two separate concepts.

OUTLINE OF THE CHAPTER: The chapter has two sections. The *first section* will be devoted to a discussion of the two opposites of trust: mistrust and distrust. In the *second section*, I will look at the relation of trust to confidence, reliance, etc. by comparing their patterns and I will briefly examine the role that these concepts play in the patient-physician relationship.

2.2 MISTRUST AND DISTRUST

Most concepts have one contrary, like love / hate or hot / cold. Trust has two opposites: 'mistrust' and 'distrust'[96]. In this short section, I show that the two terms (although they are often used interchangeably) can (and should) be clearly distinguished. To introduce the subject, here is a short example: If you answer 'no' to an opinion pollster's question whether you are familiar with a certain brand X, he knows what he wants to know, namely that you have not heard of brand X. However, if you answer 'no' to a standard poll question such as "would you tell me whether you trust doctors to tell the truth?" [Ipsos

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95 I will come back to this example in chapter 5.4.

96 Actually, there is yet a third option, namely to withhold trust even though one believes that the other is trustworthy. Since on my definition of trust, trust is a choice, this is of course true. Yet, I do not believe that this type of 'not-trust' plays an important role in the patient-physician-relationship.

MORI 2007, p.7], the interviewer may think that he knows what he was paid for to find out. Yet, the fact is that he does not know. Here is why: If you say that you are not familiar with brand X, there remains no ambiguity. Either you know it or you do not know it. If, however, you say that you do not trust (i.e. expect) doctors to tell the truth, this still leaves room for two different interpretations: you may generally expect doctors to lie, or you do not generally expect them to lie, but neither do you expect them to tell truth.

Trust, mistrust, and distrust differ with regard to the truster's expectations. Trust is about positive expectations. Of the two other terms, one expresses a negative expectation (in the example you expect doctors to lie), whereas the other simply refers to an absence (or suspension) of trust[97] (you neither expect them to tell the truth nor do you expect them to lie). Consequently, 'I don't trust you' may either mean 'I believe that you are not competent or not committed to my interest' or 'I do not know whether you are competent and will act in my interest or not'. In the vernacular, the two terms are used interchangeably, although they are clearly not synonymous. Semantically, the two prefixes 'dis' and 'mis' are very similar, although I think that overall 'dis' has a more negative connotation than 'mis'. With few exceptions (e.g. [Omodei 2000, p. 279]), 'distrust' is used to refer to the negative expectation (e.g. [Rose et al. 2004; Shea et al. 2008; Sztompka 1999]). I will follow their example, i.e., I will use the following definitions: *'Trust'* refers to a positive expectation (as it typically does). '*Distrust'* refers to a negative expectation (you believe that the trustee[98] will not be honest, etc.). I.e., it is more than just a negation or refusal of trust. Finally, *'mistrust'* refers to the absence (suspension) of both trust and distrust. You do not believe that the trustee will lie, but neither do you expect him to tell the truth.[99] In a way, mistrust

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97 Hall et al. call this "a sense of agnosticism but not active distrust" [Hall et al. 2001, p.618].

98 Strictly speaking, he will not be a 'trustee'. I still use the term for convenience sake.

99 One might argue that 'mistrust', meaning the suspension of trust, is not truly an opposite of trust. Yet, even if one agrees with this, mistrust is perceived as negative, and in this sense, it is the contrary of trust, which is a positive expectation.

is a negation of both trust and distrust.

In practice, there is often a certain overlap of the two terms. The statement 'I don't know whether I can trust him' (suspension of trust) probably implies at least a grain of the 'expectation that he will not be quite honest'. Nevertheless, I believe that we should make a clear distinction between the two terms. Overall, to distrust someone is a far severer moral criticism than to mistrust someone [Hawley 2012, p.9]. Here is why: If I tell you that I *dis*trust you this implies that I believe you to be dishonest, unreliable, etc. (all terms that are far from complementary). If, on the other hand, I tell you that I *mis*trust you this simply implies that I do not know you well enough or that I am not yet sure, whether you are trustworthy. Distrust also has far more negative consequences than mistrust. Outright distrust is detrimental to social interactions, whereas a certain amount of mistrust may at times be indicated. We can see it as a

> "… form of wariness that generates caution and verification ('trust but verify')" [Hall et al. 2001, pp.618-19].

This view is probably correct as long as mistrust does not become habitual, because every time we mistrust, we miss an opportunity to trust (and hence to benefit from the advantages that trust offers[100]). Take e.g. the increasing number of parents who forego the protection that vaccination would offer to their children because they mistrust their paediatrician's recommendation. Besides, wholesale distrust is incoherent [O'Neill 2002a, p.121]. In the end, you will always have to trust someone. Paradoxically, people who say that they no longer trust doctors usually do so because of what they have learned from the media, i.e. from those journalists whom the same people claim to trust even less than doctors.

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[100] See chapter 6.2.1.

Whereas trust is a way to handle uncertainty and risk[101], distrust is not. It simply avoids the issue. If you distrust someone, you will have to use other means to cope with uncertainty. If you trust someone, you are willing to render yourself vulnerable,[102] to transfer power to the trustee. If you distrust, you will not do either. Just as there is only conditional trust, there is only conditional distrust. Like trust, distrust must always be specified. This is best exemplified by the fact that you can trust and distrust the same person at the same time, but with regard to different issues[103] [McKnight and Chervany 2001, p.42].

There is yet another important point: whereas it is often rather difficult to build trust, mistrust and distrust come easily. This is not surprising, because to trust (contrary to mistrust and distrust) needs courage (to run the risk of trusting). Also, the transition from trust to distrust is much easier and happens much faster than the opposite. Moreover, it is probably easier to pass from mistrust to distrust than from mistrust to trust [Sztompka 1999, p.27]. If we remember that "the surest way to make someone untrustworthy is to distrust him and show your distrust"[104] it becomes obvious that distrust is self-reinforcing [Miller 2007, p.59].

IN SUMMARY, we have trust as a positive expectation on one side, distrust as a negative expectation on the other side, and mistrust as the suspension of both somewhere in between.

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101 See chapter 6.2.1.

102 I am aware that this term is poorly defined [Wrigley 2014] but here I am simply using it in its vernacular sense.

103 I have a colleague who is a good surgeon but an inveterate womaniser. So, whereas I trust his medical judgement, I would never trust him to take my daughter camping.

104 Henry L. Stimson, U.S. Secretary of War from 1911-1913.

2.3 CONFIDENCE, RELIANCE, HOPE, AND BELIEF-IN

In this section, I demonstrate why the four terms are not synonymous with trust, despite the fact that in the vernacular they are often used in lieu of trust. I will start by demonstrating why these concepts are neither synonymous with trust nor with each other and then have a closer look at the role that the four concepts play in the patient-physician-relationship in separate subsections.

As we have seen, we say that we trust (among other things), ‘that the weather will be good tomorrow' and 'that our car will keep running another year'; we trust 'the brakes of our bike', we trust 'in the faithfulness of our partners'; and we may ‘trust in homeopathy’. I think it is obvious that according to my account of trust, we *may say that we trust* but we *cannot effectively* trust the weather; nor our car or the brakes of our bike, because trust is always about a personal relationship.[105] And just as we cannot trust in medicine, we cannot trust in homeopathy. Only in the case of our partner’s faithfulness can we talk of trust in the strict sense. It the other cases, I argue, it would be correct to express our beliefs by saying that we *hope* (or, depending on the situation that we *are confident*) that the weather will be good, and that our car will keep running another year, that we *rely* on the brakes of our bike, and that we *believe* in homeopathy.[106]

Trust, according to my pattern-based account, is an expectation of the truster regarding the truster's behaviour under conditions of uncertainty and risk. Of the four concepts, only confidence, reliance, and hope refer to an expectation of the speaker, and so far fit the pattern of trust, whereas a 'belief-in' is not an expectation but simply an affirmation of the

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105 See chapter 1.4.6.

106 In fact, trust is used in lieu of even more terms. Faith is one of them. Since faith belongs almost exclusively to the discourse of religion, I will not include it in the discussion. Another use of trust is illustrated by the sentence ‘I trust you will come to the party tonight’. Of course, this may mean that I trust you to come. Yet, more likely, it simply means ‘I assume you will come’.

speaker's belief.[107] Clearly, 'belief-in' in does not fit the pattern, i.e., it is different from trust.

Next, to differentiate trust from 'confidence', 'reliance', and 'hope', let us look at the level at which the expectation is situated. To explain what I mean by this, I will compare 'expectation' with 'belief'. Beliefs can be irrational, rational, or justified.[108] Similarly, expectations can be irrational, rational, or justified. Let me start at the bottom of this hierarchy: my belief that the moon is populated by pink piglets is irrational, and so is my expectation that one day we will find piglets on the moon.[109] Irrational expectations have nothing to do with trust. And yet, they are often confused with trust.

Contrary to the belief that there are pink piglets on the moon, the belief that somewhere in the wide universe there is another form of life is perfectly rational,[110] and so is the expectation of scientists that eventually they will find signs of life elsewhere in the universe. Contrary to irrational expectations, *rational expectations* can become true. If they refer to something positive, they are often called 'hope'.[111] Scientists hope to find signs of life in the universe. As I will show in the short section on 'hope' below, it is important not to confuse irrational wishes (which often take the form of false hope) with true hope.

Now, let us move one more step up the hierarchy of beliefs: When I was a kid, I loved dolphins and (like all my companions) I thought they were fish. Even if I eventually learned

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107 See chapter 2.3.2.

108 Of course, these are not the only possibilities, but they are the only ones in which I am interested in the present context.

109 At least as long as 'pink piglets' refers to what we call pink piglets in the vernacular, the chances (or the probability) that we will ever find pink piglets on the moon are exceedingly small (or even approaching zero).

110 Given the immense size of the universe, it is (for purely statistical reasons) probable that life has evolved more than once.

111 We can rationally wish for something negative. But this would not be 'hope'.

that they are mammals, I think that at that time my belief was perfectly justified; after all, I had good reasons to believe that they are fish since they look and behave like fish in many ways (although not in all ways). As much as there are beliefs that are both rational and justified (even though they may not be true), there are expectations that are both rational and justified (even though they do not necessarily have to become fulfilled). As I have argued in the preceding paragraph, hope is a rational expectation because it may become true (this applies even to the rather unrealistic hope of emptying the jackpot in a lottery). Yet, hope is not a justified expectation because I have no reason to believe that my hope will become true. So, hope does not belong to the category of rational *and justified* expectations.

Contrary to hope, confidence and reliance do belong to the category of justified expectations because (as they are based on past performance) we have reason to believe that they are true. Yet, even though confidence and reliance, like trust, are justified expectations, this does not mean that they are synonymous with trust. An essential feature of trust is uncertainty and risk. Of course, this is also true of confidence and reliance. However, there is a major difference between how trust on the one hand and confidence and reliance on the other hand handle uncertainty and above all risk. If we trust, we always know (at least 'subconsciously') that we are running a risk. The same is not true for reliance and confidence. Reliance refers to a (perceived) certainty, based on past performance [O'Neill 2002b, p.15]. In fact, reliability means a 'faultless track record'. Once a machine (e.g.) fails, it is no longer considered reliable. Of course, we know that boarding an airplane implies a risk but we do not consciously consider it a real danger. Similarly, confidence implies stability. In the case of confidence and reliance, risk (although inherent) is not perceived as such [Brown 2008,p.351]. So confidence and reliance can be differentiated from trust by the way they perceive uncertainty and handle risk. There is another important difference between trust and confidence: trust is always agent-related, confidence may be both agent-related and outcome-related. Whereas you can only trust your doctor to behave in a certain manner but not that he will bring about a

specific outcome, you can be confident that the doctor behaves in a certain manner *and* that a certain outcome will be achieved. Moreover, whereas we can only trust an agent, we can be confident or rely on agents and technology. Finally, like trust but contrary to confidence, reliability cannot be outcome related.

IN SUMMARY, belief-in, hope, reliance, and confidence are all distinguishable from trust. Belief-in is an affirmation of one's belief, but no expectation[112]. Trust, hope, reliance, and confidence are expectations. More than that: they are rational expectations. However, only trust, confidence, and reliance are also justified expectations. (True) hope (contrary to false hope) is a rational expectation because it may in principle become true. However, it is not a justified expectation, because we have no reason to believe that it will effectively become true. Confidence and reliance differ from trust with regard to how they handle uncertainty and risk. Moreover, they can refer to technology. Finally, contrary to trust and reliance, confidence can also be outcome-related.

The following table compares the pattern of trust with the patterns of the four related concepts (✓indicates features that are present in the respective pattern). The table shows (a), that since none of the other concepts shares the entire pattern with trust, they are all different from trust, and (b), that since none of the other concepts shares the entire pattern with any other concept they are all different from one another[113].

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[112] See chapter 2.3.2 for a detailed discussion of this difference.

[113] Of course, it can be argued that some of the features of the various patterns are (or at least border on the) stipulative. I can understand this concern. Of course, I cannot refute it. All I can say is that this not the way I worked and that I derived all features from a detailed analysis of the literature.

Features	Trust	Confidence	Reliance	Belief-in	Hope
1 Expectation	✓	✓	✓		✓
is rational	✓	✓	✓		✓
is justifiable	✓	✓	✓		
is / may be agent-related	✓	✓	✓		✓
may be outcome-related		✓			✓
2 Uncertainty / risk	✓	✓	✓		✓
conscious acceptance of risk	✓				
3 May refer to moral agents	✓	✓	✓	✓	✓
may also refer to technology		✓	✓	✓	✓

Of course, what is listed here is the 'full pattern'[114] of the individual concepts. Not all cases will always present all features in full. Consequently, the difference between two concepts (e.g. trust and confidence) may occasionally be blurred[115]. However, this is the essence of the 'family resemblance' or 'commonality' approach:

> "What we see is a complicated network of similarities overlapping and crisscrossing." … "What still counts as a game and what no longer does? Can you give the boundary? No. You can draw one, for none has so far been drawn. (But that never troubled you before when you used the word 'game')" [Wittgenstein 1953, §68].

I would even go as far as to claim that this is not just the essence, it is the beauty of this

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[114] In fact, it is not quite the full pattern. There are other features (such as how we react if an expectation is not fulfilled, and whether we can chose to trust, rely, etc.). Since these features play no role in my argument, I have ignored them here.

[115] In fact, the distinction is quite often not even desirable. I will discuss this aspect in chapter 7.2.

type of approach. Contrary to an explicit definition or a definition based exclusively on necessary conditions[116], the pattern-based approach leaves a certain leeway in deciding what still counts as trust and yet it is adequate for everyday purposes.

Now that we have seen why trust is conceptually different from belief-in, hope, confidence, and reliance, let us have a closer look at the four concepts and see what role they play in the patient-physician relationship.

2.3.1 HOPE

Whereas trust is active; hope is passive [Sztompka 1999, p.24]. And whereas you commit yourself if you trust, hope is non-committal. In other words, trust belongs to the discourse of agency; hope belongs to the discourse of fate. It is important not to confuse (true) hope with false hope: 'false hope' belongs to the category of irrational expectations. It means hoping for something that 'in the real world' will not come true. It is 'wishful thinking'. Contrary to this, (true) hope is rational. It is a wish that we can rationally expect to be fulfilled. This distinction between 'false hope' and 'true hope' touches upon an ethically important issue. Patients with incurable cancers (or other terminal diseases) often say that they do not (or refuse to) give up hope and their relatives often ask the doctor 'not to destroy this hope', i.e. not to plunge the patient into despair (which in fact is the opposite of hope). I do not agree with this, if by 'hope' they mean 'hope for cure', because this hope is irrational. Contrary to what people believe, supporting false hopes is not benevolent but deceitful.[117] It does not respect the patient's autonomy. And besides, it violates the doctor's integrity. Of course, there are occasionally patients who can keep up this (false)

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[116] I will come back to this in more detail in chapter 7.2.

[117] Some might argue that it may be benevolent despite being deceitful. I agree. But then we are back to good old 'benevolent paternalism', an attitude that I personally do not endorse.

hope to the very end.[118] Whether this is positive, I do not want to discuss. In most cases, however, the patient will eventually come to realise that there is no cure, and that his hope was false. He will then resent that his doctor, in collusion with his family, has not been honest. I subscribe to the theory that in these situations the physician's task is to help the patient not to fix all his thoughts on the inevitable (death), not to hope for the unachievable, but to hope that the remaining time is meaningful, that it is still

> "… containing the possibility of new experience, rather than the closed experience of life as having nothing more to offer" [Garrard and Wrigley 2009, p.41].

This approach is summed up by the following:

> "Fostering absolute hope[119] provides the welfare benefits of helping patients to cope with a terminal condition, while also respecting their autonomy by providing a full and accurate explanation of the prognosis" [Garrard and Wrigley 2009, p.42].

Hope often stands at the beginning of a trust relationship. On the way to your first appointment with a physician, you hope that he is competent and emphatic, in which case your hope is agent-related. Or you may even hope that he will be able to cure you, in which case your hope is outcome-related. Goold refers to this situation as presumptive trust [Goold 2002, p.79]. I think I can understand what he means by this: Because we usually trust doctors we presume that we can (or will) trust this doctor as well, although we have not yet met him and therefore are not yet in position to trust him. Nevertheless, I think that it would be better not to talk of 'trust' in this situation in order not to confuse the issue.

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[118] In my personal experience, they are the rare exception and not the rule.

[119] This is what I call 'true hope', as opposed to 'false hope', which refers to irrational wishes.

2.3.2 TO BELIEVE IN SOMEONE OR SOMETHING

To ‘believe in’ someone or something (as opposed to ‘believe that’) may have two different meanings [Honderich 2005, p.86]: (a) It may simultaneously note and reject a claim to existence of something or someone. Statements like ‘John believes in Santa Claus’, implying ‘he is very naive’ exemplify this meaning. For obvious reasons, first-person statements rarely refer to this meaning. (b) More commonly, ‘believe-in’ has an acknowledging meaning. Contrary to the first meaning, this meaning affirms or even requires the existence and functioning of the entity one believes in. ‘I believe in God’ acknowledges His existence. Yet, in addition to simply saying 'I believe that God exists' it also adds a statement about my belief in His 'power' or 'work' etc. ‘I believe in homeopathy’ means that I approve of homeopathy, that I believe it works, etc. I will come back to this in chapter 5.4, where I will show that physicians are losing the authority they used to have as long as people believed in scientific medicine because ever more people have become disenchanted with (i.e. no longer believe in) science and scientific medicine. So, when people say that they no longer *trust* in medicine they actually mean that they no longer *believe in* medicine, that they no longer believe it works, or that they no longer approve of its paradigms. This example shows that it pays not to confuse 'trust' with 'believe-in'.

2.3.3 RELIANCE AND RELIABILITY

Like trust and trustworthiness, reliance and reliability are twins. You (usually, but not always) trust only people whom you believe to be trustworthy and you (usually, but not necessarily) rely only on someone you believe to be reliable. Yet, here the relationship ends. Even if reliability leads to confidence, and confidence is a basis for trust, trust and trustworthiness cannot simply be reduced to reliance and reliability [Jones 2012, p.62].

Trust presupposes uncertainty and risk; reliance refers to certainty based on past performance (risk, although it may be inherent, is not conceived): I rely on the brakes of my bike if (and because) they have never failed me in the past and I do not conceive of

their failure in the future.

As we have seen[120], in general a breach of trust produces a feeling of betrayal, while misplaced reliance merely produces a feeling of disappointment[121] [Hieronymi 2008, p.215].[122] But, and this is important, trust often survives a breach, reliance usually does not: you may still trust someone who has breached your trust, but if a system fails, you will no longer rely on it (at least not until you have sufficient evidence that the fault has been fixed).

Whereas (according to my account) we can only trust in agents, we can rely on agents, on technology, as well as on things happening. *With regard to agents and to technology*, reliance has a double meaning: it may implicate that we believe the person or technology to be reliable or it may signal that we are dependent on that person or technology [Nickel 2007, p.207]. The day before a planned surgery, I usually had a long talk with the patient (explaining the goal of the procedure, the procedure itself, and the risks involved[123]). At the end of this talk, many patients said that 'they put themselves into my hands'. In some cases, this may have meant that they trusted me, whereas in other cases it merely implied that they relied on me. Since most patients have had no prior experience with me, this could only mean that they felt they had to depend on me.

If we rely on something to happen, reliance may have yet another meaning:

> "I need not believe that it will happen. But I do need to plan on it happening: I need to work around the supposition that it will" [Holton 1994, p65].

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120 See page 58.

121 This need not always be true because occasionally there may be a certain overlap in ordinary usage of the terms.

122 For a detailed discussion of the role that the feeling of betrayal plays in conceiving 'trust' as a moral notion, see chapter 6.3.1. Moreover, the reader is referred to chapter 6.3.2, in which I defend the position that we have a moral obligation to honour trust with the help of the obligation-ascription thesis (see. p.191).

123 From my perspective, the purpose of these discussions was to build up trust.

Here is an example for this meaning: relying on my cough to clear up by the weekend, I plan to go skiing. Of course, I do not consider my cough reliable; nor do I depend on the cough. What I do is that I plan to go skiing 'under the condition' that the cough will clear.

Reliance is an important concept in medicine. Not only because we (may have to) rely on persons, but because we rely on technology and on tests or exams. At first glance, this may be surprising, because hardly anything in medical practice ever reaches the level of certainty [Schwab 2008, p.308]. It is less puzzling if we remember that we are talking of *perceived* certainty, where risk is simply not conceived. This illusion of certainty and the denial of risk explain the massive frustration of patients if an allegedly reliable procedure fails or a risk materialises.

2.3.4 CONFIDENCE (VERSUS TRUST AND RELIANCE)

If we keep the etymology of the two words 'trust' and 'confidence' in mind, it may not be so surprising that they are very often used interchangeably. Trust comes from the Old Norse 'traust', whereas confidence comes from the Latin 'confidentia'. Interestingly, both roots have survived in English, whereas only 'traust' has found its way into the Germanic languages and only ‘confidentia’ survives in the Roman languages. Nevertheless, I think that the fact that some languages only have one term is no argument to use the two terms synonymously, as e.g. [Calnan and Sanford 2004, p.94] do. The Inuit have approximately one hundred words for (different types of) snow[124] and the fact that we have only one word certainly does not signify that the one hundred Inuit words are all synonyms.

'I trust you to help me' and 'I am confident that you will help me' are not equivalent.[125] In chapter 1.4.4, I have argued that trust is a cognitive mental state insofar as it refers to my

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[124] See http://ontology.buffalo.edu/smith/varia/snow.html.

[125] Even in German (in which 'Vertrauen' indeed means trust and confidence), I can make the difference by using 'Zuversicht' for 'confidence', if I really want to differentiate between trust and confidence.

beliefs (regarding the trustee's trustworthiness) and it is an act in as much as it refers to how we interact with someone. Contrary to this, confidence is purely cognitive. To trust implies a commitment; it belongs to the discourse of agency. Confidence, on the other hand, is passive and non-committal; it belongs to the discourse of fate, [Sztompka 1999, p.25]. Trust implies choice; confidence is more like a “habitual expectation” [Misztal 1996, p.16]. Trust judgements are made in the face of uncertainty about the motivations of others. Confidence in others, in contrast,

> “… implies a situation of relative stability and security where judgements about others are based on what is predictable, involving little risk for the person making the judgement” [Gilson 2006, p.361].

In Misztal's words

> "… the main difference between trust and confidence is connected with the degree of certainty that we attach to our expectations” [Misztal 1996, p.16].

Trust implies *consciously* taking a risk. Confidence implies that negative consequences (risks) are not conceived [Brown 2008, p.351], either because there are no risks (certainty of outcome[126]), because a person (or a system) has proved to be reliable, or because we are not aware of risks. Moreover, a breach of trust leaves a feeling of betrayal. Not so confidence: if you find that your confidence was not justified you only feel disappointed.[127] Yet, like reliability (but contrary to trust), confidence is usually lost with failure [Pieters 2006, p.290].

Of the two (trust and confidence), confidence comes easier, it is "the normal case" [Luhmann 2000, p.97]. Yet confidence 'carries less weight': whereas lack of confidence only leads to alienation, lack of trust leads to withdrawal from society [Luhmann 2000,

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[126] "When expectations are strongly positive, we may begin to speak of confidence" [Hardin 2006, p.29].

[127] See chapter 6.3.1.

pp.103 -104]. Familiarity typically leads to confidence rather than trust.[128]

Like trust, confidence always refers to something specific. You are never confident 'tout court'. Yet, and this is important, whereas trust is always and only agent-related,[129] confidence may be agent-related or outcome-related (i.e., you may be confident that your team will win the tournament).

Although confidence plays a key role in the patient-physician relationship, it does not *a priori* lead to (or increase) trust. You may be quite confident that someone is reliable and yet decide not to trust him. Consequently, to believe that measures which aim at improving confidence automatically encourage trust is wrong[130] [Smith 2005, p.312]. On the other hand, it is rather unlikely that we will trust someone if we are not confident he will meet our expectations. Consequently, a decline of confidence will almost certainly lead to some decline of trust. As I will argue in chapter 5.4, patients' loss of confidence (as well as belief) in scientific medicine is one of the reasons, why trust has declined.

2.4 SUMMARY OF CHAPTER 2

In most of the literature, trust is treated as a binary concept: either you trust or you do not trust. In the *first section* of this chapter, I have shown that (and why) this is wrong. The opposite of knowledge is ignorance, which is simply the absence of knowledge. Yet, the opposite of trust (which is a positive expectation) is not simply the absence of this positive expectation; rather it is the presence of a negative expectation. I have defined the absence of trust (i.e. of a positive expectation) as mistrust and the presence of a negative expectation as distrust. The disregard of this distinction has serious consequences: Opinion polls traditionally ask people whether they trust doctors or not. This is fine as long

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[128] For a further discussion of this, see page 145.

[129] See page 32.

[130] I will come back to this in chapter 6.2.2.

as people answer ‘yes’; but if people answer ‘no’, it remains unclear whether they have simply suspended their trust (i.e., that they mistrust), or whether they actually harbour negative expectations vis-à-vis their physicians (i.e., that they distrust).

Belief-in, hope, reliance, and confidence are often used synonymously with trust. In the *second section* of this chapter, I have argued that (and why) I believe that this is wrong. In brief, trust is a justified expectation under conditions of perceived and accepted uncertainty and risk, whereas to believe in is an affirmation of one's belief and (true) hope is a rational, albeit not a justified, expectation. Reliance and confidence are, like trust, justified expectations. However, they differ from trust with regard to how they handle uncertainty and risk. Finally, reliability leads to confidence, and confidence is a basis for trust, but neither is *per se* sufficient to justify trust.

Finally, this chapter has demonstrated the discriminatory power of using a pattern-based account of trust. In other words, my definition of trust also fulfils the fourth condition of a satisfactory definition.

CHAPTER 3 JUSTIFICATION OF EPISTEMIC TRUST

3.1 INTRODUCTION

Throughout the text, I have referred to trust as a *justified* expectation. Yet, so far, I have addressed neither the issue *whether* trust is indeed justified, nor *how* it is justified. This is what I will do in this and the next chapter.

To define 'trust' I have analysed the sentence 'I trust my doctor'. Trust in physicians is a very exacting example of trust. After all, we trust the physician to make decisions that may have a serious impact on our life. Consequently, I will have to show why and how trust in physicians is justified. Yet before that, I want to look at a more mundane example of trust: trust in what we are told by others. All day long, we are literally bombarded with information. We read the paper; we listen to the radio; and we listen to other people. We may not believe all of what we read or hear but at least some of it we do believe. In other words, we trust that some of what we are told is true, or (more correctly) we trust other people to tell us the truth. This trust in testimony is commonly referred to as 'epistemic trust'. With two exceptions,[131] trust bears upon the trustee's competence and, as competence implies knowledge, trust entails epistemic trust. If epistemic trust is not justified the concept of trust virtually collapses. I will devote this third chapter exclusively to the question of whether and how we can justify epistemic trust for two reasons: first, epistemic trust is an integral, not eliminable part of trust in physicians (if you do not trust what your doctor tells you, you will not trust him at all). Second, it offers me the opportunity to discuss the question whether trust is at all justifiable (and if so, under what conditions) in a well-defined context rather than in the rather 'messy' context of the

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[131] Only when we trust someone to have a certain attitude (such as open-mindedness) or to abstain from doing something, competence, and hence epistemic trust plays no role (see page 34).

patient-physician-relationship.

Let me expand on this: Epistemologists[132] debate whether 'knowledge' acquired through testimony qualifies as true knowledge,[133] i.e. whether epistemic trust is justified. To the proverbial 'man of the street', this question may appear almost absurd, since most of what we 'know' is based on testimony from others. In most aspects of life, we depend on the knowledge of others. And yet,

> "… almost all [epistemologists] seem united in the supposition that *knowledge rests on evidence, not trust*. Thus, for most epistemologists, it is not only that trust plays no role in knowing; trusting and knowing are deeply antithetical" [Hardwig 1991, p.693, my italics].

And indeed, since trust implies risk (in this case the risk that the information is false) one would be inclined (on rational reflection) to reject information based on trust and prefer to rely solely on evidence. In other words, epistemic trust would indeed appear irresponsible or hard to justify. There are two problems with this position: *First*, there is no way around the fact that our daily life would be impossible without acquiring knowledge through testimony, i.e. without epistemic trust. Our "intellect is too small and life is too short" [Hardwig 1985, p.335] to get direct evidence of (or on) everything we need to know and to check every bit of information which we receive and process almost continuously. *Second*, if we reject epistemic trust the entire construct of trust collapses: how can we trust someone if we do not trust his testimony?[134] This leaves us in the uncomfortable situation that we have to rely on something that we cannot justify.

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132 See e.g.[Faulkner 2003, p.36], [Fricker 2006, p.596], and [Mcmyler 2007, pp.517 and 537].

133 Formally speaking, the question is whether 'we know that p' if we know that 'someone else knows that p'.

134 It may be argued that the concept of trust need not collapse because we can base our trust on published data, league tables, etc. rather than on the trustee's testimony. I do not think, however, that this saves the concept of trust, because published data are just another form of testimony.

In this chapter, I defend a position between the extremes of complete rejection and almost *a priori* acceptance of epistemic trust, namely that *it is responsible to grant derivative authority, i.e. to accept testimony if and only if we have sufficient reason to do so.* To determine what counts as 'sufficient reasons', I propose two strategies: 'epistemic vigilance' and assessing the 'epistemic trustworthiness' of the trustee.

OUTLINE OF THE CHAPTER: The chapter has four sections. The *first section* will be devoted to the definition of 'testimony'. Contrary to what I have done so far, this will not be an analytic definition but a 'stipulative definition'[135] [Moore 2009, p.4]. In the *second section*, I will show why epistemic trust is unavoidable ('most of the time most of us are laypeople on most subjects'). In *section three* I will show that and why it is often more prudential (and hence more responsible) to accept testimony than to insist on gaining knowledge from direct evidence. Finally, in the *fourth section*, I will refute both the reductionist position[136] (which holds that epistemic trust is never justified) and the permissive 'acceptance principle'[137] (according to which epistemic trust is justified unless we have stronger reasons not to do so) and argue in favour of the position that it is responsible "to accept testimony to p, if and only one has sufficient reason to believe that p" [Faulkner 2003, p.37].[138]

3.2 DEFINING TESTIMONY

From the moment we wake up to the moment we go to bed we are flooded with information. If all this information counts as testimony, the concept of 'epistemic trust'

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135 See page 14.

136 Exemplified by Locke [Locke 1690, Book I, chapter 3, #24]

137 … which would amount to granting 'fundamental authority' and is exemplified by Burge [Burge 1993, p.469].

138 … which amounts to granting 'derivative authority'. Faulkner claims that this is in fact Locke's position. It is beyond the scope of (and irrelevant to) this thesis, whether this claim is warranted.

becomes absurd. For the discussion of 'epistemic trust', I need a more specific definition of 'testimony'. Let me start with what is probably the simplest definition:

> "Testimony consists in imparting information without supplying evidence or argument to back one's claims" [Elgin 2002, p.291].

'Imparting information' means that testimony always needs two people, one who imparts the information and one who receives it [Fricker 2006, p.597]. We might also say that testimony refers to what someone asserts, what he claims to know vis-à-vis an audience. Now, if the physician tells the patient 'what you have is a benign pleomorphic adenoma', he wants her to believe him and to share this knowledge with her. He wants her to go away 'with the knowledge' that she does not have to worry. But, he does not supply her with arguments that are comprehensible to her.

Although most testimonies are verbal communications, they do not necessarily have to be so:

> "Testimony, that is communication of knowledge, through the hearer's trust in what the speaker presents as being so, can occur also when a shared language is not used literally" [Fricker 2006, p.593].

In other words, testimony does not have to be verbal. An assertion may be made with a facial expression or with body language. Physicians quite often try to reinforce good news by being particularly voluble. Or, conversely, they may precede the conveyance of bad news with a moment of 'speaking silence'.

Testimonial knowledge is always (at least) second hand [Fricker 2006, p.603]. I.e., behind any item of testimonial knowledge must (ultimately) be an equivalent item of first-hand knowledge (knowledge, which is based on direct, non-testimonial evidence). If the physician makes an ultra-sound exam of the pre-auricular tumour and then tells the patient that the tumour is well-defined and measures 27mm in diameter, he is the author (or 'producer') of the information. In this case, the patient's knowledge is truly second hand (the physician's knowledge being first-hand knowledge, based on direct evidence). If, however, the physician tells the patient that pleomorphic adenomas are benign lesions he

himself is only the 'transferor' of information, which was produced by someone else. So, the patient's knowledge is literally speaking third hand knowledge. In fact, it is not even 'third hand' but 'umpteenth' hand. The knowledge that pleomorphic adenomas are benign rests on a statistical analysis of the course of the disease of many patients with pleomorphic adenomas. Yet, the diagnosis 'pleomorphic adenoma' was made by many different pathologists who all relied upon criteria as to which tumours are pleomorphic adenomas set up by others, etc. In short, there is an almost infinite regression.[139] Sztompka quite aptly speaks of a 'pyramid of trust' [Sztompka 1999, p.47]. However, irrespective of whether the testimony refers to information that the informant has produced himself, or to information that he is only conveying, the question if and if so under what conditions epistemic trust is responsible remains the same.

Although what I have said so far tells us something about the quality of the information, it does not tell us which communicated information counts as testimony. I argue that only information which (once we have received it) we treat as our own (albeit second hand) knowledge counts as testimony.[140] To illustrate what I mean by this, here are four examples:

(1) Two days after the physician has taken the fine-needle aspiration biopsy the patient calls him to ask whether he already has a result. The doctor tells her that he has not had time to look at his mail because he was away at a conference, but that he will call her as soon as he has had a chance to look at his mail.

(2) After the physician has listened to the patient's history, has asked a few additional questions, and has palpated the tumour, he tells her that on his reckoning this is most likely a pleomorphic adenoma.

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[139] I will come back to this in chapter 3.5.3 on page 106.

[140] I owe this and the following distinction (at least in part) to [Mcmyler 2007, pp.516-520].

(3) At my last consultation, my GP told me that I should stop smoking, because smoking is unhealthy.

(4) A patient consults his doctor because for two days he has felt an itching, slightly painful nodule on his back. The physician looks at the lesion and tells the patient that to him this looks like a tick. The patient finds this hard to believe because, as he says, he has not been ‘crawling through bushes’ lately. The doctor then proceeds to remove the 'offender', puts it under a microscope and lets the patient see for himself that it is indeed a tick by comparing it with a picture of a tick.

The four examples illustrate four different types of information. The information in the *first example*, namely that the physician did not have time to read his mail because he was away at a conference may be true or not and the patient may believe it (or not), but at any rate the patient is not interested in knowing whether the physician was at a conference. Since it is not relevant to her, it does not matter whether she trusts the physician on this or not. So, this type of information does not count as testimony.[141] A vast amount of the information that we receive continuously belongs to this type. Similarly, information that only serves the purpose of confirming what we already know does not count as testimony (although in a legal context it is often used for exactly this).

The physician's information (in the *second example*) that 'on his reckoning this is most likely a pleomorphic adenoma' (which means that it is a benign tumour) is different. This is what the patient wants to know. This information is relevant for her. She now knows (and thereby is reassured) that her tumour is most likely a benign pleomorphic adenoma. If someone asks her why she knows this, she will cite the physician's authority. She will say that she trusts her physician. To me, any information that is relevant to us and that we accept because of the authority of the informant is 'testimony'. In this case, the patient bases her knowledge on the authority of a single individual (i.e. her physician). However,

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[141] I will expand on this in the section on 'street-level' epistemology (chapter 3.5.1).

this does not always have to be so. I know e.g. that Rome was founded in 753 B.C. This knowledge is not based on an individual's assertion, but is "… justified by appeal to authority, but the authority appealed to is communal" [Mcmyler 2007, p.519].

In the *third example*, my GP does not pass on his personal knowledge that smoking is bad for my health. This is general knowledge. He simply conveys an argument, namely that I should stop smoking because smoking is unhealthy. There is a major difference between this situation and the situation in the preceding example. In the preceding example, the patient trusts her physician's testimony that her tumour is in all likelihood a pleomorphic adenoma. The responsibility for the truth of this information rests with the physician. If his testimony turns out to be false, the patient will rightly feel betrayed. In the third example, however, the physician supplies me with an argument that I can comprehend myself. Whether I heed his advice is my responsibility and not his. So, conveying an argument transfers the responsibility to me [Hinchman 2005, pp.563-64], but it does not count as testimony.

Finally, in the *fourth example*, the physician does not merely claim that the patient has a tick but provides proof of it. In this case, the patient will know by direct evidence that it is a tick. He will not have to base his knowledge on the physician's authority. Hence, this is no testimony.

IN SUMMARY, neither information that is irrelevant to the receiver, nor the supply of arguments or the provision of direct evidence counts as testimony. Only information that is relevant to the receiver and that she trusts based on the informant's authority, counts as testimony.

In what follows, I will argue (a) that epistemic trust is (at least very often) inevitable, (b) that beliefs based on testimony are often more responsible than (and hence preferable to) beliefs based on direct, not-testimonial evidence (for reasons of prudence or of probability), and (c) that (under these conditions) epistemic trust can be justified. By this, I do not mean that we have to trust every testimony; nor do I imply that epistemic trust is always responsible.

3.3 EPISTEMIC TRUST IS INEVITABLE

The amount of knowledge that we possess today is exceedingly vast and its justification a complex subject. To simplify the discussion, let us go back in evolution to a time when the amount of knowledge was very limited and when our early ancestors (the australopithecines) had not yet developed language. Having no language does not mean having no means of communication. According to Dunbar's 'grooming as gossip' theory, grooming (which most people simply take for 'delousing') was used to foster social interaction (as it is today, though under different names), and alarm cries were used to warn others of predators [Dunbar 1996, p.1ff]. Much as language does today, grooming and alarm cries raised expectations in the recipient, which could come true or not. We know that animals use false alarm cries, e.g. to lure competitors away from a prey they want to have all to themselves. So, it is reasonable to assume that our predecessors did the same. If true alarm cries were not heeded, the consequences could very well have been fatal. Yet, acting on faked alarm cries could have equally dire consequences as not heeding true alarm signals. So, at least in a very broad sense, even these hominids had to trust each other with regard to intention. However, since alarm cries always pointed to something that was happening 'then and there', the recipient of the signal could check whether the signal was warranted or not; i.e., he could rely on direct evidence; there was no need for epistemic trust.

Once language had emerged (anthropologists disagree about why and when that happened[142]) the situation changed; things became vastly more complex. For the first time in history it became possible to convey information about facts and events that were distant in time and/or location[143] from the 'interlocutors' [Bickerton 2009, p.47]. From then

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[142] Anyone interested in this fascinating subject is referred to Donald Johanson's and Edgar Blake's superbly illustrated book *'From Lucy to Language'*, Simon and Schuster, 1996.

[143] The technical term for this feature of language is 'displacement'. Whether displacement is possible without language and hence in animals is discussed controversially in the literature

on one could convey information that the recipient could not verify 'on the spot'. And although the amount of information was assumedly small (compared to today), it was impossible for an individual hominid to verify (i.e. to have direct evidence of) everything she was 'told'. She had to decide whether to trust the testimony of others. So, epistemic trust is probably about as old as language.

I do not know at what moment during evolution our hominid ancestors began to gossip, i.e. to pass on irrelevant information, but I assume that in the early stages of language development much of the information transmitted concerned such relevant things as food sources. Consequently, a distrusting hominid probably had little chances to prosper because he would starve, or run into the next predator. Even if not every testimony was true, overall trusting was the better strategy. Not every testimony had to be accepted of course, but refusing every testimony was not compatible with survival in the group (and of the group). So, overall epistemic trust was the inevitable choice.

Now, let us return to the present. If our ancestors had not accepted testimony, knowledge would have forever remained minimal; and without epistemic trust, the acquisition of testimonial knowledge would have been impossible. Yet, we know that during the intervening hundreds of thousands of years not only the world's population but also the collective knowledge has literally exploded, which I think proves that hundreds of generations have trusted the testimony of others. Without epistemic trust, whatever knowledge one individual has acquired during his lifetime would have been lost at his or her death. In short, epistemic trust is a fact; moreover, it is a tremendous 'success story'.

As a consequence of this knowledge explosion,

> "… most of the time and on most subjects all people are laymen"[144]
>
> [Baurmann 2010, p.186, my translation].

(see e.g. [Cuccio and Carapezza 2015]).

[144] Original: "Die meiste Zeit und in den meisten Bereichen sind alle Leute Laien."

In other words, most of the time and on most subjects we all have to rely on testimony, i.e. we have to exercise epistemic trust. Most of today's knowledge is empirical knowledge developed by teams in which each member has to trust the other members. Although occasionally empirical knowledge can be verified by replicating an experiment, very often this is practically not feasible. Creating knowledge has become a global enterprise in which we are all participating both as producers and as recipients of knowledge.[145] So, what was true for our hominid ancestors is even truer for us: Our time and intellect are too limited to gain first hand (direct, non-testimonial) knowledge of everything we need to know to survive and to prosper. We are bound to trust others to supply us with (correct) information [Hardwig 1985, p.335]. In short, epistemic trust is inevitable.[146]

There is one more reason why epistemic trust is important. As we have seen, knowledge is produced by a myriad of people (they are the 'experts who know that p'). But unless this knowledge is used not only by the experts themselves but also by others (those who only 'know that p because an expert knows that p') it remains useless. One of the greatest (or most beneficial) discoveries of all times is the discovery of penicillin by Alexander Fleming in 1929. However, Fleming had discovered penicillin quite fortuitously and had abandoned research on penicillin when clinical tests were inconclusive and when he could not convince chemists to produce penicillin on a larger scale. Just imagine what would have happened if Howard Florey and Ernst Boris Chain (who took up where Fleming[147] had left and in the early 1940s started to produce penicillin) had not believed in what Fleming had published in 1929. Many of us would probably not be here. We may say that epistemic

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145 I think it happens to all of us that we 'know' something and think we have seen it ourselves, when, in fact, we have only heard or read about it. Shapin (1994, cited in [Misztal 1996, p.13] has called this "the great civility of granting the conditions in which others can colonize our minds and expecting the conditions which allow us to colonize theirs".

146 For a discussion of the problem of 'inevitable trust' (i.e. trust if we have no alternative) see page 55).

147 The fact that the three jointly received the Nobel Prize for the discovery of penicillin in 1945 nicely emphasises the relevance of epistemic trust.

trust bridges the gap between the producers and the recipients of information [Baurmann 2010, p.190]. Indeed, all our scientific networking is based on epistemic trust. In short, epistemic trust is inevitable.

3.4 EPISTEMIC TRUST IS OFTEN RESPONSIBLE

The fact that epistemic trust is necessary does not *per se* make it responsible.[148] In this section, I claim that epistemic trust is often preferable to direct evidence and hence responsible both for prudential reasons and for reasons of probability.[149] To illustrate this, let me briefly return to my favourite hominid ancestor and start with the *prudential reasons* for trusting testimony. If 'Lucy'[150] saw a ferocious predator, she knew she was in trouble and had better run. In short: 'she knew that p', (where for once 'p' may stand for predator). However, if a tribesman told her that he had seen a ferocious predator 'roaming beyond the next mound' she probably sensed that she was in trouble but, of course, she did not truly know it. She did not herself 'know that p' (in fact her direct evidence told her 'that not p'); she only 'knew that p', because her tribesman 'knew that p'. In simpler words, she only knew there was a predator lurking about if she trusted her fellow's testimony. Given the situation, there can be no doubt that the prudential decision was to trust the tribesman's testimony rather than to rely on direct evidence. Needless to say, that the same argument very often applies today as well (even if fortunately under different circumstances).

Another argument in favour of epistemic trust is *probability*. Assume that you have just looked at your watch and seen that it was twenty minutes past eleven o'clock. So, you have direct evidence that it is twenty minutes past eleven. Yet, this very moment you hear the speaker on the radio announce that it is now exactly twelve o'clock. The probability

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148 For a definition of what I mean by responsible, see footnote on p.10.

149 This in fact amounts to the (pragmatic) claim that the responsibility of trusting testimony is more important that the truth-value of the testimony.

150 Lucy is probably the most famous Australopithecine, who lived some 3 millions of years ago.

that the radio speaker is right and your watch is wrong is certainly higher than the opposite. So, at least under certain conditions, trusting the epistemic testimony rather than your direct evidence is entirely responsible.[151]

SO FAR I have shown that epistemic trust is inevitable and (at least very often) preferable to direct evidence. However, I have not yet shown that (and if so, why) epistemic trust is justified.

3.5 EPISTEMIC TRUST IS JUSTIFIED

Assume that I ask you what time it is and, after looking at your watch, you tell me that it is exactly twelve o'clock. To the 'man in the street', this is a trivial situation. To the philosopher it is not. To him, the question arises whether, and if so, under what conditions I am justified to trust your information. Or, put differently whether, and if so, under what conditions epistemic trust is justified. Two classic answers to this question have been given by John Locke (in 1690) and by Thomas Reid (in 1764). Here is Locke's account (often referred to as '*reductionist account'):*

> "For I think we may as rationally hope to see with other men's eyes, as to know by other men's understandings. So much as we ourselves consider and comprehend of truth and reason, so much we possess of real and true knowledge. The floating of other men's opinions in our brains makes us not one jot the more knowing, though they happen to be true. What in them was science is in us but opiniatrety" [Locke 1690, Book I, chapter 3, #24].

On Locke's account, your information, although it is 'floating in my brain', does not make me know the time, even though it happens to be true. According to this strict *reductionist account*, epistemic trust is never justified. Since, as I have shown, most of the time direct

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[151] I will expand on this in chapters 3.5.2. and 3.5.3, where I will discuss 'epistemic vigilance' and 'epistemic trustworthiness'.

evidence is either not available or too complex for an individual to understand, and since epistemic trust is clearly prudentially superior to the direct evidence in many (if not most) situations, this complete rejection of epistemic trust is not acceptable.

Reid's (so-called *non-reductionist)* view is slightly more tolerant. According to Reid

> "… one is justified in accepting testimony to p if and only if one has insufficient reason to disbelieve p" (Reid T, 1764, 'An Inquiry into the Mind on the Principles of Common Sense', cited in [Faulkner 2003, p.37]).

Although Reid (like Locke) rejects epistemic trust, he leaves a loophole in his account: I may trust your information that it is twelve o'clock only if I have insufficient reason to disbelieve you. In other words, I may trust you, but only on condition that I have no sufficient reason to distrust you. This is a strange argumentation that I find hard to understand, let alone to accept.

A more tolerant position has been advocated by Burge, who argues that the default position is what he calls the *'acceptance principle'*. According to this

> "[a] person is a priori entitled to accept a proposition that is presented as true and that is intelligible to him, unless there are stronger reasons not to do so" [Burge 1993, p.469].

This is clearly a much more permissive position: as long as you present your information in a way that lets it appear true and as long as the information is intelligible to me, I may accept the information that it is twelve o'clock. This position grants what is called "*fundamental authority* to the opinions of others" [Goldman 2001, p.86, my italics]. Origgi who views "fundamental authority as an extension of the necessary self-trust that we grant to our past, present and future judgements" [Origgi 2004, p.66] considers granting fundamental authority legitimate. I do not agree with her. To me, this argument does not legitimate granting fundamental authority, because our own judgements are far from always being reliable. It is a position of credulousness, which is no more justified than complete rejection of epistemic trust. We are often confronted with stories that appear perfectly reasonable, even though they are pure fiction, often even meant to deceive us.

So far, we have three positions: (a) the complete rejection of epistemic trust (Locke), which is inacceptable, (b) the rejection of epistemic trust with a hardly understandable exit option (Reid), and (c) an account on which epistemic trust is almost the default position, bordering on credulousness (Burge). To me, none of these accounts is acceptable. What I favour is Faulkner's position that

> "… one is justified in accepting testimony to p if and only if one has sufficient reason to believe that p - testimony in itself provides no such reason" [Faulkner 2003, p.37].[152]

In other words, even if your testimony does not count as evidence *per se* I may still be justified to accept your testimony provided I have sufficient reason (apart from your testimony) to believe that it is indeed twelve o'clock. Contrary to Burge's account that grants the informant fundamental authority, this account grants *derivative authority* to the propositions of others [Origgi 2004, p.65]. Granting derivative authority means that I have sufficient reason to believe that you are trustworthy with regard to this particular item of information.

IN SUM, I argue that epistemic trust is in principle justified, provided we have sufficient reasons to believe that the source is trustworthy, i.e. trustworthy with regard to this particular item of information. What remains to be shown is what counts as sufficient reasons, or in other words, under what conditions it is epistemically responsible (for laypeople) to trust experts.[153]

To start the discussion, I introduce the concept of 'street-level epistemology' as an alternative to strict 'philosophical epistemology'.

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[152] Faulkner claims that this is in fact Locke's position. It is beyond the scope of (and irrelevant to) this thesis, whether this claim is warranted.

[153] Of course, the same applies to one expert trusting another expert and to choosing between different experts.

3.5.1 TRADITIONAL EPISTEMOLOGY VERSUS STREET-LEVEL EPISTEMOLOGY

Philosophy of knowledge (epistemology) traditionally

> "… focuses on particular beliefs or types of belief and the criteria for truth or what philosophers call 'justified true beliefs" [Hardin 2002, p.115].

I.e., epistemology focuses on under what conditions 'I know that p' is justified.

Now, since we can rarely 'know that p', and since (in everyday life) we are more interested in knowing under what conditions it is responsible to trust a specific belief acquired through testimony than in knowing under what conditions a general belief is a 'justified true belief '[Baurmann 2010, p.187], Hardin proposes

> "… an account of epistemology of individual knowledge or belief, of *street-level epistemology,* to complete the rational theory of trust " [Hardin 1993, p.505, my italics].

In this 'street-level-epistemology'

> "… we cannot speak of the justification of belief X tout court; rather, we must speak of the justification of belief X by person A" [Hardin 2002, p.116].

Traditional epistemology assumes that we can rationally choose to accept or refuse a testimony. Street-level-epistemology avoids this

> "… artificial image, that depicts the hearer as a rational chooser who has the option of accepting or refusing a chunk of information that is presented towards her by a speaker. In most cases, we just do not have the choice" [Origgi 2008, p.36].

This last sentence is very important. The patient, who is told by her physician that her 'lump' is a pleomorphic adenoma and that she should have it removed, cannot choose between accepting and refusing this information. This information refers to what is called 'esoteric knowledge' (or privileged knowledge) to which she has no direct access, i.e. information that she cannot check herself. All that the patient can do (apart from refusing

treatment) is to try to assess the epistemic trustworthiness of the physician in general (but not his trustworthiness with regard to his statement about the patient's tumour). Of course, she can seek a second opinion. But this is not going to solve her problem. At best, the second opinion confirms the first; in which case she may feel more comfortable, but she will still have to trust. At worst, the second opinion contradicts the first; in which case she will have the additional problem of deciding whom she wants to trust.

In other words, whereas traditional epistemology deals with whether trusting testimony is *rational* (or can be rational), street-level-epistemology is more concerned with the conditions under which trusting testimony is *responsible.* It deals with epistemic responsibility, which is "… a matter of adjusting our way of interpreting what other people say to our epistemic needs" [Origgi 2008, p.42]. And whereas traditional epistemology deals with the *truth content* of a statement, street-level-epistemology is not so much concerned with the truth-value of statements but with the *content relevance*, i.e. with the relevance (or the interest) which a statement has for the recipient.

Truth and relevance of a statement do not always coincide. Take e.g. the simple statement of the physician that 80% of all tumours of the parotid gland are benign pleomorphic adenomas. This statement is based on the best possible epidemiological evidence. Medical knowledge is notoriously contingent, but this statement comes as close to truth as possible. And yet, the patient is not interested in it, as long as she does not know whether her tumour belongs to the 80%. It is only once the physician tells her that based on what she has told him and based on his exam, he believes her tumour to be a benign pleomorphic adenoma that this information becomes relevant to her. The truth-value of the second statement is definitely no higher (in fact, it is lower) than that of the first statement, but the content is relevant for the patient because it refers to her tumour (and not just to 'such tumours in general'). Equally, the pathologist's opinion that the cells aspirated from her tumour are benign is relevant for the patient, since it tells her what is most important for her (even though it may not be true because aspiration cytology typically misses about 2% of all malignant parotid lesions). So, again the responsibility of

trusting testimony trumps the truth-value of the testimony.

According to this view, the 'pragmatic' value of a statement depends on the context: whereas the statement that '80% of all tumours of the parotid gland are benign pleomorphic adenomas' is not relevant for the patient (and hence has no pragmatic value for her as long as she does not know whether her tumour belongs to this category), the same statement is relevant (and is epistemically valuable) for the medical student preparing for his exams.

IN SUMMARY, by shifting from truth content of a statement to content relevance (i.e. the relevance, which a statement has for the recipient) street-level-epistemology allows us to justify epistemic trust.

With this in mind, I now turn to two strategies that we commonly use to make sure that we have sufficient reasons to believe that the source is trustworthy, i.e. trustworthy with regard to this particular item of information: epistemic vigilance and the assessment of epistemic trustworthiness.

3.5.2 EPISTEMIC VIGILANCE

As recipients of information, we have two options: We can mistrust the 'producer' of the information, in which case our epistemic situation (our 'pool of useful knowledge') will remain the same. Or we can trust the producer of the information. If the information is true, our epistemic situation will improve; if it turns out to be false, our epistemic situation will deteriorate [Baurmann 2010, p.192]. Since, as rational persons we want to increase our knowledge, we will want to trust (the alternative to trusting would be to remain ignorant). Yet, since 'trust implies risk', we also want to make sure that we trust responsibly. In order to reduce the risk of accepting the wrong information or of trusting the wrong producer of information, we use prudence, or what is generally called *'epistemic vigilance'*. Under what conditions it is responsible to accept testimonies depends on a number of factors. To illustrate these factors, I will use an example from the world of music, which I will present in four variations.

First, let us assume that at a party someone mentions that he owns a violin made by Jacobus Stainer.[154] Of course, I know that most so-called 'Stainer' violins are copies (or fakes, depending on how you look at it). Nevertheless, under the circumstances I see no reason to challenge his statement. *Second*, assume that I am interested in buying the violin and that the owner (who is a private violin amateur) is willing to sell it. Would I still accept his testimony that this violin is a 'Stainer'? I certainly would not. You may ask 'why not' (after all, it is the same fiddle and the same person)? The answer is that epistemic trust depends on the 'situation'. Whereas the first situation was one of non-committal small talk, the second situation is that of serious business.[155] Our epistemic threshold is usually rather low in small talk situations but considerably higher in business situations. *Third*, assume that the man offers the same violin as the work of an unidentified Mittenwald luthier. Would I buy it? Probably yes, if it suits my purposes, is in good condition, and the price is right (i.e. right for an un-specified Mittenwald violin). Again, you may wonder why (after all, it is still the same fiddle and the same person). The answer is that epistemic trust depends on the 'topic' of the testimony (or the claim that is made in the testimony). The claim that this is a violin by Stainer is much less likely to be true than the attribution to an unidentified Mittenwald luthier. Our epistemic threshold is usually inversely proportional to the truth probability of the claim. If someone claims to have won a local five-mile run, I am more inclined to believe him than if he boasts of having finished 10th at the London marathon. Finally, *fourth*, let us assume that (a year later) I am offered the same violin, this time by a renowned violin dealer, who sells the violin with his certificate that it is a violin by Jacobus Stainer in good condition. Would I buy it? The answer is 'yes', provided I had the money and that the price was 'adequate' (i.e. adequate for a Stainer violin). What has made me change my mind, is the fact that I believe the dealer to be 'trustworthy'. In

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154 J. Stainer from Absam, Tirol (1618-1683) was the most prominent luthier of his time outside Italy.

155 An authentic Stainer violin may cost up to or even above 100’000£.

summary, we base our willingness to accept testimonies on an appraisal of the situation and the topic of the information[156], as well as on our assessment of the source of the information. What has changed through the four situations is the risk I run if I accept the testimony that the violin is by Stainer. A violin by Stainer is easily worth twenty to thirty times as much as a fiddle from Mittenwald. In the small talk situation, I lose nothing if the statement is false. If I buy the violin as a 'Mittenwald' and at the price of a 'Mittenwald', I cannot lose much either as long as the instrument is in good condition. If, however, I pay the price of a Stainer and it turns out to be by someone else, I will lose a fortune. So, I had better make sure I have the best possible certificate of authenticity before I buy the violin.

IN SUMMARY, both the *situation* of the information transfer and the *topic* of the information are important features of epistemic vigilance. They act as necessary filters, with which we adjust our epistemic vigilance. However, the most important single filter is the trustworthiness of the epistemic source.

3.5.3 ASSESSING EPISTEMIC TRUSTWORTHINESS

Our epistemic trust is not blind. According to Baurmann,

> "… it is for the recipient a rational decision to accept the truth of information, which he cannot verify himself, if he can presume the competence, incentives, and disposition of the witness. In principle, the recipient can verify the presence or absence of these facts (competence, incentives, and disposition of the witness), even if he cannot verify the truth of the information" [Baurmann 2010, p.193 my translation[157]].

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156 In the words of Faulkner: "We are likely to believe speakers talking about everyday events, giving us directions, or telling us the football scores. However, we tend to be sceptical of speakers talking about politics, the greatness of their exploits, or the statistics that favour their opinion. On some quite specific topics, we may be utterly sceptical or conversely credulous" [Faulkner, 2002, p.356].

157 Es ist für einen Rezipienten demnach eine rationale Entscheidung, von der Wahrheit einer von ihm selbst nicht überprüfbaren Information auszugehen, wenn er das Vorhandensein

In other words, even though we cannot verify the truth of a testimony, we can assess the epistemic trustworthiness of the witness. Now, I agree with Baurmann that epistemic trustworthiness (like trustworthiness tout court) depends on competence and disposition (what I would call commitment) of the witness. However, I disagree with Baurmann with regard to incentives. Incentives do not *define* trustworthiness; they are a means of *assuring* someone's trustworthiness. Positive incentives are typically used to increase someone's interest in being trustworthy. Gaining the patient's trust (and thereby keeping him as a patient) is an incentive for the physician to be trustworthy. Similarly, negative incentives (i.e. sanctions) are used to dissuade people from being untrustworthy. If "we are more likely to believe friends, family and lovers than strangers" [Faulkner 2002, p.256], this is because we know that friends etc. have a stronger incentive to be trustworthy (in order not to lose our friendship), than strangers. Knowing someone's incentives to be trustworthy is also a means of assessing his trustworthiness. Knowing the positive and negative incentives, which someone has to be trustworthy, influences my willingness to trust him. I will come back to the role of incentives below and in chapters 4.3, and 5.5.

As I have shown in chapter 1.4.2, the expectation in trust always encompasses competence and commitment. Of course, this applies to epistemic trust as well, but whereas *'commitment'* in the context of epistemic trust does not differ from commitment in the context of trust in general, *'competence'* takes on a specific meaning in the context of epistemic trust. I will therefore focus on competence in this chapter.[158] As we have seen, testimony can refer to either first hand or second hand knowledge. Since we cannot ascertain the truth of the testimony (irrespective of whether it is first or second hand), we

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entsprechender Kompetenzen, Anreize und Dispositionen auf Seiten des Informanten unterstellen kann. Prinzipiell kann ein Rezipient das Vorliegen oder Fehlen dieser Tatsachen auch dann überprüfen, wenn er die Wahrheit der übermittelten Information selber nicht überprüfen kann.

158 I will briefly come back to the role of commitment in epistemic trust at the end of this chapter and in more detail in chapter 4.3.2.

want to make sure that whoever supplies the information uses reliable tools (or procedures) to acquire his knowledge. Colloquially, I might say, since I cannot know whether what you say is true, I want at least know how you came to know it. To quote Schwab:

> "… epistemically responsible trust is epistemic trust in others who employ reliable belief-forming processes" [Schwab 2008, p.305].

This definition needs some fleshing out. As I have said earlier, trust implies uncertainty, whereas reliability is based on evidence (e.g. from past, faultless performance [O'Neill 2002a, p.15]. The patient trusts her doctor (uncertainty), but the doctor uses reliable methods (certainty). There are two problems with this 'reliabilist approach'. The first problem is that no belief-forming process (no test and no trial) in medicine is 100% reliable. So, we will often have to be content with relative reliability. The second problem is that there are multiple levels of trust and reliability leading to (almost infinite) regression.

NO BELIEF-FORMING PROCESS IN MEDICINE IS 100% RELIABLE

Many clinical tests or exams have one thing in common: they are sensitive (i.e. good at detecting pathology) but not very specific (i.e. not very good at differentiating between different pathologies). The diagnosis of angina is a good example to illustrate this.[159] Typical symptoms and signs of angina (or tonsillitis) are sore throat, fever, and coated tonsils. Causative agents include streptococci (about 20%), other bacteria (40%), and viruses (40%). Whereas streptococcal angina (SA) must be treated with an antibiotic because of the risk of late complications, all other forms of tonsillitis need no antibiotic treatment because they are harmless and self-limiting. Clinical examination does not routinely allow us to differentiate between the different types of angina. So, if all patients are treated, 80% of the patients receive an antibiotic that they do not need (and this costs

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[159] The example serves the purpose of illustration. The details need not be correct in every detail.

money and may cause complications). On the other hand, not treating any patient exposes 20% of them to the risk of a late complication. What we want is a test that is 100% sensitive (i.e. one, which identifies all cases of SA) and at the same time 100% specific (i.e. one, which eliminates all other cases). Unfortunately, no test fulfils this requirement. So-called quick tests correctly identify about 80% of all cases of SA, but are falsely positive in at least 10% of non-SA (i.e. they say that it is SA, when in fact it is not). If we remember that virtually nothing is 100% certain in medicine, this is a good performance. Only taking a bacterial culture is better than quick tests, (with a sensitivity of >90%, and a specificity of almost 100%). Overall, we could say that the SA quick test qualifies as a very reliable belief-forming process, and bacterial culture as a maximally reliable belief-forming process. In principle, confidence in both quick tests and culture is justified.

Now, one may ask, why confidence in quick tests (which are only *very* reliable) is justified, if cultures are *maximally* reliable. The answer is that cultures, although somewhat more reliable, take much more time (a few days versus a few minutes) and cost a lot more. Consequently, it may be epistemologically responsible to prefer the quick test [Schwab 2008, p.307]. Similarly, on occasions it may be strategically better to trust than to distrust, because the overall costs are lower.

In the example of the patient with the pleomorphic adenoma, the patient is justified to trust her physician when he tells her that her tumour is benign, because the ultrasound he used is a reasonably reliable method to distinguish between benign and malignant tumours. It may not be quite as reliable as Magnetic Resonance Imaging. But it is available on the spot, much cheaper, far less unpleasant for the patient, and easily sufficient to make a responsible therapeutic decision.

THERE ARE MULTIPLE LEVELS OF TRUST AND RELIABILITY

The patient, who trusts her doctor not only trusts him to use reliable diagnostic tools, she also trusts him to base his decisions on reliable theoretical knowledge. At a first

approximation, we might say that knowledge gained from the Lancet[160] is more reliable (or at least more likely to be reliable) than knowledge picked up at some local conference. Ultimately, the reliability of theoretical knowledge depends on the level of evidence on which it is based. The higher the level of evidence, the more reliable (and hence the epistemically more responsible) is the information.[161] However, since evidence always has to rely on other evidence, this opens the usual road to regression.

Indeed, the second problem with the 'reliabilist approach' to epistemic responsibility is that there are multiple levels of trust and reliability [Schwab 2008, p.305]. The patient trusts her physician to use a reliable test. The reliability of the test is based on its past performance. Yet, reliability presupposes competent execution of the test. So the physician has to trust the lab technician's competence, which includes using reliable equipment. Of course, this list can be extended. And there is yet another aspect of this problem of regression: how do we know that a test is reliable? Usually we do so by comparing it with another test of 'proven reliability' (what we call the 'gold standard'). Unfortunately, even this gold standard is rarely beyond any doubt. I do not have an answer to the problem of infinite regression, which lurks behind the reliabilist approach. However, I think that at a 'street level' this need not concern us. In the words of Schwab:

> "If a belief-forming process produces *reliable predictions* that is precisely what tells us it is responsible" [Schwab 2008, p.306, my italics].

IN SUMMARY, epistemic vigilance and assessing epistemic trustworthiness are means to make sure that we have sufficient reasons to believe that the informant is trustworthy, i.e. trustworthy with regard to this particular item of information.

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160 The Lancet is one of the leading medical journals.

161 This is the credo of Evidence-Based Medicine (EBM), according to which only 'Randomised Clinical Trials' confer level I evidence. Unfortunately, even supposedly high evidence is not necessarily true. Often the epistemic trust in the RCTs is not justified. The selective reporting of studies with positive results and the suppression of negative results leads to false evidence and undermines the credibility of (and the confidence in) EBM and eventually even in medicine 'tout court' (see e.g. [Elliott 2011]. I will come back to this in chapter 5.4.

To have established the relevance as well as the responsibility of epistemic trust is a prerequisite for the following discussion of the justification of patients' trust in physicians. If you trust your doctor you first and foremost trust that what he tells you is true, true in the sense that he will not lie to you, and true in the sense that what he knows is true (and sufficient). If you do not trust his testimony, you will not trust him at all.

3.4 SUMMARY OF CHAPTER 3

The most common everyday situation of trust is trust in what people say, in what we hear and read. This is referred to as 'trust in testimony' or 'epistemic trust'.

I have opted to start the discussion about the justification of trust with the justification of epistemic trust (1) because epistemic trust is an integral, not eliminable part of trust in physicians and (2), because it has offered me the opportunity to discuss the question whether trust is at all justifiable.

Not all information we receive qualifies as testimony in the present context. I have stipulated that only information, which is relevant to the receiver counts as testimony. Irrelevant information (which probably applies to 99% of all media contents), arguments (which we can accept or not), and the provision of pieces of evidence do not count as testimony.

Epistemic trust is inevitable, because our world is far too complex for us to get direct evidence on everything. It is also a success story (without it we would still be foraging for food rather than surfing the internet). If we reject epistemic trust the concept of trust *per se* collapses, or is at least relegated to some rather insignificant situations (such as trusting that someone will abstain from doing something). In fact, a complete rejection of epistemic trust is not compatible with any form of (social) life. Admittedly, this does not prove that epistemic trust is rationally justified, but it does prove that epistemic trust is very often responsible.

By resorting to the concept of street-level-epistemology, i.e. by shifting from the truth content of a statement to the content relevance (i.e. the relevance, which a statement has

for the recipient), I have been able to justify epistemic trust. Between the extreme positions of complete rejection and almost a priori acceptance of epistemic trust, I argue that *it is responsible to grant derivative authority, i.e. to accept testimony to p if and only if we have sufficient* reason *to believe that p.* To determine what counts as 'sufficient reasons' we have two strategies: 'epistemic vigilance' and assessing the 'epistemic trustworthiness' of the trustee.

Now that I have established that, and under what conditions, epistemic trust is responsible, I can turn my attention to whether and if so how patients' trust in physicians can be justified.

CHAPTER 4 JUSTIFICATION OF PATIENTS' TRUST IN PHYSICIANS

4.1 INTRODUCTION

In chapter one, I have (among other criteria) defined trust as a justified (or justifiable) expectation. In chapter two, I have narrowed down this expectation by differentiating trust from other justified expectations such as confidence etc. Moreover, I have argued that outright distrust (i.e. the complete rejection of trust) would be detrimental to social interactions, and ultimately incompatible with life. Yet, the fact that trust is unavoidable if we are to function socially, does not *per se* make it reasonable[162]. So, I was left with the task of showing whether and if so how trust can be justified. Rather than addressing the justification of patients' trust in physicians straight away, I opted to begin the discussion with one of the most common examples of trust, to wit 'epistemic trust'. In chapter three, I have defended the positions that a complete rejection of epistemic trust would lead to a collapse of the concept of 'trust' and that epistemic trust is in principle justified, provided we have good reasons to believe that the source is trustworthy, i.e. trustworthy with regard to a particular item of information. I have called this 'granting the informant derivative authority'. What remains to be shown is under what conditions patients' trust in physicians is justified.

Epistemic trust is a constituent, not eliminable part of trust in physicians.[163] Since adopting a more restrictive or a more liberal position for the whole than for a part would lead to contradictions it appears reasonable to adopt the position of granting derivative authority with regard to the justification of patients' trust in physicians as well.

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[162] In some countries, some palm greasing is unavoidable if you want to get anything done, and yet I would not call this practice reasonable.

[163] How can you trust a physician at all if you do not trust what he tells you?

Until fairly recently, this was easy. The physicians' professional status was accepted as sufficient reason to justify trust. Physicians qua professionals enjoyed what Buchanan calls 'status trust' [Buchanan 2000, p.189]. More recently, however, 'professionalism' and 'professional status' have come under suspicion:[164] professional status is no longer accepted as token or guarantor of trustworthiness [Pellegrino 1991, p.69]. This would not be a problem if the demise of 'status trust' were compensated for by what Buchanan calls 'merit trust' [Buchanan 2000, p.189], i.e. by trust based on an assessment of physicians' trustworthiness (i.e. their competence and commitment):

> "The erosion of status trust may not be detrimental if accompanied by an increase in well-founded merit trust" [Buchanan 2000, p.189].

Indeed, the shift from 'status trust' to 'merit trust' is hailed as a major step forward in the patient-physician-relationship [Buchanan 2000, p.208] comparable to the move from paternalism to shared decision-making. This sounds so plausible that people tend to overlook how difficult it is to define trustworthiness, let alone how daunting a task it is to assess a physician's trustworthiness. As I will argue in chapter 5.3, a useful assessment of an individual physician's trustworthiness is often not feasible and, consequently, the compensation for the loss of merit trust has not taken place and the level of trust has declined.

IN SUM, this chapter serves a double purpose: first, to complete my analysis of the justification of trust; and second, to prepare the reader for chapter 5, in which I will present my arguments for the decline of trust.

OUTLINE OF THE CHAPTER: From the brief introduction follows that the discussion of the justification of trust in physicians presupposes a clear understanding of the terms 'professionalism', 'trustworthiness', 'competence', and 'commitment'. Although all four

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[164] I will show why 'professionalism' is no longer accepted as token of trustworthiness in chapter 5.2.

terms are used liberally in the literature they are under-explored and in need of elaboration. I will devote the *first section* to the definition of 'professionalism' and the *second section* to an in-depth analysis of the term 'trustworthiness' and of its two constituent parts 'competence' and 'commitment'.

4.2 PROFESSIONALISM AND STATUS TRUST

> "Not so long ago, the question of trust in the medical profession simply did not arise; Doctors functioned in a quasi-ecclesiastic atmosphere of patient awe and confidence" [Clark 2002, p.14].

What Clark refers to in the above quotation is 'status trust'[165], i.e. trust, which is granted to individuals simply because they belong to a specific profession,[166] irrespective of any individual merit [Buchanan 2000, p.191]. In general, we trust someone if we believe him to be trustworthy. So, if we trust someone simply because he is a professional, this implies that we take 'professionalism' as a guarantor of trustworthiness. This raises the question why we do this. One answer might be that we believe that particularly trustworthy characters become professionals. This answer may have been correct one hundred years ago.[167] Without being cynical, I think that one would have to be exceedingly naïve to believe this today. An alternative answer might be that we believe that the profession somehow instils trustworthiness in the professional (much as a copyist becomes very

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165 An alternative interpretation would be that he refers to 'faith'. I will briefly address (and try to refute) this on page 141.

166 In principle 'profession' is a generic term, which may be used in reference to any occupation requiring specific knowledge or skills. It was only in the 19th century when society started to regulate important activities such as medicine and the law that the term assumed a more limited sense [Cruess and Cruess 2010, p.713].Today we are witnessing the opposite: with legislation regarding the exercise of all kinds of occupations the number of occupations which consider themselves 'professions' continuously rises.

167 By this, I do not actually mean that particularly trustworthy characters became professionals but that people believed this to be the case.

precise and conscientious). Again, this does not sound very plausible. So, I think we have to look for yet another answer. And the best way to do so is to analyse and define the term 'professionalism'. Unfortunately, very much like 'trust', 'professionalism' defies an easy definition. So rather than (vainly) searching for an analytic definition, let us see how those directly involved (i.e. patients and physicians) use the term.

To my knowledge, only Chandratilake has investigated how the *public* views doctors' professionalism. In his survey, 953 people responded to a 55-item online inventory of professional attributes. The survey shows that people "recognise doctors as professionals by their good behaviour, high values, and positive attitudes" [Chandratilake 2010]. However, this only describes how people see professionals, but it does not define what 'professionalism' is in the eyes of the public.

Physicians on the other hand have themselves defined their profession:

> "Physicians have been granted by society a high degree of professional autonomy …, whereby they are able to make recommendations based on the best interests of their patients without undue outside influence. …, the medical profession has a continuing responsibility to be self-regulating … [to] ensure quality of care provided, competence, and professional conduct of the physician. … Ultimate control and decision-making authority must rest with physicians, based on their specific medical training, knowledge, experience and expertise" [WMA 2009].

Even if this WMA declaration is perhaps somewhat skewed towards the physicians' rights at the expense of their duties, it is perfectly in line with definitions proposed among others by [Rhodes 2001] and [Cruess 2004].[168] It contains the important elements that are

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[168] "Professions are defined … by the set of knowledge, skills, powers, and privileges that a society entrusts the profession to have and to use for the good of its members" [Rhodes 2001, p.494].

Professionalism refers to "(1) 'mastery of a complex body of knowledge and skills,' (2) a sense

currently used to define a profession: (1) the possession of highly specific and complex knowledge and skills requiring significant amounts of training, (2) the duty to serve the interests of society as well as the duty for self-regulation, (3) the right to autonomy and decision-making control without external influence, and (4) the provision of serious consequences in case of failure to comply with these duties or of unethical behaviour. Although none of these features is unique to professions, together they define professions and separate them from other 'jobs' or 'trades'. In particular, the provision of sanctions in case of unethical behaviour or failure to comply with professional norms set professions apart from other occupations, which may otherwise be equally demanding or difficult.

The 'possession of highly specific and complex knowledge and skills' corresponds to 'competence', and the 'duty to serve the interests of society as well as the duty for self-regulation' corresponds to 'commitment'. So far, the justification of status trust does not differ from that of merit trust: both 'status trust' and 'merit trust' refer to the trustworthiness of physicians. What sets the two apart is that whereas in 'merit trust', trustworthiness is assessed by the truster and sanctions are imposed by external institutions, in 'status trust' self-regulation and policing by the professionals is supposed to ensure trustworthy behaviour.[169] In other words, in 'status trust' professionalism is seen as a guarantor of trustworthiness, obviating the need for each patient to assess the merit (i.e. the trustworthiness) of the individual practitioner. The declining willingness of patients to grant physicians the privilege of self-regulation and to accept professionalism as a guarantor of

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of calling to use the knowledge and skill to serve others, (3) governance by a code of ethics, (4) avowed 'commitment to competence, integrity and morality, altruism, and the promotion of the public good,' (5) social grant of a 'monopoly over the use of its knowledge base, the right to considerable autonomy in practice and the privilege of self-regulation" ([Cruess et al. 2004, p.75], as summarised in [Erde, 2008, p.21]).

169 See e.g. Holtman: "The foundational sociological and philosophical work on professionalism in medicine has crystallized around the idea of a social contract in which the *medical profession is granted the privilege to self-regulate in exchange for its fulfilment of a fiduciary responsibility* toward patients [Holtman 2008, p.234, my italics].

trustworthiness explains the demise of 'status trust'.[170]

4.3. TRUSTWORTHINESS AND MERIT TRUST

Much like reliance and reliability, trust and trustworthiness are like “two faces of the same coin” [Stirrat and Gill 2005, p.128]. Indeed, we cannot define one without referring to the other. However, the relationship between the two concepts is not symmetrical. It does not mean that one is not thinkable without the other. We can very well trust someone who is not trustworthy (even if this may not be advisable). And even if I believe someone to be trustworthy, I can decide not to trust him [Hall et al. 2001, p.616]. Moreover, it is possible to fake both trustworthiness and trust. Caring behaviour in principle indicates commitment, and yet it offers no proof that the commitment will be realised [Buchanan 2000, p.194]. We have probably all fallen prey to “the untrustworthy who parade as trustworthy (‘you know you can trust me!’),” and we all can remember situations when we have been "living up to what another presents as her trust in one, when that is not really trust but reliance on her evident power to punish those who fail her ('I am trusting you and don’t you forget it')" [Baier 1991, p.113]. Before I go on to define 'trustworthiness' (which is the principle goal of this section), I will point out those features, which the two concepts have in common. This helps me avoid repeating what has been said before and at the same time underlines the close relationship between trustworthiness and trust.

Just as trust can never be general[171] but must always be specified with regard to the object of trust (the trustee) and the content of your trust (i.e. what you expect of the trustee), someone is only trustworthy to a specific truster with regard to a specified issue. Hence, *trustworthiness is not transferable*:

> “Trust is a relationship that depends on the actions and beliefs of all the

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[170] I will come back to this in the section on the 'discrediting of professionalism and physicians' loss of professional authority' (chapter 5.2).

[171] See p.31.

> parties involved, and assessments of trust made by one patient are not necessarily transferable to others" [Iltis 2007, p.47].

The fact that to me you appear to be trustworthy does not necessarily imply that someone else will come to the same conclusion, either because she has different standards of judging trustworthiness (or different demands on your commitment), or because your commitment to her is not necessarily the same as your commitment to me.

There is *no more wholesale trustworthiness* than blanket trust.[172] The belief, which some people hold, that a person is (or at least can be) trustworthy with regard to anything and towards anyone is not reasonable. Nor is it plausible that the trustworthiness of doctors should, ideally, be unconditional (i.e., that a patient should be able to trust doctors with regard to anything). Trustworthiness is not simply 'out there'. Just as we have to specify with regard to what we trust someone, we have to state with regard to what we believe someone to be trustworthy; and like trust, *trustworthiness must comprise both competence and commitment.*

If we are to base our trust on a physician's competence and commitment, we must know what we mean by these two terms. To define competence and commitment will be the topic of the next two sub-sections.

4.3.1 DEFINING COMPETENCE OF PHYSICIANS

Competence is one of today's buzzwords.[173] It is on everyone's lips, and yet I believe that it is poorly defined and under-explored. What exactly is a 'competent physician'? In this section, I will argue that competence of physicians has three components: (a) theoretical (science-based) knowledge, (b) practical (personal, experience-based) knowledge, and

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[172] See page 33.

[173] In the past, we used to have a 'tumour conference'. Now we have a 'head and neck tumour competence centre', etc.

(c) skill or craftsmanship. I will show that these three components correspond to the three Aristotelian concepts of *episteme*, *phronesis*, and *techne* respectively. Moreover, I will argue that all three components are necessary and that together they are sufficient to define a physician's competence.

Here is a first brief definition of competence (with reference to professionals):

> "Competence represents the scope of what we can know and can do" [Sellman 2012, p.115].

In other words, competence refers to the 'know-what' and the 'know-how', or roughly to knowledge and craftsmanship. So much is uncontested in the literature. However, it is much less clear what exactly 'know what' and 'know-how' means. There is a strong tendency to equate 'know-what' with (what many consider "impartial, universal, and generalizable") epistemological knowledge at the expense of the "more messy practical experience" [Kinsella and Pitman 2012, p.6].

To illustrate what 'know what' and 'know how' mean, I will return to the patient with the lump in front of the right ear. After listening to the patient's story, asking a few pertinent questions, and palpating the lump the doctor tells the patient that this is in all likelihood a benign tumour of the pre-auricular salivary gland called 'pleomorphic adenoma'. Further, he tells her that the diagnosis can be confirmed with a fine-needle aspiration biopsy. Lastly, (once the diagnosis is confirmed) he recommends her to have the tumour removed. Asked by her relatives why she has agreed to the proposed surgery, the patient says that she trusts the competence of her physician. Pressed to explain what exactly she means by this she would probably roughly argue that she believes (1) that he has made the correct presumptive diagnosis, (2) that he is suggesting the best work-up, (3) that his recommendation to have the tumour removed is best for her, and finally (4) that he is considered a 'good surgeon'. Let us have a closer look at these four components of the folk understanding of 'competence'.

(1) I start with the question *how the physician makes his diagnosis*. Why does he believe that this is a benign tumour of the parotid gland and most likely a pleomorphic adenoma? I

think that, if asked, he would give two reasons: The *first reason* is that he knows from the literature that tumours of this size in front of the ear are almost without exception tumours of the parotid salivary gland, that at least 90% of all parotid tumours are benign, and that about 80% of all parotid tumours are pleomorphic adenomas. So far, this is epistemological knowledge. Yet, put less candidly, his 'diagnosis' would appear to be not much more than an educated guess, based on statistical probabilities. If this were all the physician had to offer, the patient's trust would hardly be justified. In fact, the patient might well have come up with the same probabilistic diagnosis if she had 'googled' 'tumour in front of the ear'[174]. However, his diagnosis is based on more than this epistemological knowledge. It is more than mere probability, because (and this is the *second reason* the physician would give) he also knows that benign tumours are usually mobile (whereas malignant tumours tend to be fixed to the surrounding tissues), and that pleomorphic adenomas have a firm rubbery consistency (whereas other benign parotid tumours are rather soft or doughy). Having read this, you now also 'know'[175] that these tumours are 'mobile and firm', and yet you would probably be hard pressed to judge the fixedness and the consistency of your tumour. Why is this so? The answer is that, in addition to the epistemological knowledge about these tumours, one needs 'experience' with how these tumours feel on palpation (which you presumably do not have). So, the physician has made his diagnosis based on his epistemological knowledge (of such lesions) and on his personal experience (with these tumours).

(2) Next, I come to *what the physician does to confirm the diagnosis*, i.e. his recommendation to take a fine-needle aspiration biopsy. Again, the physician knows from the literature that a fine-needle aspiration biopsy is a reliable and relatively non-invasive (i.e. harmless) procedure. So far, this adds nothing to our concept of competence.

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[174] I have tried it out and it works.

[175] I have discussed the topic of the transfer of knowledge in the chapter on epistemic trust (see chapter 3.2).

However, since the physician is no pathologist, he himself has to trust the pathologist to make the correct diagnosis; and the pathologist has to trust the lab-technician to have handled the material correctly and to have presented him the correct slides. Of course, this is not the end of the 'trust-chain', but I will stop here.[176] So, in addition to being knowledgeable and experienced, the competent physician must be prudential with regard to his choice of collaborators. Since, as we will see later, the choice of collaborators has more to do with the physician's integrity (which is part of his commitment) than with his competence I will address this issue in the section on commitment.[177]

(3) I now come to the *treatment recommendation*. Of course, the recommendation to have the tumour removed is again based on the physician's knowledge of the relevant literature. There are two main arguments in favour of tumour removal: (a) there is a small (albeit non-negligible) risk of malignant transformation if a pleomorphic adenoma is left in site for an extended period, and (b) the bigger the tumour is let to grow, the greater is the surgical risk should an operation become necessary later on. Let us, for the sake of the argument assume that these two observations are based on sound evidence.[178] In this case, the recommendation to have the tumour removed is 'evidence-based'. And yet, not every pleomorphic adenoma of the parotid gland must be removed, because the majority of pleomorphic adenomas never turn malignant, and because many do no not grow (at least for a long time). So the risks of a ' wait-and-see policy' (i.e. 'to leave the tumour in site and check it at regular intervals') have to be balanced against the risks of the surgical removal (e.g. the risk of a facial paralysis). Moreover, there are patient-specific factors (such as age, profession,[179] and co-morbidity) that have to be taken into account. To

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176 For a further discussion of the 'pyramid of trust', see page 86.

177 See chapter 4.3.2.

178 In fact, the data quoted in support of these two claims are not above suspicion.

179 Whereas a slight facial palsy might be perfectly acceptable for many patients, even a minimal palsy would be detrimental for a musician or an actress.

balance all risks and advantages properly again requires experience on the part of the physician.

(4) Finally, we come to *the surgery*. Removing a parotid tumour is not trivial. It has unavoidable side effects (such as a scar and a numb ear lobe), and it carries certain risks, most notably the risk of a facial paralysis. To perform a parotidectomy requires a number of 'skills' on the part of the surgeon: (a) He needs a thorough understanding of the anatomy and the principles of the operation. (b) In order to locate the facial nerve where it exits the skull and to follow the nerve through the parotid gland, the surgeon must have a three-dimensional mental image of the course of the nerve. (c) Although a parotidectomy is a 'standard procedure', there may be unexpected variations, which the surgeon must be able to handle. Finally, (d) manual dexterity is needed to dissect the nerve away from the tumour and to handle the tumour without tearing its capsule (which would 'seed' the tumour into the surrounding tissue, causing the tumour to recur). In other words, the patient who trusts her physician to be a 'good surgeon' has to trust his theoretical knowledge (about the operation) and his practical skills (while performing the operation).

IN SUMMARY, I have identified three different aspects of the physician's competence: (a) *theoretical knowledge* with regard to these pre-auricular tumours and to the treatment options, (b) *personal experience* with such tumours, and (c) *practical skills* (or craftsmanship). These three components of competence correspond to Aristotle's *episteme, phronesis* and *techne*, where

> "… *episteme* embodies scientific deductive knowledge … ***techne*** is concerned with the craft, the productive act, of the practitioner; and *phronesis* with knowing how to act in a situation in order to achieve the goals of professional practice" [Tyreman 2000, p.120, my italics].

There is a vast amount of scholarly work on what 'episteme', 'techne', and 'phronesis' mean in Aristotle's original writings. It is not my intention to enter into this discussion. Rather, I will use them as umbrella terms covering the different components of physicians' competence. After a brief comparison of episteme, techne, and phronesis, I will flesh out

what each term means in (and how we can apply them to) medical practice in separate sub-sections.

To illustrate how I understand the tree terms, I will use an example from outside of medicine.[180] A violinist who is about to perform Bach's d-minor partita for violin solo in a large church must of course have a thorough knowledge of the score as well as a sound understanding of the musical meaning of the various dance types Bach uses in his partitas. Moreover, he must have the manual skill to play all the fast passages and intricate double stops in perfect intonation. However, contrary to what many people think, this is not enough. In addition to having the score 'in his brain and in his fingers', he must have experience with playing in public and in different venues. He must e.g. have experience with how to adapt his tempo, the loudness of his playing, and his phrasing to the idiosyncratic acoustics of this particular church. In summary, the violinist must 'know what' he is going to play (the notes, the structure of the piece, the tempo relationships between movements etc.) and he must 'know how' to play. 'Knowing what' means the theoretical knowledge, i.e. what he has been taught at music school and what he has acquired through his reading. This is episteme. To 'know how' to play the instrument is his craft or his skill, which he has been instructed by his teachers and practised during long hours. This is techne. Finally, he must be able to adopt his playing to the given situation and to bring the 'dry notes' to life, to interpret the music, to move the audience. This is his musicianship, which he has gained through long experience on the stage. This is phronesis.

This example demonstrates not only the difference between episteme (knowing the score) and techne (the skill to play the violin), but also the difference between episteme and phronesis. Episteme is the theoretical knowledge of a given piece of music, whereas phronesis is the practical knowledge necessary to interpret the piece in front of a public in

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[180] I owe the idea for this example to [Tyreman 2000].

a given venue.

There is a basic difference between knowledge and practical skills on the one hand, and phronesis on the other hand. Whereas episteme and techne are taught or instructed and can be practised actively (it is up to you to learn your scores by heart and to practice your scales as often as you want or need to), phronesis cannot be taught (at least not in traditional ways); nor can it be acquired 'in one's study'. Phronesis only comes through 'praxis' (engaging in concerts, interacting with other musicians, and reacting to the public's response and the concert venue's acoustic) over an extended period. It is phronesis, which distinguishes the merely knowledgeable and skilled from the 'expert'.[181]

Now, let us return to medicine. In medicine, discussions about physicians' competence are usually limited to knowledge and skills, i.e. episteme and techne; or as Davidoff puts it very nicely: "knowing the right thing" and "knowing how to do things right" [Davidoff 2011, p.16].[182] Contrary to theoretical knowledge and skills (episteme and techne), phronesis has found little attention in the literature.[183] This is reflected in medical curricula (with their focus on knowledge transfer and training of skills) and in medical exams (which almost exclusively assess knowledge and to a lesser extent skills).

Whereas episteme is theoretical knowledge and techne is practical skills, phronesis is a

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[181] Here, as well as in what follows, I am using this term in the 'folk sense' of referring to someone with 'a lot of experience'. It is beyond the scope of this thesis and it would not further my argument to enter into the scholarly discussion of the definition of the term 'expert' (see e.g. [Priaulx et al. 2014]).

[182] Often, the concepts of episteme, techne, and phronesis are invoked to distinguish between 'medicine as science' and 'medicine as art', where 'science' has to be read as objective (and referred to as episteme), and 'art' as subjective (and referred to as either techne or phronesis) [Hofmann 2003, p.416]. Whether medical practice is a science or an art is a popular subject for debates (not only among physicians). I think that the contenders would often be hard pressed to offer a clear definition of what exactly they mean by 'art' and 'science'. Yet, many of them even use the terms 'science' and 'art' in a normative sense, and see their respective position as a moral stance. Not surprisingly, these debates can become quite fervid. Since I do not think that this debate is fruitful (certainly not in the context of defining competence) I will not pursue this subject.

[183] I will try to remedy this and to explain why this is so further down.

combination of both knowledge and skill. But whereas episteme is about theoretical knowledge, phronesis is about practical knowledge (knowing how to act in a specific situation) or about judgement [Horton 2005, p.16]. And whereas techne refers to the practical skills of medical practice, phronesis

> "… brings reflection to bear upon the appropriate action to take, depending on the concrete circumstances" [Dowie 2000, p.241].

So far, I have (provisionally) defined 'episteme' to denote the theoretical, scientific knowledge, which underpins most of today's medicine, 'techne' to denote the craft of medical practice, and 'phronesis' to denote the personal experience (or practical knowledge) needed to apply the theoretical knowledge to individual patients.

In the following short sub-sections, I will elaborate the three concepts and show how they apply to medical practice.

EPISTEME

The standard translation of 'episteme' is 'knowledge'. Yet, this is too general. Episteme aims at

> "… theoretical truth, scientific knowledge of what we know …, [it] does not require knowledge of particulars" [Davis 1997, p.189].

In the context of medicine, 'episteme' means knowing whether clinical (diagnostic or therapeutic) interventions actually work. It means knowing what treatment is effective and what is (most likely) due to the placebo effect. Episteme refers above all to the factual knowledge of a physician; what he knows about diseases, their diagnosis, and treatment.

The following (slightly abbreviated) quotation describes the epistemic credo, which underpins most of medicine today:

> "In seeking to determine what is wrong with the patient … the physician deploys scientific knowledge, that is, the predominantly probabilistic laws and rules, the theories and principles, of the biomedical sciences. She appeals to statistically validated norms of human biological function, … the physician

reasons hypothetico-deductively and inductively" [Davis 1997, pp.182-3].

I have inserted this quotation, because (as I will argue in chapter 5.4) I believe that a growing uneasiness with this epistemic credo is one of the reasons for the decline of trust in medicine.

As a final point, I want to emphasise that it is not important for the physician to know as much as possible. Rather, he must know what is relevant in the particular situation. Moreover, it is important that what he knows is 'up-to-date', i.e. the best available knowledge at the time.

Whether a physician's episteme merits the patient's trust depends upon his epistemic vigilance[184] (i.e. whether he chooses trustworthy information) and upon his commitment to stay abreast of the development of medical knowledge.

TECHNE

'Techne' is usually translated as 'craft' or 'skill'. Since intuitively most people associate both craft and skill primarily (or even exclusively) with manual dexterity, neither term is entirely appropriate. *First*, techne is not limited to skills in the sense of dexterity, but entails a cognitive part as well. *Second*, it is not limited to motor skills but includes mental skills such as physical examination, history taking, or even conversational therapy.

The following example will show that techne entails practical as well as cognitive aspects. It is often erroneously assumed that the surgical craft is purely a question of manual dexterity or skill. However, to perform an operation one must know what exactly the operation entails and what one wants to achieve. Exact knowledge of the surgical anatomy including a three-dimensional mental image of the operative site and knowledge of basic surgical rules must precede the surgical act. Whereas the operating surgeon

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[184] See chapter 3.5.2.

must be in command of the cognitive and of the motor part of the skill in question, these two parts may very well exist separately. On the one hand, there is the musician who displays what music critics like to call soulless virtuosity. On the other hand, there is the teacher, who knows how to perform a piece without having the manual dexterity actually to perform it. I still know e.g. how to perform a stapedectomy[185] and I think that I could still teach it. Yet, I know that I could not perform the operation myself any longer, because my eye-hand coordination is not what it used to be and my hands are no longer as steady as they would have to be. One might say that I still possess the cognitive part but no longer the manual skill part of the techne of stapedectomy.

Apart from motor skills, there are also mental skills. Perhaps the most widely used skill of physicians is history taking. Anyone who does not believe that history taking is a skill need only watch a novice and an experienced physician at work. Whereas the novice will most likely grapple along some (memorised) checklist (and quite likely miss the important features), the experienced will, with a few well-placed questions (or even pauses!) elicit the important information. Just as an operation has a rhythm, so has history taking. There are parts of an operation during which one can press forward (because nothing serious can happen at that stage), and there are parts during which one has to be careful. Much the same is true for history taking. So, there are not only motor skills but also mental skills.

Anyone who is about to undergo a surgical operation hopes that his surgeon will be skilled. And yet, overall, skills enjoy a rather low reputation. Many people see in them no more than a set of manoeuvres, capable of (mindless) repetition. And yet, techne, implies far more than just drill,[186] it

> "… involves knowing-in-action, a reflective conversation with a unique and

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185 In a stapedectomy, the ossified, fixed stapes is micro-surgically replaced by a prosthesis in order to improve the impaired hearing.

186 Even dribbling in football, which is often seen as an example of a skill devoid of cognitive context, requires an interpretation of the situation and foresight. The example is from [Hinchliffe 2002, p.190].

uncertain situation" [Hinchliffe 2002, p.195].

PHRONESIS

Whereas the importance of knowledge and skill in the overall picture of competence should be obvious, that of phronesis may be a bit less so. As a consequence, phronesis

> "…has been largely under-explored, probably because of difficulties in describing and assessing it" [Tyreman 2000, p.118].

Personally, I believe that phronesis is not only under-explored but also under-valued. For this reason, I will not only define what phronesis is but also explain why phronesis is important.

Phronesis is practical knowledge or 'experience'.[187] Like skills, 'experience' enjoys a rather poor reputation. All too often it is used (not only by physicians!) to parade one's beliefs as truths when in fact they are only personal 'opinions' or 'biases'. Until fairly recently, all that doctors could rely on was 'their experience'. What this meant is that if a doctor had seen a patient improve after treatment x, he concluded that the patient's improvement was caused by x, and that x would work in the next patient as well. Of course, neither conclusion was justified. The first is a case of the 'post hoc, ergo propter hoc' fallacy,[188] and the second is refuted by a simple probability calculus.

By phronesis, I mean a different kind of experience, i.e. the knowing of how to act in a specific contingent situation. Contrary to episteme, phronesis does not aim at discovering 'generalities' (what is true in general), but 'individualities' (what is true in a given situation or for a given patient). With ever more knowledge being 'evidence-based',[189] it becomes

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187 Other translations include 'practical wisdom' [Dowie 2000, p.240] (which is a somehow loaded term), and 'practical rationality' [Montgomery 2009, p.191] (which is too restricted to reason).

188 I.e. the erroneous conclusion that just because 'B' follows 'A', 'B' is (or even must be) caused by 'A'. It is an error, which pervades the thinking of both patients and physicians.

189 See footnote on p.106.

mandatory to manage this vast amount of knowledge. We might say that what phronesis does is knowledge-management. It means integrating individual clinical experience with "the best available external clinical evidence from systematic research" [Sackett et al. 1996, p.71]. To use an analogy: It is no good having a large database if you do not have powerful software to make use of it. That is why phronesis must be a constituent part of any definition of 'competence'. Both techne and phronesis have a practical and a cognitive component. But whereas techne is reflected application of skills, "phronesis brings reflection to bear upon the appropriate action to take, depending on the concrete circumstances" [Dowie 2000, p.241].

To further underline the importance of phronesis, let me come back to the concept of the 'expert'. Knowledge and skills (episteme and techne) alone do not make you fully competent; do not make you an expert. It is phronesis, which makes the difference between a novice and the expert. Whereas the novice can (only) apply the instrumental skills, the expert also knows their worth as well as their limits; he knows what can be achieved by them (and what not), and how they are best employed [Tyreman 2000, p.118.].

So why does phronesis enjoy so much less attention than episteme and techne? One (or probably the prime) reason for today's over-reliance on knowledge and skills, at the expense of phronesis, is the fact that episteme and techne can be taught and assessed, whereas phronesis can only be acquired through praxis, and is difficult to assess. And because phronesis is difficult to measure it is unpopular with bureaucrats, who are increasingly in control of medicine and "who generally hold the purse strings" [Tyreman 2000, p.122].

Finally, why do I think that phronesis is important, not only as a component of competence but by itself? I have two answers, and both relate to the ethics of medical decision-making. *First,* today's (almost) exclusive reliance on scientific knowledge (episteme) has far-reaching ethical consequences: it blurs the distinction between 'what *can* be done' and 'what *should* be done' and leads to an overemphasis of 'what can be done'. Evidence-

based medicine will tell us what is effective in principle. It does not tell us what must, should, may, or indeed must not be done in an individual patient. This gap between what has been shown to be effective in general and what should be done in an individual patient's situation, is bridged by phronesis [Davis 1997, p.183]. *Second*, in today's medicine, there is an increasing conflict between responsibility (vis-à-vis the patient) and accountability (before the law) [Pitman 2012, p.131]. Science-based medicine (in particular EBM) favours rule-governed decision-making processes, but rule-governed decision-making fails if there are competing goods or competing rules. Should the epistemic rule (that pleomorphic adenomas should be removed because of the risk of malignant degeneration), or rather the ethical rule (that the patient should not be exposed to an unnecessary surgical risk), take precedence? Protocols (i.e. treatment guidelines or algorithms) aim at increasing accountability (and thereby decreasing personal responsibility) of the physician; phronesis encourages taking personal responsibility [Frank 2012, p.58]. The inexperienced will opt for the protocol, i.e. the accountable way and advocate surgery, whereas the 'phronimos' (i.e. the practically wise) will accept the responsibility and often advise a wait-and-see policy, knowing that, should the tumour at a later time cause problems, he may have a problem of accountability. Unfortunately, juridical accountability increasingly trumps both the patient's interest and the physician's self-respect as a professional [Schwartz et al. 2004, p.178].

IN SUMMARY, the competent physician must have sufficient theoretical knowledge, sufficient practical experience, and good craftsmanship. I have purposely qualified knowledge and experience with 'sufficient', because knowledge and experience always have to be judged in the current context. Although it never hurts to know more and to be more experienced, it would be irrational to expect the physician to know everything (even with regard to a specific topic) and to have experience with every possible lesion and every imaginable situation. It suffices if he has enough knowledge and experience to arrive safely at the correct diagnosis, etc. Now with regard to skill, merely 'sufficient' is not enough. Someone who performs at the limits of his capabilities is ill equipped to handle

unexpected difficulties.

At the beginning of this section, I have claimed that these three components are both necessary and sufficient to define 'competence' in physicians. I think it obvious that all three conditions are necessary. A physician who lacks adequate theoretical knowledge, who is not skilled, or who does not have sufficient practical wisdom, is not competent. It is more difficult to show that jointly they are sufficient. However, what does a physician, who has enough true beliefs (with regard to the disease he is confronted with) to make the correct diagnosis and to know the best treatment, who has enough experience to apply the general knowledge to the individual patient, and who is a skilled surgeon, miss to be considered competent? Since in all the examples I have considered I could not detect an additional element, I think it is reasonable to conclude that the three components episteme, techne, and phronesis are jointly sufficient to define 'competence' in physicians.

4.3.2 DEFINING COMMITMENT OF PHYSICIANS

Defining commitment is much more difficult than defining competence. Competence, once one has acquired it, is stable. Of course, one may lose (some of) it over time, but one does not have it one day and lack it the next day (except for cases of e.g. head injury or stroke). One cannot decide to be competent one day and not to be competent the next day. If occasionally we act incompetently (despite being competent), this is not because we have suddenly lost our competence, but because on that occasion we are not sufficiently committed to the task. Contrary to competence, commitment is fragile. No one is always motivated to 'give his best'. You can even decide not to commit yourself to a task you have the competence to do. Commitment depends on one's will; competence does not.[190] Some people are committed to many things, others only to a few things;

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[190] Of course, it requires a will to become and remain competent, but at a given moment you are or you are not competent independent of your will and independent of whether your competence is required.

some are highly committed, others only vaguely. Our commitment may be general, specific, or purposive.[191] *General commitment* refers to what someone would do anyway, irrespective of whether anybody trusts him or not. These are commitments, which we take for granted. If (e.g.) we are engaged in a discussion, I expect you to devote your attention to me (and not simultaneously to discuss your weekend plans with your partner on your mobile phone). This type of commitment has nothing to do with whether I trust you or not (but with general manners). *Specific commitment* refers to the obligation the trustee implicitly accepts when he undertakes to do what someone trusts him to do.[192] It is the commitment I expect of the doctor when she accepts to treat me. This is the commitment, to which trust refers. Finally, *purposive commitment* aims at provoking or inducing trust. Purposive commitment is used to demonstrate one's trustworthiness. A GP who calls a patient to convey some results he has just received may be said to show purposive commitment. Children often use this type of commitment to induce their parents to trust them.

When I speak of the physician's commitment in a trust-based patient-physician relationship, I refer exclusively to the physician's specific commitments: (a) his commitment to lifelong learning and to a periodic self-assessment process and (b) his 'commitment to the interests of his patients'[193] [Kassirer 2007, p.383]. The commitment to stay abreast of recent developments eventually reflects on the physician's competence. Therefore, and since it is comparatively easy to assess a physician's commitment to 'continuing medical education' (CME), this commitment has become a proxy to assess the

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191 Sztompka speaks of anticipatory, responsive, and evocative commitment [Sztompka 1999, pp.26-28]. However, since I do not consider these terms particularly illuminating I will not use them.

192 I will come back to this in chapter 6.3.2 under the heading of 'obligation-ascription' (see page 191).

193 As will become clear later, I have chosen this rather vague description on purpose.

epistemic and general trustworthiness of physicians.[194] I will briefly come back to this issue in the section on how we assess trustworthiness.[195]

Defining the physician's commitment to his patients' interests is a more challenging task. As I have said earlier, *defining trust* as 'expectation that the trustee will act in the truster's interest' is insufficient, because it focuses solely on commitment and neglects competence. Yet, even *defining commitment* as 'expectation that the trustee will act in the truster's interest' is flawed. If you have a close look at this definition, you will easily see that it is a wolf in sheep's clothing; it is good old paternalism in (poor) disguise. I will not go into a detailed discussion of all the arguments against paternalism; they are well known by now. Like paternalism, the 'expectation that the physician will act in the patient's interest' presupposes that the physician knows what is best for the patient. It wrongly assumes that there is no difference between what the patient and the physician perceive as best. Alternatively one might say that it falsely assumes that 'best interest' and 'patient autonomy' are compatible, or that 'best interest' trumps, if they conflict [Buchanan 1991, p.94]. It cannot take into consideration that the patient may have conflicting interests, or that there may be a conflict between the physician's commitments to different patients or between the physician's commitment to his patient and to his employer. Mechanic's alternative definition of commitment as a "commitment to act as the patient's agent" [Mechanic 1998, p.661] faces the same problems.

It is easy to give examples of commitment: 'keeping confidentiality', 'supplying adequate (and unbiased) information', 'being responsive', and 'continuing the relationship (i.e. not abandoning the patient) if something unexpected happens', are just a few examples that come to mind. They all refer to the physician's commitment. But they only illustrate commitment; they do not define it. What we need is a definition of 'commitment' that takes

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[194] Many physicians display their CME diplomas in their office. Some specialist societies even make the CME data of their members accessible to the public.

[195] See chapter 5.3.

into account the nowadays-accepted model of the patient-physician relationship of informed consent and shared decision-making. To find out what such a definition might look like, let us use another example. A man has to undergo major abdominal surgery. Unfortunately, he has already had two serious myocardial infarctions, which makes him (as the anaesthesiologist puts it) a high-risk patient. The man knows that apart from the surgical risk there is the risk of a third (and potentially fatal) heart attack. Moreover, he knows that cardiac resuscitation always carries the risk of surviving with a neurological deficit. During the pre-operative discussion, he lets the surgeon know that he would rather not wake up after the surgery than having to live the rest of his life with a neurological impairment. The night before the surgery, the patient tells his wife that he fully trusts the surgeon and his team. What does he mean by that, in particular with regard to a potential cardiac reanimation? Let us look at the different interests: The surgeon's personal interest clearly favours reanimation (should it become necessary), because 'losing a patient on the operating table' (to use professional jargon) is about a surgeon's worst nightmare. Unquestionably, he would also believe reanimation to be in the patient's best interest, because 'life is always better than death'. As to the patient, he has clearly said that 'he would rather not wake up after the surgery than having to live as a vegetable' (to use his words). However, this does not imply that he considers dying to be his primary interest; of course, he prefers to live (only not under any condition). So what does the trusting patient expect the operating team to do in the unlikely event of a cardiac arrest? I think the patient trusts the surgeon to fulfil his expectation, in other words, to abstain from any attempt at resuscitation. What this amounts to is that he expects the physician to respect his values, even if they clash with the physician's own values.

Ana Smith Iltis proposes the following definition of trust:

> "Trust should be understood as an expectation that the trustee will act in a way that the truster approves" [Iltis 2007, p.47].

As a definition of trust, this is flawed, because it neglects competence. However, the phrase *'acting in a way that the truster approves'* [196] catches exactly what commitment means. The committed physician does not profess to always act in the patient's interest, but always to act in a way that the patient approves, thereby accepting that what a patient approves need not be in his interest. This definition of commitment has the further advantage of being able to account for moral (or cultural) pluralism in society [Iltis 2007, 58]. The difference between 'acting in the patient's interest' and 'acting in a way that the patient approves' will become very important in the discussion of the problems of professionalism in status trust.[197]

It is all very well to be committed to do something but only as long as one is at liberty to do so. In other words, it is not enough that a physician is willing to 'act in a way that the patient approves' if he is not free to do so. Kitcher and Schacht (in a different context) refer to this as having 'directive authority' [Kitcher and Schacht 2004, p.27]. I will come back to this in chapter 5.5, where I will argue that many patients today fear that physicians are no longer independent professionals but 'corporate employees' [Clark 2002, p.22], who no longer have the directive authority to act (solely) with the patient's interest in mind.

I have said that the competent physician must have 'sufficient' knowledge and experience, i.e. sufficient in the respective context. The same applies to commitment. Commitment is not all-or-none, but admits degrees. Depending on the context, we can expect more or less commitment. The expected duration of the relationship, the risk involved, and the presence or absence of a withdrawal option for the patient, are just three factors that influence the extent of the commitment we can justifiably expect [Sztompka 1999, pp.28-29]. The fact that the 'presence or absence of a withdrawal option' influences the amount

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196 Or 'would approve', if he were in a position to do so.

197 See chapter 5.2.

of commitment we can expect, deserves a comment:[198] If a patient repeatedly consults his ENT doctor for a chronic nasal obstruction, but never heeds his advice, the doctor may end his commitment and tell the patient to see someone else. The same does not apply to the physician in the emergency room, where the patient has no 'withdrawal option'. Even if the patient is perfectly obnoxious, the doctor cannot refuse to treat him. However, this does not mean (and I want to emphasise this) that the commitment can be expected to be unlimited. The patient has to acknowledge that the physician's commitment may be limited by competing commitments. I am in no way

> "… indulging in the delusion that it is the physician's fiduciary obligation always to provide all care that is expected to be of any net benefit to the patient" [Buchanan 2000, p.189].

IN SUMMARY, 'commitment' like 'trust' is difficult to define. Most authors resort to giving examples rather than a general definition of 'commitment'. To me *'acting in a way that the truster approves (or, depending on the situation, would approve)*' is the best descriptive definition of commitment.

In order to be able to define 'trustworthiness' I have analysed its two constituent parts (competence and commitment) separately. Now, trust is not justified by competence or commitment alone, but only by competence together with commitment, i.e. by trustworthiness. In 'status trust', professionalism is taken as a guarantor of trustworthiness. Contrary to this, in 'merit trust' trustworthiness is not taken for granted. It must be individually assessed. Whether and to what extent trustworthiness is indeed assessable is the topic of chapter 5.3.

4.5 SUMMARY OF CHAPTER 4

In the previous chapter, I had argued that it is responsible to grant derivative authority, i.e.

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[198] I will briefly come back to the obligation aspect of commitment in chapter 6.3.

to accept testimony if and only if we have sufficient reason to do so. In this chapter, I defend the same position with regard to trusting physicians. The two justifications usually cited as sufficient to warrant patients' trust in physician are professional status and individual merit (both of which in fact refer to trustworthiness). Whereas in 'status trust' professionalism is taken as a guarantor of trustworthiness, in 'merit trust' the physician's trustworthiness is assessed individually.

In the *first section,* I have defined 'professionalism' as 'acting trustworthily in exchange for autonomy with regard to self-regulation and policing'. While this was sufficient for most patients in the past and is still sufficient for many patients today, it has increasingly come under suspicion. Why this is so will be the topic of chapter 5.2.

The *second section* was devoted to 'merit trust' and 'trustworthiness'. Trustworthiness of a physician implies competence and commitment, both of which are complex constructs. I have defined 'competence' in terms of episteme (theoretical knowledge), techne (craft or skill), and phronesis (practical knowledge or experience). The competent (and hence trustworthy) physician must have sufficient theoretical knowledge, sufficient practical experience, and adequate craftsmanship. As definition of commitment, I have offered 'commitment means to act in a way that the truster approves'. Together, competence and commitment define 'trustworthiness'. In theory, trustworthiness of the trustee justifies trust.

So, *in principle*, trust in physicians is justified, since both professionalism and individually assessed trustworthiness grant derivative authority. Yet, as I will argue in chapters 5.2 and 5.3, *the reality is somewhat different:* an increasing number of patients reject the concept of professionalism and find it difficult (or even impossible) to assess physicians' trustworthiness. Hence, they no longer believe that their trust in physicians is justified.

With the end of this chapter, I have completed my analysis of 'trust'. I will now return to my initial questions: Why have patients lost trust in physicians? Should we be worried about this loss? And is this loss merely instrumental or does it have moral implications?

CHAPTER 5 REASONS FOR THE DECLINE OF TRUST

5.1 INTRODUCTION

Now that we have a solid conceptual foundation, I will return to my initial questions: Why have patients lost trust in physicians? Should we be worried about this loss? And is this loss only instrumental or does it have moral implications? In this chapter, I will deal with the reasons for the decline of trust. In the following chapter, I will address the usefulness and the moral significance of trust. In addition, I will (in this and the next chapter) try to demonstrate that (contrary to common definitions of trust) my definition of trust fulfils the fifth condition, which a definition of trust must fulfil, namely that it has the required explanatory power.[199]

(C1) the discrediting of professionalism
(C2) the insistence on (and difficulty of) assessing physicians' trustworthiness
(C3) the disavowal of the basic tenets of scientific medicine
(C4) the commodification of medicine and the re-conceptualisation of physicians as dependent employees
(C5) changes of risk perception and risk acceptance

I will argue that the following five developments, which all have occurred in society and in health care over the past decades, are responsible for the decline of trust:[200]

In particular, I will argue as follows: The discrediting of professionalism (C1) leads to a loss of 'professional authority' and a decline of 'status-based trust', because it impairs the justification of trust and hence, unless it is compensated for by an increase in 'merit-based authority' and 'merit trust', leads to an overall decline of trust. Since trustworthiness is difficult to assess (C2), this compensation is often insufficient to prevent an overall decline

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[199] See page 16 for a list of all five conditions.

[200] Of course, there may other reasons as well, but I believe that these are the most important ones.

of trust. The disavowal of the basic tenets of scientific medicine (C3) undermines physicians' 'medical authority',[201] again leading to a decline of trust. The commodification of medicine (C4) leads to a decline of trust, because patients doubt physicians' commitment and because it is perceived to compromise physicians' 'directive authority' (i.e. their independence of decision-making). Finally, the increase of risk sensibility and the decrease of the preparedness to accept risks (C5) cause a decline of trust because people are less willing to accept the trust inherent risk. In sum, four of the explanations refer to the loss of (different types of) physicians' authority, and one to what O'Neill aptly calls an "unrealistic hankering for a world, in which safety and compliance are total" [O'Neill 2002a; O'Neill 2002b, p.19].

As I have shown previously, common definitions of trust,[202] (such as 'trust means expecting caring, honesty, or responsiveness', 'the trustee will act in the truster's interest or act as the truster's agent',[203] or 'individuals and institutions will meet their responsibilities to us') all refer solely to the trustee's commitment or agency and neglect important features of trust, such as competence , the fact that trust has to be justified, and the fact that 'trust' always implies risk. Consequently, such definitions can only explain why the commodification of medicine and the re-conceptualisation of physicians as dependent employees (with the resulting doubt about the physicians' commitment to their patients) can lead to a loss of trust. They cannot, however, explain why the discrediting of professionalism, the insistence on (and difficulty of) assessing physicians' trustworthiness, the disavowal of the basic tenets of scientific medicine (all of which undermine the possibility to justify one's trust), and changes of risk perception and risk acceptance

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201 For a discussion of the difference between 'professional authority' and 'medical authority', see page 149.

202 For more examples as well as for the references for these definitions, see pages 13ff.

203 Hardin's 'encapsulated interest' theory of trust ('trust means that my interests are encapsulated in your interest' [Hardin 2002, p.3ff]) is in reality a variation of this definition.

should lead to a decline of trust. [204] This is insufficient. What we want, is a definition of trust, which has the necessary explanatory power to help us understand why any (or in fact all) of the five mentioned recent developments in society and health care can be held responsible for the decline of trust.

Apart from identifying the reason for the decline of trust*, the purpose of this chapter* is to demonstrate that my definition of trust indeed is able to explain the decline of trust and that thereby it offers a significant contribution to the ongoing debate about trust in the patient-physician-relationship.

Just as a reminder, here is a summary of my definition of trust: (a) trust is an expectation regarding the competence and commitment of the trustee; (b) this expectation must be realistic[205] and (c) justified; (d) trust presupposes a situation of uncertainty and risk; (e) trust is a free choice and implies the conscious acceptance of the trust inherent risk;[206] a breach of trust causes a feeling of betrayal on the part of the truster; (f) trust refers to a relationship between competent and autonomous agents. On this definition, anything that negatively effects the perception of physicians' competence or commitment (i.e. his trustworthiness) as well as anything that negatively affects the willingness to accept risks will cause a decline of trust: If you do not believe that someone is competent and/or committed, you will not trust him. If you do not feel that your trust is justified you will not trust. Nor will you trust if you are not willing to accept the trust inherent risk.

Before I address the five explanations for the decline of trust in separate sections, I want to refute (1) the allegation that the decline of trust is caused by an objective overall deterioration of the quality of health care, (2) the claim that the changes in the patient-physician-relationship (which I have described in the two case histories at the very

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[204] In other words, these definitions lack the required explanatory power.

[205] For details, see page 35 (trust presupposes capability).

[206] For details, see page 79.

beginning of my thesis[207]) reflect the changed self-perception of today's patients rather than a decline of trust, and (3) the suggestion that what I call a loss of trust is in fact a loss of faith in physicians.

The assumption that *physicians (or the health care system in general) are no longer as 'good' as they used to be* would be the simplest explanation for the decline of trust in physicians. Of course, my physician's ego baulks at this thought. But quite apart from my personal feelings, I think that there are two good arguments against this assumption: *First*, taking into account how highly regulated and standardized medical training, life-long continuing education, and practice are today, it is unlikely that the overall quality of performance has indeed declined. *Second*, the loss of confidence is not limited to medicine. It similarly affects most other social institutions (such as Higher Education, the Church, and the Supreme Court) with the exception of those institutions that never enjoyed much confidence (such as the press) [Corso 2010]. A decline of trust in so many different social institutions is highly unlikely to be due to a simultaneous deterioration of performance. So, there must be another reason (or several other reasons), "something beyond the level of performance" [Norris 2009, p.35].

The *self-perception of patients* has unquestionably (and fortunately!), changed greatly over the past three to four decades. Whereas 40 years ago the patient was a 'patient' in the original etymological sense of the word, today's patient defines himself as an autonomous partner in the patient-physician-relationship, who wants to take control and participate in the process of decision-making, and who has access to an almost unlimited amount of information. I agree that this changed self-perception of today's patient alone can explain (at least some of) the changes observed in the patient-physician-relationship. However, the fact remains, that the patients themselves declare that they lost trust in physicians (as evidenced by the empirical data presented in the appendix). And since

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[207] See page 2.

there is no reason why a patient should not trust just because he is well informed and autonomous, there must be additional explanations for the decline of trust.

Lastly, I want to briefly address the question whether what I call 'status trust' is in fact 'faith'. I have introduced the section on 'status trust' with a quotation from Clarke ("not so long ago, … doctors functioned in a quasi-ecclesiastic atmosphere of patient awe and confidence" [Clark 2002, p.14]) and argued that the 'quasi-ecclesiastic atmosphere' referred to 'status trust. An alternative interpretation (which is suggested by the term ' quasi-ecclesiastic') is that patients did not trust physicians but had faith in them. At an early stage of my research, I did briefly consider this interpretation. However, I have dismissed it for the following reason: In faith

> "… there is a leap ... beyond rational evidence, … a leap from knowledge to … faith, … a leap over the confines of common sense and reason" [O'Brien 2014, in the chapter on Kierkegaard].[208]

The patient's expectation regarding the physician's behaviour, however, is perfectly rational and justified by the belief in the physician's trustworthiness, irrespective of whether this belief is based on a personal assessment of trustworthiness or on the acceptance of the physician's professionalism as guarantor of his trustworthiness.

OUTLINE OF THE CHAPTER: This chapter has *five sections*, each devoted to one of the five developments (C1-C5), which, I claim, are responsible for the decline of trust. I will conclude (1) that the decline of trust does not have a single (or predominant) cause but several causes, and (2) that my account of trust (contrary to the most commonly cited definitions of trust[209]) has the power to explain why any (or all) of these five developments (can) lead to a decline of trust, and (3) that by doing so, my definition of trust offers a

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[208] The term 'leap of faith' is usually attributed to Kierkegaard, although to my knowledge he has never used the term himself.

[209] For examples, as well as for the references for these definitions, see pages 13ff.

significant contribution to the ongoing debate about trust in the patient-physician-relationship.

5.2 THE DISCREDITING OF PROFESSIONALISM AND PHYSICIANS' LOSS OF 'PROFESSIONAL AUTHORITY'

In chapter 4.2, I have defined 'professionalism' and I have pointed to the fact that increasingly its role as guarantor of trustworthiness has been challenged. In this section, I will present the major criticisms levelled against 'professionalism'. If they are vindicated, then professionalism indeed cannot serve as justification of trust.

A general criticism of the construct of 'professionalism' holds that it is *too vague* (e.g. the 'commitment to excellence'), *over-simplifying* (e.g. ignoring cultural or ethnical differences [Veatch 1991, p.162]), and *ignoring the dark sides of trust* (e.g. the possibility of abuse of the power it grants physicians). In particular, the monopoly it grants physicians is seen as both an ethical and an economic problem: an ethical problem because it allows physicians to decide what constitutes relevant medical knowledge and reasoning; and an economic problem because the fact that it lets physicians decide what work-up or treatment they consider necessary may seduce doctors to recommend unnecessary (i.e. costly or even harmful) tests or treatments [Erde 2008, pp.11-12]. Of course, this problem is particularly relevant in countries where physicians are paid on a 'fee-for-service' basis (as e.g. in Switzerland).

The major specific criticism against 'professionalism' concerns the *paternalistic attitude* aspect of the concept, i.e. the professional's fiduciary obligation to act in the 'patient's best interest'. For the critics of professionalism, the claim

> "… that it is constitutive of the physician's role to act in the patient's best interest either falsely assumes that this will always be compatible with respecting the competent patient's autonomy or acknowledge the possibility of a conflict but implies that the duty to act in the patient's best interest

> overrides the duty to respect the patient's autonomy when the two conflict" [Buchanan 1991, p.94].

Let me unpack this: I think that most people will agree (a) that a competent and reasonable patient is in the best position to decide what is best for him and to act accordingly, and (b) that the physician has a duty to respect the patient's autonomy [Buchanan 1991, p.94]. Now, as long as the patient's estimate of his best interest coincides with the physician's estimate of what is best for the patient, the physician can 'act in the patient's best interest' and, at the same time, respect the patient's autonomy. However, it is certainly false to assume that patient and physician will always agree as to what is best. And if the two disagree, the physician will have to choose between acting 'professionally', i.e. to act in what he believes to be 'in the patient's best interest', and respecting the patient's autonomy. In the first case, he violates the duty to respect the patient's autonomy; in the second case, he violates his professional duty. In other words, as long as the patient's and the physician's estimate of what is best for the patient converge, there is no problem with professionalism, but there is no need for it either: respecting the patient's autonomy is sufficient. And if the two do not agree, professionalism becomes paternalistic and hence inacceptable. In this situation, it may be tempting to try to save the concept of 'professionalism' by redefining the professional duty of the physician as 'the duty to respect the patient's autonomy', i.e. to act in the way the patients desires. This may intuitively sound right, and yet, I do not wholly agree. First, I do not think there is a need to stipulate a moral duty, which we all have anyway, namely to respect the other's autonomy. Second, to reduce the physician's duty to respect the patient's autonomy is a step in the wrong direction. Much as I agree that 'respecting autonomy must trump best interest', I do not think we should completely eliminate the 'physician's duty to act in the patient's interest' (or, as I have argued elsewhere[210], to act

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[210] See p.134.

in a way that the patient approves, or could approve): (a) because not all patients can (or want to) act autonomously, and (b) because it releases the physician from the duty to think about what (in his estimate) would be best for the patient. In other words, it may tempt some physicians to resort to some form of minimalism.

A second specific criticism holds that cost-containment issues as well as the duty to other patients makes it impossible for the physician always to act in an individual patient's interest [Veatch 1991, p.161]. I agree with this. Only I think that it has always been an illusion to believe that physicians can act 'without undue outside influence' (i.e. independently). Physicians always acted within society and had to balance the individual patient's interests with those of society or those of other patients. Here is just one example from the past: quarantining patients with infectious diseases (e.g. bubonic pest) was not in the interest of the afflicted patient but in that of society. In recent times, discussions about rationing, cost containment, or managed care have simply raised the awareness of the physicians' dependence.

Finally, a third specific criticism concerns the *insistence of professionals on self-regulation and policing* [Erde 2008, p.7]. Indeed, the physicians' argument that they are trustworthy because they are professionals is circular as long as the physicians themselves define 'professionalism' (it reminds one of the famous quip 'you can trust me, I am a doctor'). So this reproach is certainly justified. Now, one might counter that all we have to do to make 'professionalism' an adequate justification of trust is to replace the self-regulation with external regulations, controls, and sanctions. Tempting as this might be, I am afraid this will not do. If the 'trustee' has no option to behave unprofessionally because he is so tightly reined in by rules and controls you know that he will not act unprofessionally (because he wants to avoid sanctions). In the absence of uncertainty about the physician's behaviour, there is (at least on my account of trust) no need for trust[211] (nor for

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[211] Or, to put it bluntly, 'you do not have to trust a tetraplegic not to run after you with a knife'.

trustworthiness, by the way), and hence no need for the concept of 'professionalism' to justify trust.

Without going into a more detailed discussion, I agree with Buchanan that overall the simple fact of being a professional does not by itself adequately justify trust [Buchanan 2000, p.189]. This does not rule out, of course, that some patients still accept 'professionalism' as a guarantor of trustworthiness, either in general or at least in certain situations. Yet, overall, the number of people trusting physicians just because of their professional status has (unquestionably and justifiably so) declined. This leads to a decline of physicians' professional authority. However, it does not necessarily lead to an overall decline of trust, as long as the demise of status-based trust can be compensated for by an increase of merit-based authority and merit trust [Buchanan 2000, p.189]. In the following section, I will argue that a complete compensation for the loss of professional authority is unlikely because of the inherent difficulties of assessing trustworthiness.

IN SUMMARY, even if professional status is still considered a sufficient justification of trust by some patients and/or in certain situations, as a concept (as it is conceived today) it is inadequate to serve as justification of trust.

5.3 THE DIFFICULTY OF ASSESSING TRUSTWORTHINESS AND PHYSICIANS' LOSS OF 'MERIT-BASED AUTHORITY'

According to my definition, trust is an expectation regarding the competence and commitment of the trustee. This expectation (and hence trust) is justified if and only if I have sufficient reason to believe that the trustee is competent and committed (i.e. trustworthy).[212] This, however, presupposes that it is possible to assess the trustee's

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[212] I will later qualify this statement by showing that we often trust someone because we believe that the trustee has a moral obligation to be trustworthy rather than because we have reason

trustworthiness. I will argue that this is often far from easy in 'real life'.

Given the complexity of trustworthiness in the medical context, it is an illusion to believe that an individual patient can even approximately assess a physician's all-out trustworthiness. Fortunately, this is often not necessary. In many cases, it is sufficient to know that a physician is competent with regard to a limited topic (such as a dentist's competence in pulling a wisdom tooth) or sufficiently committed in a specific situation (such as the obstetrician's willingness to deliver a baby, even if the baby is born at 2am on a Sunday morning). Usually we can obtain the necessary information by asking a few pertinent questions.

A wider appraisal of a physician's trustworthiness, however, is much more difficult to come by. Mechanic and Meyer argue that in a long-term patient-physician-relationship we may iteratively come to an overall judgement of a doctor's trustworthiness [Mechanic and Meyer 2000, p.657]. I doubt whether this is quite correct. The familiarity, which usually develops in this situation, engenders a feeling of reliability, and hence confidence, but not necessarily trust.[213] As I have outlined in chapter 2.3.3 "trustworthiness and trust are not reducible to reliability and reliance" [Jones 2012, p.62]. Reliability refers to faultless (or, depending on the context, at least 'sufficient' or 'good-enough") past performance, i.e. to the past. However, since trust refers to the future you are interested in the physician's future trustworthiness. Moreover, trustworthiness is a much richer concept: you expect that the trustee will act in a way that you approve.[214] The fact that a physician has acted reliably in the past means that he will (probably) behave the same way in the future. Yet, in the future, you may have a different (more demanding) expectation, perhaps because you suffer from something much more serious. I admit that the transition from reliability to

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to believe that he is trustworthy (see chapter 6.3.2).

213 Trust presupposes uncertainty and risk, whereas in reliance and confidence risk, although it may be inherent, in not conceived (see page 77).

214 See page 132.

trustworthiness may be fluent. Still, I think that we should not equate reliability with trustworthiness. While I agree that familiarity-based confidence often (and justifiably) warrants trust, I am not convinced that it amounts to a general assessment of trustworthiness.

Rather than vainly trying to assess a physician's all-out trustworthiness, most patients look for specific features, which they believe are indicative of trustworthiness. Caring behaviour and compassion on the part of the physician are often seen as indicative signs of the trustworthy physician [Thom 2001, p.323]. Yet, although caring behaviour *per se* may indicate commitment, it does not guarantee that the commitment will be realised [Buchanan 2000, p.194]. Other important features include 'availability' of the physician [Gerretsen and Myers 2008, p.595] and receptive and expressive communication skills [Thom 2001 p.327]. Again, availability may indicate commitment, and communication skills are what we expect from a competent physician, but none of them suffices to guarantee trustworthiness.

If you ask patients why they trust their doctor, you will quite often get an answer like 'because he is a good man'. Of course, this answer begs the question. What these people mean is (first) that they believe they can judge the character of another person intuitively, and (second) that trustworthiness is an essential virtue of a good person. In other words, if the doctor is (or at least appears to be) a 'good person', he must (so many people believe) be a 'good physician'. This second belief is commonly called the 'consilience assumption'.[215] I think that neither of the two assumptions is justified: the first, because many (if not even most) of us are not very good at judging other people's character, and even those who are will usually need to be well acquainted to make an accurate

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[215] The term 'consilience' refers to the principle that calculating a result by two different methods should lead to the same answer. The word *consilience* was coined in 1840 by William Whewell in *The Philosophy of the Inductive Sciences.* It was popularised by the biologist E. O. Wilson in his book *Consilience: The Unity of Knowledge*, 1998, reprinted in 1999 by Vintage.

judgement. And the second, because there is no reason why anyone should have specific competences, just because he has a good character [Schwab 2008, pp.313-314].

I have previously argued[216] that 'most of the time and on most topics we all have to rely on testimony from others'. This also applies to trustworthiness. If we cannot base our trust on our own perception of the physician's merits, we are left with the option of referring to someone else's testimony. Of course, this leads us back to 'epistemic trust'. Since, as I have argued[217] epistemic trust is only responsible if the information is based on a reliable belief-forming process, and since we usually cannot know what belief-forming process was used by the informant, epistemic trust in external information on a physician's quality is (at least very often) not sufficient to justify trust in physicians.

IN SUMMARY, knowing that someone is trustworthy justifies one's trust in her. However, in reality it is often difficult or even unfeasible to assess a physician's trustworthiness, (a) because our own perception of a physician's trustworthiness is often inadequate, and (b) because relying on an external information amounts to epistemic trust, which on its own is often not sufficient to justify trust in physicians. If the loss of professional authority (and hence status trust) is not (or at least not fully) compensated for by a corresponding equivalent gain in merit-based authority (and hence merit trust), there inevitably results an overall decline of trust.

5.4 THE CRISIS OF MODERN MEDICINE AND PHYSICIANS' LOSS OF 'MEDICAL AUTHORITY'

In this section I argue that physicians in addition to having lost their 'professional authority' are also losing their 'medical authority',[218] i.e. the authority they have originally won

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[216] See page 91.

[217] See page 103.

[218] I will explain the difference between 'professional authority' and 'medical authority' further

through the success of science-based medicine, because ever more people have become disenchanted with science and scientific medicine.[219] I will refer to this disenchantment as 'the crisis of modern medicine' [Ernst 2009, 298].

Somehow, we assume that physicians always possessed (almost unlimited) medical authority. But this is not true. Up to the turn of the twentieth century, medicine had little to offer. Most treatments were either ineffective or even nocuous (just think of bleeding or purging). Physicians understood very little about diseases. They may have cared for their patients, but they rarely cured them. So even if they commanded respect, they had no medical authority [Heritage 2005, p.84]. It was only with the rise (and society's acceptance) of the paradigms of science-based medicine and the consequent understanding of many diseases, the improvement of diagnostic acumen, and the development of effective treatments that physicians rapidly gained medical authority[220] [McCullough 2009, p.1]. This medical authority reached its zenith around 1960.[221] From then on it started to decline steadily [McCullough 2009, p.1]. In the words of Schlesinger:

> "The authority of the medical profession … can be depicted as a grand historical arc, rising to great heights by mid-century but faltering badly as the century drew to a close" [Schlesinger 2002, p.186].

Before I go on, I want to emphasise that 'professional authority' (as described in chapter

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down.

219 Some people (e.g. [Calnan and Sanford 2004]) use the term *'orthodox medicine'* to differentiate it from various forms of 'alternative medicine'. Others (e.g. [Le Fanu 2011]) talk of *'modern medicine'* to differentiate it from 'pre-scientific' medicine. I prefer to use 'scientific (or science-based) medicine' as an explanatory term. 'Orthodox' is somewhat judgemental [Sampson 1996, p.191] and 'modern' would open up the debate as to whether today's medicine is still 'modern' or 'post-modern' [Sampson 1996, p.194], a topic I clearly do not want to address.

220 Kitcher and Schacht use the term 'epistemic authority' [Kitcher and Schacht 2004, p.27], which in fact it is. I stay with the term 'medical authority', because it is the more commonly used term and to avoid confusion with 'epistemic trust'.

221 This was what McKinlay calls the "golden age of doctoring" [McKinlay and Marceau 2002, p.383].

4.2) is not identical with the 'medical authority', of which I am talking here. 'Professional authority' refers to the assumption that someone is trustworthy because he belongs to a profession. 'Medical authority' refers to the epistemic authority, which the corpus of science-based medical knowledge confers to those, who practice scientific medicine, provided (and this is important), that people believe in this knowledge. To believe in scientific medicine means that one approves of its paradigms and that one believes that it works.[222] Let me give an example to illustrate the difference between the two types of authority. I do not believe in homoeopathy. So, for me, homoeopathic knowledge does not confer medical authority. Nevertheless a homoeopath may practice homoeopathy in compliance with the regulations set up by the 'Society of Homoeopaths'[223] and therefore deserve the professional authority conferred on him by this society.

Now, if medical knowledge confers authority, how can 'medical authority' decline at a time when medical knowledge appears to increase relentlessly? Here is what I think explains this apparent paradox: Until the 1960's, most people believed in scientific medicine. Since then the number of people who have become sceptical of scientific medicine has steadily increased. Concomitantly, 'alternative (or complementary) medicine', which played only a negligent role during the rise of scientific medicine, has gained a substantial following over the last few decades [Sierpina 2006, p.906]. For these people, the body of medical knowledge (irrespective of whether it increases or not) no longer legitimises medical authority [Brown 2008, p.360]. Hence "modern medicine is deemed to be in a crisis" [Ernst 2009, p.298].

In the following paragraphs I will argue that three charges brought forward against modern

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[222] See chapter 2.3.2.

[223] I have not made this up. It exists: "The Society of Homeopaths is a professional body, whose members are trained to high standards and agree to practise according to a strict code of ethics and practice." See http://www.homeopathy-soh.org/.

medicine are responsible for this crisis:[224] (1) the slackening of progress, (2) a methodological bias and reductionism, and (3) the overreliance of physicians and in particular of evidence-based medicine on generalised and encoded scientific knowledge (episteme) at the expense of the physician's individual expertise (phronesis) together with a devaluation of the patient's role in the patient-physician-relationship.

(1) LACK OF PROGRESS: One of the simplest reasons for the increasing frustration of people with medicine is that although the amount of knowledge in medicine increases, true therapeutic progress has slowed down over the last few decades and is not meeting the expectations it raised during the period of unprecedented success after the war [Fitzpatrick 2001, p.132]. Le Fanu in his book *'The Rise and Fall of Modern Medicine'* lists 35 important discoveries or developments in medicine since 1940.[225] If we group these events by decade, we find seven events each for the 1940s and 1950s. Then the number drops to six (1960s), five (1970s), and two each for the 1980s and 1990s [Le Fanu 2011, p.3]. To aggravate matters, progress has slowed down despite a massive increase of investment in both research and health care [Starr 1984, p.410]. Yet, I do not think that slacking progress is an adequate reason no longer to acknowledge what medicine has achieved and is still achieving. There must be more to the 'crisis of medicine' than just disillusionment because of diminishing success. Take the example of vaccinations. Despite the fact that vaccinations belong to medicine's top success stories "measles is [still] one of the leading causes of death among young children *even though a safe and cost-effective vaccine is available*" [WHO 2015, my italics].[226] Why are physicians "struggling to secure the confidence and co-operation of individuals who appear

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[224] To avoid any misunderstanding: I argue that these charges are responsible for the crisis, not that these charges are necessarily justified.

[225] Admittedly, the list is debatable (as any such list is) but it certainly contains what immediately comes to mind: e.g. penicillin, renal dialysis, cataract surgery, cortisone, polio vaccination, contraceptive pill, hip replacement surgery, kidney and other organ transplants, Computerised Tomography, Helicobacter as the cause of gastric ulcers, and triple therapy for AIDS.

[226] Available from http://www.who.int/mediacentre/factsheets/fs286/en/.

obstinately disinclined to accept strong scientific evidence about childhood vaccination" [Sweeney 2002, p.131]? One potentially promising answer is to be found in a spreading of cultural relativism, anti-scientific thinking, and even a general distrust of rationality [Sampson 1996, p.194].

Many of the arguments brought forward against 'scientific medicine' concern 'medical science' rather than 'scientific medicine' properly speaking. By *'scientific (or science-based) medicine'*, I mean clinical medical practice based on the paradigms of the natural sciences. Its purpose is to treat patients. By *'medical science'*, I mean all those endeavours, which aim at increasing medical knowledge. Since medical science primarily aims at improving medical practice and since scientific medicine heavily relies on the findings of medical science, there is evidently a considerable overlap. Nevertheless, I will treat the arguments separately. I will start with the arguments against medical science, namely the reproach of methodological bias and reductionism. Following this, I will address the arguments against scientific medicine, in particular the accusation of physicians' overreliance on science.

(2) METHODOLOGICAL BIAS AND REDUCTIONISM: One argument pertains to the principle methodology used by medical scientists. At the heart of the critique of science-based medicine lies the upbraiding of an overreliance on what Davies calls "the epistemological credo of hypothetico-deductive and inductive reasoning" [Davis 1997, p.183]. In fact, this critique is twofold: (a) it is a critique of the principle *per se* and (b) it is a critique of the over-reliance on this single principle at the exclusion of other methods [Sellman 2012, p.113].

The *first critique* is directed against the linear reductionist thinking, which holds that every disease has a specific cause (or aetiology) and in principle becomes treatable (or curable) once the aetiology is found, whereas in reality health and disease are part of a non-linear complex system, in which "properties of the whole cannot be predicted from the properties of the component units" [Frost 1997, p.1045]. This argument is supported by the fact that 'mono-causal reasoning' (or 'linear thinking' [Ernst 2009, p.298]) was very successful with

many acute diseases, which indeed have a single cause (such as infections), but much less so with chronic disorders (such as cardio-vascular diseases) where there is no single cause and in particular no linear cause-effect relationship [Fitzpatrick 2001, p.133]. Perhaps the simplest and most striking blow against the mono-causal thinking is the placebo effect, the fact that placebo often works, despite the fact that we have not the faintest idea of what causes certain symptoms and how placebo works [Charlton 1992, p.436].

The *second critique* refers to the bias in favour of one single method. By the end of the 20th century, we have accumulated an extreme amount of knowledge that (thanks to the informatics revolution) has become accessible to almost everyone. And yet, many urgent problems of medicine (e.g. cardio-vascular diseases and cancer) have not been solved. So, what do we do? The answer is "more of the same, only harder" [Kegan and Lahey 2001, p.233]. One is reminded of the athlete, who only increases but never changes his training impulses and is frustrated if he does not make any progress. Indeed, the "suspicion that we have exhausted the simple problems amenable to classic reductive scientific explanation" [Gillett 1995, p.286] could explain why therapeutic breakthroughs have become rather sparse.

(3) THE OVERRELIANCE OF PHYSICIANS ON SCIENCE: Many patients argue that physicians rely too much on science [Schlesinger 2002, p.193], and that too much emphasis is placed on rationality at the expense of emotional aspects. These patients complain that because of the technological pre-eminence, their role as narrator has all but disappeared [Imber JB 2008, p.109]. This has led to a feeling of disempowerment on the part of the patients. One of the goals of the 'right's movement' was (or is) to increase the self-assertiveness of the sick and to re-empower patients [Schlesinger 2002, p.196]. As a consequence, patients see themselves as consumers of health care without the need of deference to medical authority [Fitzpatrick 2001, p.136].

Moreover, it is argued that science-based medical practice is too much based on knowledge about *generalities* at the expense of the *individual* [Sweeney 2002, p.134]. The

ultimate embodiment of the scientific method is the development and application of *'evidence-based medicine' (EBM)* with its reliance on (and demand for) randomised clinical trials and meta-analyses. The problem of this approach is that it creates knowledge about illnesses and their treatment 'in general' rather than about the illness of the sick individual [Tyreman 2000, p.120]. For the sake of *methodological validity* entire groups of the population are excluded from studies at the price of a loss of *practical relevance* [Knottnerus 1997, p.1110]. Children are almost invariably excluded, as are old and often multi-morbid patients. Women are very often underrepresented. Hence, the results of such studies cannot be applied to these groups. This 'criteria bias' reduces the transferability of knowledge gained in clinical studies to individual patients. It also explains why the results obtained in clinical studies are often not replicable in clinical practice.[227] This is why "many clinicians struggle to apply results of studies that do not seem relevant to their daily practice" [Knottnerus 1997, p.1109].[228]

Lastly, EBM replaces local knowledge (the physician's expertise) with encoded knowledge (national standards, Cochrane, NICE). Encoded knowledge is designed to improve outcome, reduce risks, and increase public confidence. Yet,

> “the effect of concentrating on cognitive rationality is leading to a system that functions efficiently in curing patients but which fails to meet the personal and emotional needs of patients and therefore does not inspire confidence and trust” [Alaszewski and Brown 2007, p.8].

Here is an illustration of what this means: From my personal experience (both as a physician and as a patient), I know that physicians tend to believe that they will gain the patient's trust by demonstrating their competence or knowledgeability, whereas patients

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[227] By the way, I am not aware of any empirical evidence that the practice of EBM has improved medical practice.

[228] Knottnerus pointedly claims that we need more *'medicine-based evidence'* rather than 'evidence-based medicine' if EBM is to work in clinical practice [Knottnerus 1997, p.1110].

are often more concerned about the physician's commitment and are much more willing to trust the physician, who responds to their emotions of fear or worry.

I am neither in favour of alternative medicine, nor of relativism and anti-scientific thinking and yet I believe that there is more than a grain of truth in these arguments, and I can understand why they appeal to many people, sadly to the detriment of trust. Nevertheless, I am afraid that

> "from the belief that medicine can do anything, opinion is in danger of swinging to the equally untenable conclusion that it can do little or nothing" [McKeown 1976, p.160].

IN SUMMARY, modern medicine is increasingly criticised for its methodological bias and reductionism and for the overreliance of physicians on science at the expense of respecting the patient's needs. The resulting 'crisis of modern medicine' and the consequent loss of medical authority of physicians offer a second explanation for the decline of trust.

5.5 THE COMMODIFICATION OF MEDICINE AND PHYSICIANS' LOSS OF 'DIRECTIVE AUTHORITY'

In the previous section, I have discussed why patients no longer trust physicians' medical authority. In this section, I argue that the patients increasingly doubt physicians' commitment and 'directive authority', i.e. their agency and their freedom of decision-making. I present two arguments for these increasing doubts: (1) the commodification of medicine and (2) the re-conceptualisation of physicians as corporate employees.

(1) THE COMMODIFICATION OF MEDICINE: In the first book of Plato's *Republic,* Socrates asks Thrasymachus "is the physician, taken in that strict sense of which you are speaking, a

healer of the sick or a maker of money?" [Plato, *Republic*, section 341c[229]]. This shows that the question whether medicine is a calling or a business is at least two and a half millennia old. Thrasymachus answered "a healer of the sick", and I think that until fairly recently most people would have agreed. I am afraid that today the answer might well be different.

Of course, physicians (even the one referred to by Thrasymachus) have always been remunerated in one way or another. However, in the past, physicians (much as priests or rabbis) were felt to be remunerated in recognition of their 'community service' under the implicit provision that these services are provided for the patient's good [Sulmasy 1993, pp.28-29]. And even if physicians were paid for their services, patients did not conceive the patient-physician-relationship as a business relationship. However, with the commodification of medicine, i.e. with "professional health care more and more being reconceived as just another commodity in the free market" [Clark 2002, p.22], patients fear that physicians increasingly adopt a business attitude, caring more for their own (pecuniary) advantage than for the patient's benefit. This is one explanation for the spreading doubt in physicians' commitment to the patients' cause.

(2) THE RE-CONCEPTUALISATION OF PHYSICIANS AS CORPORATE EMPLOYEES offers yet another possible explanation. Over the past two to three decades, health care costs have literally skyrocketed.[230] The need for cost-containment has led to the introduction of various types of 'managed care'. I am using this term in a very general way to include all health care models, in which physicians are financially accountable to third parties, and in which (positive or negative) incentives are used to encourage physicians to reduce costs, basically by limiting access to the care. As a consequence of this, many people fear that

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[229] The translation is by B. Jowett, available from http://www.gutenberg.org/files/1497/1497-h/1497-h.htm.

[230] A recent McKinsey Study from the U.S. shows that over the past 20 years the health care costs have increased by about 500%, whereas the Gross Domestic Product has only increased by about 100% during the same period [Bradford et al. 2011].

physicians are no longer independent professionals but 'corporate employees' [Clark 2002, p.22], who have lost their independence as sole arbiters of medical matters and are no longer in a position to act with only the patient's interest in mind. Or, to put it differently: physicians (are perceived to) have lost directive authority.

IN SUMMARY, the commodification of medicine and the physicians' loss of directive authority are perceived as undermining the physicians' commitment to the patients' interest and hence lead to a decline of trust.

5.6 CHANGES OF RISK PERCEPTION AND RISK ACCEPTANCE

So far, I have looked at changes, which (at least in the patients' perception) undermine the physician's (various types of) authority. In this section, I argue that there is also a change in the patients' attitudes or behaviour, which leads to a decline of trust, namely the patients' increasing sensibility to risks (be they real or imagined) and their increasing aversion to risks (including the risk inherent in trust). I will claim (1) that (contrary to common belief) risks have not increased but people's perception of what constitutes risks has changed [O'Neill 2002a; O'Neill 2002b, p.8]; and (2) that (again, contrary to what many people believe) risks can materialise without it being anybody's fault. I will conclude that this change of risk perception, together with the increased risk aversion (i.e. the unwillingness to accept risks as inevitable parts of life) contributes to the decline of trust.

To be able to support these claims I have to come back to the definition of 'risk' and to the relationship between risk and uncertainty. In chapter 1.4.3, I defined 'risk' as a function of the probability that a certain adverse event will happen and of the (negative) consequences of this event.[231] This implies that I must know the possible adverse events and their prevalence if I want to calculate (or at least estimate) the risk. Here is an

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[231] See page 39.

example: If I go skiing, I run the risk of a fall with the possible consequence of a fracture. Since each year about 20'000 serious skiing accidents happen on the slopes of the Swiss Alps[232] and since each skier spends on average five days per year skiing, my (theoretical) risk of having a serious accident is about .001% if I go skiing for a day. Of course, such a skiing trip is full of other uncertainties as well. Fortunately, not all of them are risks. Although there is no risk without uncertainty, uncertainty does not necessarily imply risk.[233] And contrary to risks, uncertainties cannot be assessed and/or quantified [Smith 2005, p.307]; uncertainties are inherent; you cannot measure them; they are 'simply there' [Luhmann 2000, p.100]. It is important to remember this, as in the next paragraphs I will argue that uncertainty has increased but risks have not.

(1) RISKS HAVE NOT INCREASED: If you listen to the news or read the newspapers you must get the impression that life on our Earth in general and medicine in particular are becoming increasingly dangerous. Indeed, hardly a day goes by without some headlines telling us about new (health) risks. In reality, "public concerns have grown, in the face of declining 'real' risks".[234] The fact that from 1900 to 2000 the life expectancy (in the U.S.) has increased from 48 to 78 years [Alaszewski and Brown 2007; Wildavsky and Wildavsky 2014, figure 1] clearly contradicts the belief that serious health risks have increased. We are living longer and healthier lives than our ancestors. In other words, serious health risk cannot have increased all the time. So why do many people believe that everything has become more risky and more dangerous? And why do so many people "exhibit a marked global risk-avoidant decision-making bias" [Lorian and Grisham 2010, p.29]? As I have argued before, we can estimate the risk of something if we know

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232 The figure is taken from http://www.unfallstatistik.ch/d/publik/artikel/pdf/artikel_26_d.pdf.

233 See page 39.

234 For the following arguments and data, I am drawing on the work of William R. Freudenburg [Freudenburg 1993; Freudenburg 1996].

the probability of adverse effects and their consequences.[235] However, this is not how people estimate risks. Rather, they rely on their 'intuition', which makes them susceptible to a number of 'biases' [Kusch M 2007, p.133]. Here are two examples:[236] (a) The *'availability heuristics bias'* refers to the fact that the more often we have encountered (or just 'heard of') a risk materialising, the higher we estimate the risk to be. In the past, we had to search actively for information, whereas today even information, for which we do not care, is literally forced upon us. So the probability that we hear or read of cases of risks materialising has greatly increased. (b) The increasing focus on losses at the expense of gains (referred to as *'loss aversion bias'*) and the increasing focus on the risk of doing something rather than on the risk of abstaining from doing the same thing (the so-called *'omission bias'*) also lead to an increase of the risk sensibility. A good example for this is the previously mentioned aversion to the measles vaccinations: people focus on the (anecdotal) risk of the vaccination and completely block out the (very real) risk of measles.

Perhaps an even more apt explanation for the fallacy of the belief that risks have increased is offered by the theory of increasing 'social interdependence' [Freudenburg 1993, pp.914-915]. Let me use Freudenburg's own example to illustrate this: One hundred years ago, approximately 50% of the population were in one way or another involved in the production of food. People ate what they produced themselves or what was produced by people they knew and therefore trusted. Today, only about 2% of the population are involved in the food production. The fact that we do no longer know who produces our food and how it is produced increases our fear that someone in the production process fails to do his job properly. This 'division of labour' has led to an increasing dependence on others, i.e. on people whom we do not *a priori* trust.[237] Behind this development

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[235] Alternatively, one could say that the risk is a function of the probability and the consequences of the risk materialising.

[236] The examples are taken from [Kusch M 2007, p.133] and from [Sunstein 2007, p.165].

[237] In fact, this 'social interdependence' (or social vulnerability') has increased from about 60% in

(which, of course is not limited to food production) lies one single factor: specialisation and the emergence of experts. Whereas laypeople know very little (or close to nothing) about most things, experts know a lot about very few things. This has led to a divergence of expert and lay knowledge [Alaszewski and Brown 2007, p.1]. This "split between the experts and the public" [Sharlin 1989, p.269] leads to mistrust. People constantly fear that scientists 'might have overlooked something' (or, worse, that they are purposely withholding something). "Science is seen as a source of knowledge which paradoxically both reduces and contributes to uncertainty" [Alaszewski and Brown 2007, p.2]. In other words, the experts increase safety, yet leave us with the fear, which is typically associated with uncertainty, and reduces our tolerance to perceived 'risks' [Imber JB 2008, p.114].

I vividly remember that when mobile phones became popular we had signs on all wards prohibiting their use 'because of the risk of interference with medical equipment'. Since there was no 'equipment to interfere with' there was no risk, and yet these signs remained for a long time. This type of 'risk', in which a cause-and-effect relationship is hypothetically possible, but neither probable nor plausible, is often called a *phantom risk* [Foster et al. 1999, p.1]. Indeed, "most of the claims of harm to human beings from technology are either false or unproven" [Wildavsky 1994, p.228]. And yet, they are perceived as risks and are responsible for the application of the 'precautionary principle', which according to the 'Wingspread Declaration' states that

> "when an activity raises threats of harm to human health or the environment, precautionary measures should be taken *even if some cause and effect relationships are not established scientifically*".[238]

To make things worse, the simple fact that these mostly unnecessary precautionary

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1900 to almost 100% today [Freudenburg 1993, p.915, figure 1].

238 The Wingspread Conference on the Precautionary Principle took place in January 1998 in Racine, Wisconsin, U.S.A. The citation (my italics) is from the summary of the conference, which is available from http://www.sehn.org/wing.html.

measures are taken confirms people in their belief that there must be a risk [Wiedemann et al. 2006, p.361]. I have often wondered why patients see risks lurking everywhere. For lack of space, I cannot go into any details.[239] But there is one explanation, which I want to mention: If something is continuously reiterated it gets so ingrained in people's mind that they believe it to be true. If you keep telling people, that old mobile phones 'radiate', that this 'radiation' is harmful, and that your brand-new phone 'radiates much less', people will buy a new one, even if none of the above claims is true (or makes sense).

(2) RISKS CAN MATERIALISE WITHOUT IT BEING ANYBODY'S FAULT: eventually, a (true) risk will materialise (i.e. what we fear will happen). How we react to this depends on whether it was a 'voluntary risk' or an 'involuntary risk' [Sharlin 1989, p.261]. Here is what I mean by this: If I go climbing, I know that I run the risk of falling, e.g. because I slip on a loose rock. This is a risk, which I accept voluntarily, and for which I can only blame myself if it materialises. If, however, I fall because a rope ruptures, this is an 'involuntary risk', i.e. one, which I could not foresee. [240] In earlier times involuntary risks were accepted as part of life, whereas today, whenever an involuntary risk materialises, this is seen as a failure of someone or something, for which someone has to take the blame [Sharlin 1989, p.261]. While this is true in general, it is particularly true in medicine: many patients today believe that they are entitled to a complication-free treatment and that if a complication arises, the doctor must have made a blunder. Since most people have at one time or another themselves suffered (what they believe to be) a complication, or at least know (of) someone, who has experienced (again, what he believes to be) a complication, they conclude that most physicians blunder[241] and are better not trusted.

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239 For a detailed analysis of this problem see [Kusch M 2007, p.133ff].

240 See also page 184 for the difference between 'internal' and 'external attribution'.

241 According to the then E.U. Commissioner of Health, Androulla Vassiliou, physicians make errors, which seriously harm the patient in every tenth patient and errors, which are fatal to the patient in every 1'000th hospitalised patient. Moreover, she claims that 78% of the European population consider 'medical errors a serious problem' [Schiltz 2008].

In conclusion, I argue that the change of risk perception together with the increased unwillingness to accept risks as normal features of life (i.e. an increased risk aversion) account for the decline of trust: As I have argued earlier,[242] trust implies consciously taking a risk. If you are not prepared to accept the risk inherent in trust, you will not trust. If you are not willing to accept that bad medical outcomes are sometimes unavoidable, you will not trust physicians [Imber JB, 2008, p.239]. The increasing readiness to perceive risks, where in fact there is no risk (only uncertainty), together with a decreasing willingness to accept risks inevitably leads to a loss of trust.

IN SUMMARY, there is no evidence that true risks have increased. Maybe there are some of which we were previously not aware. But most of the perceived new risks are just uncertainties, turned into risks by "unrealistic hankering for a world, in which safety and compliance are total" [O'Neill 2002a; O'Neill 2002b, p.19] and by the continuous reiteration and appeals to people's fears. Despite the fact that risks have not increased, and although risks can materialise without it being anybody's fault, people's changes of risk perception, and the increasing risk aversion have led to a decline of trust.

5.7 SUMMARY OF CHAPTER 5

The *principle purpose* of this chapter was to explain why trust has declined. In the introduction, I have refuted the assumptions (1) that a decrease of the quality of performance of physicians is responsible for the decline of trust, (2) that the recent changes in the patient-physician-relationship reflect the changed self-perception of today's patients rather than a decline of trust, and (3) that what I call a loss of trust is in fact a loss of faith in physicians.

Rather, I have argued, the decline of trust is due to five developments, which have occurred in society and in health care over the past decades: namely

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[242] See page 79.

(C1) the discrediting of professionalism
(C2) the insistence on (and difficulty of) assessing physicians' trustworthiness
(C3) the disavowal of the basic tenets of scientific medicine
(C4) the commodification of medicine and the re-conceptualisation of physicians as dependent employees
(C5) changes of risk perception and risk acceptance

Apart from identifying the reasons for the decline of trust, the chapter served to demonstrate t*hat my account of trust has the power to explain why any of these changes can lead to a decline of trust* and that my definition of trust is superior to standard definitions because it takes the trustees' competence and commitment as well as the need to justify one's trust into consideration, whereas commonly cited definitions refer exclusively to the trustees' commitment. Since (on my definition) trust is in essence a *justified expectation,* anything that negatively affects the justification of trust will lead to a decline of trust. I have argued that the *discrediting of 'professionalism'* has led to a decline of professional authority, a decline that cannot be fully compensated for by an increase in merit-based authority because of the *difficulty of assessing trustworthiness*. A *questioning of physicians' medical authority (*caused by the what is commonly referred to as the 'crisis of modern medicine' [Ernst 2009, p.298]), and increasing *doubts regarding the physician's agency and their directive authority* (caused by the commodification of medicine and a re-conceptualisation of physicians as dependent employees) further jeopardise the justification of trust. Overall, the decline of trust is primarily the consequence of physicians' loss of (different types of) authority. The final explanation is independent of physicians' authority and has to do with the risk inherent in trust. I have argued that (contrary to what many people believe) it is not risks which have increased, but uncertainty, that people's risk *perception* (or sensibility to risks) has changed, that many people have become risk averse, and that together changed risk perception and increased risk aversion account (at least in part) for the decline of trust. These may not be all possible explanations for the decline of trust, but they are certainly sufficient to understand why trust has declined.

In the following final chapter, I hope to show that my definition of trust can also explain why trust is instrumentally useful and morally significant.

CHAPTER 6 INSTRUMENTAL UTILITY AND MORAL SIGNIFICANCE OF TRUST

6.1 INTRODUCTION

I have started this thesis with the quotation "one of the most critical issues facing our profession today is the erosion of trust" [Jacobs 2005, p.3494], and throughout the thesis I have maintained that the decline of trust in medicine is a negative development and a reason for concern. Yet so far, I have not presented any arguments to underpin this claim. This is what I intend to do in this sixth chapter. In particular, I will argue that we have two reasons to be concerned about the loss of trust: First because trust has an instrumental[243] value (or usefulness) and second because trust is not just a useful commodity, but also a moral good.[244]

Of course, the strongest argument in favour of the usefulness of trust in health care would be convincing *empirical evidence* that trust improves patient welfare. Yet, quite apart from the fact that this would only show *that*, but not *why or how* it improves patient welfare, this approach poses two problems: *First*, we must be able to measure trust,[245] and *second*, we need a reliable outcome variable.[246] Of course, it would be tempting to correlate the level of trust with overall treatment success. Yet, if we consider how difficult it is to prove the very efficacy of a treatment, it must be evident that this is clearly not feasible. So, we

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[243] Miller uses the term 'strategic value' [Miller 2000, p.44]. Although the term is very enticing, I prefer not to use it because it puts too much emphasis on the purposefulness of trust (see page 55).

[244] Alternatively one might say that trust has both an instrumental and an intrinsic value, where 'instrumental' stands for 'a means to an end', and intrinsic stands for 'an end in itself' [O'Neill 1992, p.120].

[245] For a comment on the problem of the measurability of trust, see footnote on page 202.

[246] An outcome variable (also called 'dependent variable') is a measurable variable, which correlates with the level of the variable, which we want to assess (in this case trust). Survival time and survival rate are typical examples of outcome variables used to assess the efficacy of cancer treatments.

have to look for alternative outcome variables. Alternative variables may be either specific (such as earlier cancer detection in trusting patients [Mainous et al. 2004, p.35]) or more general (such as the willingness of patients to consult and stay with a physician [Lee and Lin 2008, p.44]). They may refer to whether patients are willing to follow the physician's advice, even if this means to change one's life style [Bonds et al. 2004, p.1], or to comply with treatment regimens [Gilson 2006, p.361]. Even broader outcome variables are conceivable: Jen et al. studied the relationship between trust and self-rated health and concluded that "the level of trust … is predictive of individuals' health" [Jen et al. 2010, pp.1024-1025]. Helliwell and Putnam, who set out to prove the hypothesis that 'trust is vital for a meaningful life' could show that people who claim to trust easily report higher life satisfaction [Helliwell and Putnam 2004, p.1442]. Alternatively, we can also look at the correlation between distrust and outcome: in effect, distrust was found to correlate with a higher mortality rate (basically through non-adherence to treatment recommendations and unhealthier behaviour) [Fiscella 1999].

Much as I would like to believe all these results, I do not believe that they prove that trust is useful. Here is why: I am afraid that equating 'correlation' with 'causation' means committing the logical fallacy of *post hoc ergo propter hoc*.[247] Moreover, the direction of the causation may well be inverse (healthier or happier people may be more trusting rather than the other way round). Also, the outcome variable (e.g. 'life satisfaction') and 'trust' may both be caused by a third factor (such as wealth) rather than one being the cause of the other. Finally, even if we can show that a high level of trust correlates e.g. with earlier cancer detection this does not prove that trust *per se* is overall useful in the patient-physician relationship. Given that (at present) there does not seem to exist convincing empirical evidence for the usefulness of trust (conceived in terms of positive patient welfare outcome) we will have to look for further arguments.

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[247] See footnote on page 127.

As in chapter 5, *the purpose of the chapter* is twofold: *First*, I will try to demonstrate that my definition of trust is indeed able to underpin my claim that trust is instrumentally useful and morally significant. *Second*, I hope to show once more that my definition of trust contributes to the discussion about trust in medicine.

I will start with arguments in favour of the **USEFULNESS** (or instrumental value) of trust. The *first three* arguments will be derived from my definition of trust. Of particular interest will be the role that trust plays with regard to the handling of uncertainty, complexity, and risk. All three arguments will not only show *that* trust is useful, but will also explain *why (*or in what way) trust is useful. The *fourth* argument will have to do with the inadequacy of the measures taken to compensate for the loss of trust. Moreover, I will argue that these measures only transfer the need to trust from a first order object (e.g. physicians) to a second order object (e.g. those responsible for making or implementing regulations). The final *fifth argument* is derived from the fact that there is no superior alternative to trust. Of course, trust is not the only (and perhaps not even the best) means upon which we can base a relationship. Like an umbrella, which is unquestionably useful on a rainy day, but loses much of its attraction if one wears a rain-jacket (which not only protects from the rain, but also from the wind and the cold) trust may be relegated to 'second best' if we can find a better alternative. The only model that is commonly propagated as superior to the traditional trust-based model is the 'contractual model'. However, as I hope to show, an exclusively contractual model is not feasible in the patient-physician-relationship context. Moreover, like the measures taken to compensate for the loss of trust, the contractual model itself cannot entirely dispense with trust.

Once I have established the instrumental usefulness I will address the **MORAL SIGNIFICANCE** of trust. To defend my position that trust has a moral value I will invoke two arguments: *First,* I will flesh out the argument that a breach of trust results in a feeling of betrayal, which is a reactive attitude limited to moral issues*. Second*, I will show how the truster's belief that the trustee has a moral obligation to do what he is expected to do by the truster (which makes trust a moral notion) can be justified. To do so I will have

recourse to the 'obligation-ascription thesis'.

OUTLINE OF THE CHAPTER: This chapter has two sections. In *the first section*, I will address the instrumental value of trust. Briefly recapitulated I will show why trust is useful, why regulations, controls, and treatment standards (introduced to compensate for the vacuum resulting from the loss of trust) do not fulfil their purpose and do not make trust redundant, and why the contractual patient-physician relationship model (advocated by some as a superior alternative to the traditional model) offers no advantages over the trust-based model. *In the second section* I will address the moral significance of trust. I will claim that to react to a breach of trust with a feeling of betrayal shows that trust is a moral notion, and that the belief in a moral obligation of the 'trustee to do what he is trusted to do' (i.e. to be trustworthy) can be justified.

6.2 THE INSTRUMENTAL UTILITY OF TRUST

Many metaphors have been used to describe trust. I particularly like the one by Jon Elster who calls trust "the lubricant of society" [Elster 2007b, p.344]. I think the association of trust with a lubricant is very appropriate. As anyone who suffers from arthrosis[248] can testify, we only become aware of the importance of the synovial fluid that lubricates our joints once it is lacking. The same is true for trust: Trust is so omnipresent that we take it for granted – until it is lost, and until we find out how difficult it is to restore. In the words of Annette Baier:

> "We inhabit a climate of trust as we inhabit an atmosphere and notice it as we notice air, only when it becomes scarce or polluted" [Baier 1986, p.234].

The example points up two ways of assessing the value of trust. We can list its advantages (i.e. describe or measure what it does as long as we have it), or alternatively, we can assess the consequences of its loss. I think there is yet a third way: namely to see

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[248] Arthrosis is a degenerative disease of the joints causing stiffness and pain.

whether there is a possible alternative model that is superior to the trust-based model. In the following three subsections, I will first look at the advantages of trust, then at the consequences of the decline of trust, and finally at possible alternatives to the trust-based model. I will end this section with the conclusion that in the final analysis trust is inevitable in the patient-physician-relationship.

6.2.1 ADVANTAGES OF TRUSTING

Just to show *that* trust is useful is not enough. We also have to specify *why* trust is useful. To show why trust is useful in the patient-physician relationship, we need to know what characterises the traditional patient-physician relationship. By 'traditional', I mean a relationship into which each partner enters with an open mind, i.e. without preconceived ideas of what exactly he wants and of how to proceed.[249] Once I have done this, I can analyse the role which trust plays in the relationship. Admittedly, the relationship between patient and physician is very complex, but *uncertainty* with regard to the physician's competence and disposition, *complexity* of medicine and medical decision-making, and *risk* are unquestionably decisive features of the patient-physician relationship. As should be obvious, these are exactly the type of features that figure prominently in my definition of trust. I will argue that trust is useful, (1) because it helps patients cope with uncertainty and risk and because it reduces the transaction costs caused by the inherent risk, (2) because it reduces uncertainty by inducing trustworthiness in physicians, and (3) because it reduces complexity.

Trust is useful because it helps the patient to cope with uncertainty and risk and reduces

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[249] *Vide* the following example: When the patient enters the surgery, the physician starts the conversation with an open question, such as 'what brings you to me'? To this, the patient answers 'for a week or two I have had an earache, which has been gradually getting worse'. From here on the conversation continues in a not predetermined way. Eventually, patient and physician will agree upon how to proceed. The alternative to this traditional model is the 'contractual model', in which a goal and a means of achieving that goal are agreed on in advance. I will come to this in chapter 6.2.3.

transaction costs. Uncertainty and risk are common to all human relationships. We can either accept them and learn to 'live with' them, or we can try to reduce them by checking information, seeking additional advice, monitoring behaviour, and occasionally even setting up legal safeguards. Setting up such a system of surveillance has its costs, which are usually referred to as 'transaction costs' [Cohen and Dienhart 2013, p.5]. According to my definition, trust implies the conscious acceptance of risk. This acceptance of risk has a double beneficial effect: it helps us to cope with the uncertainty (i.e. live with it), and it helps us to reduce the transaction costs by "refraining from taking precautions against an interaction partner, even when the other … could act in a way that might seem to justify precautions" [Elster 2007b, p.344]. A particularly good example of how trust helps us cope with uncertainty is the 'no alternative' situation.[250] In this situation, trust helps us conquer our fear, which is very often not a specific fear, but rather the 'fear of the unknown', i.e. the uncertainty. Here is an example: When I had to go to my first military training[251] (even though this was 45 years ago I remember it vividly), I had no idea what to expect. I do not think that I was 'afraid' properly speaking, but I know that I was very tense. Knowing that some of my best friends would be in the same unit, and trusting that they would help me if ever I got into any 'difficulties' (again, I had no idea, what difficulties) helped me cope with this tension. In other words, simply knowing that (whatever may happen) one will not be alone and trusting others to help if necessary, helps us cope with the unknown. To avoid any misunderstanding: trust does not 'spirit away' the uncertainty, but it helps us to live (i.e. to cope) with it. Coping strategies are very important in medicine. In particular, patients with chronic intractable disorders often have to learn to cope with their symptoms; and trust in their physician[252] is one means that may help them to do so.

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[250] See page 55.

[251] In Switzerland, military service is mandatory for any 'able-bodied' citizen.

[252] Just to have the physician's mobile phone number (and the permission to use it should a crisis come on) will help the patient with recurrent anxiety.

(2) Trust is useful because it induces trustworthiness. Trust not only helps us cope with uncertainty and reduce transaction costs, it also effectively reduces the uncertainty regarding the physician's contingent behaviour by inducing trustworthiness in the physician. I have previously argued[253] that demonstrating one's trustworthiness induces trust. Mahatma Ghandi is usually credited for saying that 'trust begets trust' although the saying can be traced back to Plutarch,[254] and I think that instinctively most of us act accordingly; i.e. we trust those who trust us.[255] Here I argue that there is yet a third causative interaction between trust and trustworthiness: 'Trust induces trustworthiness'. The fact that you trust me motivates me to deserve your trust [Pettit 1995, p.216].[256] I think that anyone who has children remembers situations when he or she demonstratively trusted the child, hoping that this would induce the child to honour one's trust (and behave trustworthily in a situation in which it might otherwise perhaps not have done so). Nickel has the following explanation for this observation:

> "It seems clear that motivation through awareness of an obligation, or an obligation-ascription, may serve as an important part of the explanation why trust reinforces reliability in this way [Nickel 2007, p.316].[257]

This strategy of 'purposive trust' is also illustrated by the following quotation from a man

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253 See page 129 on 'purposive commitment'.

254 "Trust begets trust, and love [begets] love" [*Moralia,* p.79 in the translation by Shiletto AR, published in 1898 by Chiswick Press, available from http://www.gutenberg.org/files/23639/23639-h/23639-h.htm].

255 In fact, Glaeser et al. have shown in a series of trust experiments, that those who trust are more likely to be themselves trustworthy than those who mistrust. In other words: "To determine whether someone is trustworthy, ask him if he trusts others" [Glaeser et al. 2000, p.840].

256 I am aware that Kiyonari et al. have shown that trust does not seem to engender trustworthy behaviour [Kiyonari et al. 2006], but their experiments were one-shot trust games, whereas I am speaking of long-term relationships.

257 Further down, I will use the concept of 'obligation-ascription' (1) to justify the belief in a moral obligation to be trustworthy (see page 191) and (2) to justify trust per se (see p.189).

who worked in an area (warfare), in which trust plays a very particular role:[258]

> "The chief lesson I have learned in a long life is that the only way to make a man trustworthy is to trust him; and the surest way to make him untrustworthy is to distrust him and show your distrust".

(3) Trust is useful, because it reduces complexity. Complexity is a key feature of medicine and medical decision-making and no patient can even remotely hope to understand everything involved in making a diagnosis and deciding on an optimal treatment plan. The patient with the pleomorphic adenoma is overwhelmed by a myriad of questions: What can it be? Do I have to be worried? Will it go away on its own or do I need treatment, etc.? Although the patient has a simple lump in front of her ear, she is baffled by the complexity of the problem. By trusting her physician, i.e. by deferring to his authority she reduces this complexity. To avoid any misunderstanding: as with uncertainty, trust does not actually reduce or even eliminate the complexity of the problem, but it makes the situation appear to be less complex.

SO FAR, I have supplied three reasons for the usefulness of trust: the help it offers the patient to cope with uncertainty, risk, and complexity, the reduction of transactions cost, and the fact that trust itself is a means of inducing trust. All these reasons directly bear upon specific features of my account of trust. Again, as with the decline of trust, existing definitions of trust cannot explain the usefulness to the same degree, because none of them refers to these issues.

Next, I will look at what happens if trust declines and we resort to mistrust.

6.2.2 CONSEQUENCES OF THE DECLINE OF TRUST

Of course, we lose all the above-mentioned advantages of trust with the loss of trust. But,

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[258] Henry L. Stimson was U.S Secretary of War from 1911-1913 and from 1940-1945 as well as Secretary of State from 1929-1933.

or so I argue, we lose considerably more. Trust serves a purpose (even if we do not consciously trust 'for this purpose').[259] If trust declines, something else has to fulfil this purpose, i.e. to fill the vacuum created by the decline of trust. Regulations, controls, and systems of stricter accountability are set up and procedural standards are introduced with the objective of reducing uncertainty and complexity, replacing or improving trustworthiness, and reducing the inevitable risk [Manson and O'Neill 2007, p.162; Kohn 2008, p.65]. If these provisions were sufficient to compensate for the loss of trust, we would have no reason to be concerned about the decline of trust. However, I will argue that regulatory measures do not adequately compensate for the loss[260] of trust and they themselves cannot do without having to fall back on trust.

Here is an illustration: A few years ago, three pit-bull terriers (which were not on a leash) fatally injured a small child near Zurich. There was an outcry in the population and a cry for better, i.e. more, regulations from politicians of all colours. The consequence is that now *all* dog owners (not just the owners of combat dogs) have to attend a four-hour theoretical course and a practical training of at least four times 60 minutes.[261] Probably the exercise does have positive effects, but I am afraid that it will not prevent irresponsible dog owners from letting their dangerous dog off the leash. In other words, these regulations do not solve the problem. We still have to trust dog owners to behave responsibly. Here is a less polemical way of saying the same:

> "Whenever anything goes wrong in society we hear the same rhetoric: more transparency and stricter regulation. And the result as a rule is more formal

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259 See page 55.

260 This is not in contradiction to my statement on page 141, where I have argued that regulations and standardisations of medical education have improved the quality of health care. Regulations may increase quality, but this is not necessarily reflected in increased trust.

261 See http://www.tierrecht.ch/hundehaltung.html.

procedures and additional chicaneries"[262] [Hirschi 2014, p.N4].

This is exactly what happened in health care as well. Trust has been (and is still being) replaced by increased regulation as well as by the development of procedural standards (at all levels, from local hospital to national health authorities) based on encoded knowledge[263] [Alaszewski and Brown 2007, p.1]. The proclaimed purpose of these regulations and standards is 'risk reduction'. Unfortunately this is achieved (if it is achieved at all!) at the price of increased costs and a lot of red tape, causing tremendous frustration[264] [Wildavsky 1989, p.4]. I have already dealt with the problem of risk perception and risk reduction in chapter 5.6. Suffice it to repeat that only if we know what the risk is, what the probability of its occurrence is, and how we can prevent it, we have a chance of preventing it [Wildavsky 1989, p.5]. Otherwise, we are just falling into the trap of over-activism. Sending all dog-owners to dog training is a prime example of overreaction and does not prevent irresponsible owners of combat dogs to let their dog run loose.

In the following paragraphs, I present four arguments why regulations (i.e. guidelines, controls, systems of stricter accountability, and procedural standards[265]) do not compensate for the loss of trust: (1) regulations do not necessarily reduce uncertainty; (2) procedures take precedence over outcome; (3) trust is not made redundant but only transferred from first order object to second order object; and (4) an increase in ('objective') trustworthiness does not necessarily lead to an increase in trust, but may

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262 This is my own abbreviated translation of "Läuft in der Wirtschaft oder in der Politik etwas grundsätzlich schief, erklingt immer die gleiche Remedurrhetorik: 'höhere Transparenz' und 'strengere Regulierung'. Und in aller Regel folgt ihr die immer gleiche Massnahme: formellere Verfahren mit zusätzlichen Schikanen".

263 See page 154.

264 An illustrative example, particularly in the present context, is the proliferation over the last few decades of 'ethics committees'. De Vries and Kim are certainly not far off the mark with their claim that "bioethics is a field born from *mis*trust" [De Vries and Kim 2008, p.377, their italics].

265 Of course, I am aware that 'protocols', 'recommendations', guidelines',' hospital standards', etc. are not the same. Here, I am using the term 'regulations' to include any external influence on the physicians' decision-making.

even lead to a further loss of trust.

(1) *Regulations do not necessarily reduce uncertainty*. On page 119, I have discussed protocols, etc. from the physician's standpoint. In particular, I have argued that because of the increasing need to account for their actions and decisions, physicians shy away from taking responsibility by following external regulations such as protocols, guidelines, etc. Now let us turn to the patient, or more particularly to the mistrusting patient. Very often, these patients are reassured if they are told that what they are recommended is based on accepted guidelines or hospital protocols. Not being familiar with such regulations and how they are generated, the patients will believe that the regulations remove uncertainty and that they offer a reasonable certainty that they will receive the optimal treatment. However, this is (at least very often) an illusion. Only a minority of guidelines are based solely on high-level evidence (RCTs etc.), simply because very often there is no such evidence. Rather they are based on uncontrolled studies or 'expert opinions'. And even in the case of guidelines based on high-level evidence, there remains the uncertainty whether they are useful for a given patient.[266] Lastly, it must be noted that often guidelines primarily serve to standardise procedures and setting minimal standards,[267] in which case following them strictly may well be inferior to what a competent physician has to offer.

(2) Another problem with regulations is that eventually *the procedure, i.e. 'how' something is achieved becomes more important than 'what' is achieved* (Luhmann, cited in [Hirschi 2014, p.N4]). People become more anxious to fulfil the regulations than to care for the outcome, because rather than being held accountable for the outcomes they are called to account for "*following prescribed procedures*" [O'Neill 2002a, p.132]. Very often, litigation cases succeed or fail depending on whether the physician can document that he has

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[266] See page 153.

[267] I have myself be involved in the development of guidelines, e.g. for the management of head and neck cancer patients, which served exactly this purpose [Wolfensberger et al. 2002].

followed the required 'patient information protocol'.[268] Sadly enough, the 'quality indicators' (so dear to managers) are more often than not chosen because they are measurable and not because they truly reflect quality [O'Neill 2002b, p.54].

(3) The belief that trust can be replaced by the above-mentioned measures is a fallacy. In effect, *these measures simply transfer trust* from a first order object (e.g. physicians) to a second order object (e.g. those responsible for making or implementing the regulations)[269] [Manson and O'Neill 2007, p.162]. I doubt whether it is indeed preferable to trust the 'regulators' rather than the physicians themselves. Now, this may sound like a physician's bias, but I think there are good arguments to support this claim: First, I believe that doctors have more incentive (are more motivated) to be trustworthy (and hence trusted) than those who are responsible for any kind of regulations (be they peer-groups, politicians, or hospital administrators), because physicians are in a direct relationship with (and personally answerable to) the patient, whereas regulators are much more removed and hardly ever personally accountable. Second, I think it is ultimately more beneficial to patients to have trustworthy doctors that to have trustworthy regulators. Finally, regulations are general rules and may not always be applicable to individual patients, whereas the physician's decision always concerns his patient.

(4) Finally, regulations and controls are claimed (by those, who set them up) to increase trustworthiness by reducing the risk of the trustee behaving untrustworthily. Contrary to this, I claim that *they make trust redundant*, and that they themselves *in fact contribute to the erosion of trust* [Smith 2005, p.305]. I have two arguments to underpin my claim: (1) If the other (in this case your doctor) has no option to behave unprofessionally because he

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[268] I have been called in as an expert in several litigation cases, in which this turned out to be the clinching factor.

[269] This is also referred to as shift from the micro-level to the macro-level [De Vries and Kim 2008, p.378].

is so tightly reined in by rules and controls you may not feel any need for trust.[270] So, trust becomes redundant. Of course, this is what some people want (e.g. Buchanan, who favours a contractual patient-physician-relationship model over a trust-based one [Buchanan 1988]).[271] I am quite convinced that for some people the purpose of ever more regulations the 'hidden agenda' is not to increase trust (as they claim), but to make it redundant. I am afraid, however, that they ultimately do the patient a disservice. Regulations do not increase trust. Assume that you are faced with a serious diagnosis: Would you rather sit vis-à-vis of a doctor who takes his time and the responsibility to explain and discuss the treatment options and to answer your questions, or a doctor, who tells you 'that's what we will do; it's the rules'. Chances are that you lose whatever trust you had in your doctor before this type of encounter. I admit that this is a black-and-white picture. Of course, there is a number of intermediary scenarios. Nevertheless, I know from experience that many doctors gladly eschew the personal responsibility of decision-making and hide behind imposed rules[272].

IN SUM, the measures used to compensate for the vacuum created by the decline of trust do not adequately compensate for the loss of trust: first, because they do not reduce uncertainty; second, because procedures often take precedence over outcome; third, because trust is not made redundant but only transferred from first order object to second order object; and fourth, because an increase in ('objective') trustworthiness does not necessarily lead to an increase in trust, but may even lead to an erosion of trust. It follows that we cannot do entirely without trust, unless (and this is important) there is an alternative model of the patient-physician relationship that is superior to the one based on trust. The only candidate for such a model that has been offered and discussed in the

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[270] See page 143 for a more detailed discussion of the dilemma between responsibility and accountability.

[271] See the next sub-section.

[272] See also page 129 for the difference between accountability and responsibility.

literature is the 'contractual model'[273], which I will discuss in the next subsection.

6.2.3 THE CONTRACTUAL MODEL AS ALTERNATIVE TO THE TRUST- BASED MODEL

Before I go on, let me briefly iterate the key features (or perhaps I should say the key problems) of the patient-physician-relationship: Asymmetry with regard to knowledge and skills, uncertainty, and agent risk as well as agent costs. In the previous section, I have argued that trust is valuable as a way of coping with these problems. Yet, even if trust is valuable it may not always be the best option. Per definition, to trust means to take a risk, and this risk may be too big. Too much (or poorly placed) trust may be detrimental. So, for a fair assessment of the value of trust, we must balance its advantages with its downsides, and since 'il meglio è nemico del bene',[274] we must make sure that there is no better alternative.

Buchanan (among others) argues strongly in favour of basing the patient-physician relationship on a principal/agent (i.e. contractual) model rather than on the traditional trust-based model [Buchanan 1988, pp.321-322]. Here is (very briefly) what a principal/agent relationship amounts to: A principal (in this case, the patient) commissions an agent (here, a physician) to render a certain service, which the agent then provides. So far, this hardly differs from a trust-based relationship. There is the same asymmetry between the two sides and the principal is at the same disadvantage as regards assessing the agent and monitoring the progress of the commissioned service. So what is the advantage of setting

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[273] This is not to be confused with a 'regulatory model'. In the 'regulatory model' (which I have discussed in the previous section), regulations are imposed from outside, whereas in the 'contractual model', a spelt-out agreement is set up jointly by patient and physician.

[274] 'Better is the enemy of good' is in fact an Italian proverb but is usually attributed to Voltaire, who used it in the first stanza of his 'Conte Moral' *La Bégueule* (1772) and in the second volume of his *Dictionnaire Philosophique* (1764).

up a contract?[275] I think that (at least in theory) the principle advantage of a contract is that it reduces (a certain type of) uncertainty and the thereof resulting risk by spelling out goals as well as standards and limits that will apply. Moreover, contracts are (again, in principle, but not necessarily in reality!) enforceable, which gives the principal a certain feeling of security. Despite these undisputed advantages, I will present four arguments why I believe that contracts may complement, but cannot replace trust: (1) to set up a contract, the goal, and the means to be used to achieve this goal must be known in advance. This is not feasible in the patient-physician-relationship, because the patient-physician relationship is characterised by contingency and far too complex to be accommodated by a contract. (2) Paradoxically, the principal/agent model 'reduces the agency of the agent' and leads to 'ethical minimalism'. (3) The contractual model neglects important emotional aspects of the patient-physician relationship and (because the agent can unilaterally terminate the contract) increases the patient's anxiety. (4) The contractual model further reduces trust and (like regulations and controls) ultimately transfers trust from a first order to a second order object.

(1) According to Quill, a contract is defined as an "explicit bilateral commitment to a well-defined course of action" [Quill 1983, p.228]. This implies that *to set up a contract "both a goal and the means of achieving this goal are agreed on in advance"* [Quill 1983, p.229]. This in turn presupposes that the *goal and the means to achieve this goal are known*. Here is an example form outside medicine: Assume you commission an architect to design and build a house for you. Even if you have no clear-cut idea what type of house exactly you want, you will have some starting points, such as the number of rooms, the style of the house, etc. Now, the architect will start designing, and through various stages,

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[275] To avoid any misunderstanding: by 'contract' I mean a spelt-out advance agreement, which specifies the main points of the commission and establishes "monitoring and regulating bodies, managing litigation and maintaining a legal framework that is concerned with specifying conditions for co-operation and responding to breaches of the agreement" [Smith 2005, p.302]. Agreements, which are reached interactively in the process of shared decision-making and informed consent and during the therapeutic relationship, are not contracts on this definition.

i.e. in an iterative process you will eventually reach the point at which you will say 'this is the house I want you to build'. Maybe you had a preliminary contract for this planning phase. But even if you did not, there was not much need for you to trust the architect, because you were monitoring the process as it went on and could have stopped it at any stage (at a comparatively little loss). Now, before you commission the architect to do all the fine planning and to actually build the house, you will certainly want to set up a contract, detailing among other things price, quality standards, materials to be used, time frame, as well as what happens, if he fails to deliver to your satisfaction and on time. Of course, despite the best possible contract, the architect may (try to) cheat you without you being able to detect it, e.g. by buying cheaper material. So, you will still have to trust him to some, albeit perhaps lesser extent. In other words, the contract may reduce the need for trust but cannot completely eliminate it. Of course, one may argue that contracts are legally binding and that they can be legally enforced. Yet again, you will have to trust those, who have to enforce the contract.

Now, let us return to medicine. Assume that for several weeks you have had a headache. You eventually decide to see a doctor with a clear goal in mind: to get rid of the headache. Unfortunately, headache is not a disease but a symptom. Moreover, it is a symptom that may be caused by just about anything which is wrong inside (or even outside) your head (that is why 'headache' is often referred to as a physician's 'pain in the neck'). Unfortunately, 'God has put the diagnosis before the treatment'.[276] So, before the poor doctor can even consider treating your headache, he must try to find the underlying diagnosis. In most cases, this means stepwise ruling out possible causes. I do not think that I have to continue this description. In most cases, *the patient-physician-interaction is too complex and too contingent to be easily accommodated by a contract*. 'Advanced health care directives' offer a good example: in my experience both as a surgeon and as

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[276] The deep meaning of this maxim is that one should only treat symptoms if a competent search for a diagnosis has failed.

head of the clinical ethics consultation team at our hospital I found that (except perhaps for 'do not resuscitate') most stipulated patient's wishes were open to different interpretations: because 'advanced directives' cannot specify every possible contingency they cannot supplant trust in whoever has to act on these directives [Pellegrino 1991, p.75]. This is not to say that contracts can play no role in the patient-physician-relationship. They can supplement trust, but they cannot make trust completely redundant.

(2) A major difference between the trust-based and the contract-based model regards the *commitment of the agent*. Whereas in the former, the physician has the ethical duty to put the patient's interest above his own and moreover is expected 'to go the extra mile' for his patient, in the latter each is (as per contract) entitled to have his own interest at heart, to promote his own interests, and to limit his engagement to what he is required to do by the contract [Buchanan 1988, p.322]. Pellegrino aptly talks of the *ethical minimalism* of legalistic or contractual relationships [Pellegrino 1991, p.79]. On page 146, I have argued that patients lose trust because they fear that physicians increasingly adopt a business attitude, caring more for their own (pecuniary) advantage than for the patient's benefit. I believe that relying too much on trying to regulate everything with a contract will only increase this 'business attitude'. It is therefore not in the patients' interest to adopt a purely contractual model.

(3) I think that most patients and physicians will agree that the relationship between patient and physician is not purely a 'business relationship' but has a (conscious or unconscious) *emotional component*. This component cannot be taken care of by a contractual arrangement. It may develop over time (much as trust may develop over time, even in a contractual relationship) but it does so rather despite the contractual nature of the relationship than thanks to the contract. Moreover, there is a major difference between the trust-based and the contractual model regarding the *possibility of terminating the relationship.* Whereas a traditional patient-physician-relationship cannot (with very few

exceptions[277]) be unilaterally terminated by the physician, a contract can be terminated by either side on the 'exit conditions' fixed in the contract. Since it is of great importance for the patient to be sure that the physician will stand by him and will not abandon him, this is a vital disadvantage of the contractual model.

(4) In the previous section, I have argued that regulations and controls do not increase trust, and that knowing that compliance can be enforced by a contract does not increase trust. In fact, "if there is no opportunity for one partner to deceive the other there is no need for trust to develop" [Barrera 2007, p.509].[278] At best contractual agreements increase confidence but not trust ([Seligman, 1997], cited in [Harrison and Smith 2004, p.377]). The same applies to ombudsmen or similar arbitrators, who are "appointed with the goal of monitoring physicians' behaviour and thereby increasing trust " [Pellegrino 1991, p.70]. Moreover, like regulations, contracts *simply transfer trust from first order to second order objects* (i.e. from the physician to those who set up and enforce contracts). So we are left with the paradox that

> "… elaborate measures to ensure that people keep agreements and do not betray trust must, in the end, be backed by trust " [O'Neill 2002b, p.6].

Again, I think we had better place our trust in physicians than in those who set up and enforce contracts, because the former have a personal interest in being trusted, whereas the latter have not (or at least less so).[279]

To conclude, the contractual model is not superior to the traditional trust-based model of the patient-physician relationship. To avoid any misunderstanding: I do not claim that contracts play no role (or even that they cannot play a role) in health care. In fact, when patients were admitted to the University Hospital of Basel, they signed a form, which

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[277] See page 133.

[278] See page 143.

[279] For my arguments why I believe that this is so, see page 176.

outlined their rights (as well as their duties) during their stay. This may well be considered a (albeit subsidiary) contract. However, its purpose was to assure the patient that he was not entering a 'legal vacuum', where he would never get any legal protection (if need be) rather than to replace trust. Moreover, it referred primarily to procedural aspects rather than to the patient-physician-relationship properly speaking. In this sense (or situation,) I agree that contract and trust can *coexist* and may even complement each other. My claim is that contracts cannot *replace* trust in the patient-physician-relationship.

IN SUMMARY, trust is useful because it helps patients cope with uncertainty and risk, because it reduces the transaction costs caused by the inherent risk, because it induces trustworthiness in physicians, and because it reduces complexity. Moreover, because neither regulations and controls nor contracts can compensate for the loss of trust or replace trust in the patient-physician-relationship, trust is in the final analysis inevitable.

6.3 THE MORAL SIGNIFICANCE OF TRUST

This brings me to the last claim of my thesis, namely that trust is a moral notion and that it is the moral significance of trust, which makes its loss particularly serious. I am well aware that this is a difficult and potentially contentious claim. Lagerspetz and Hertzberg, e.g., contend that "mainstream theorists invariably adopt an instrumental [i.e. non-moral] perspective [of trust]" [Lagerspetz and Hertzberg 2013, p.42]. Similarly, Hardin argues, "trust might be fully explicable as … a product of rational expectation without any moral residue. I treat trust as an un-moralized notion" [Hardin 1996, p.28]. And yet, I will claim that trust as I conceive it is a moral notion. To avoid any misunderstanding: I do not claim that we have a moral duty to trust.[280] All I claim is that trust is a moral good, analogous e.g. to friendship. Moreover, I think that it would clarify matters, if we did not use the term

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[280] Even a discussion of (let alone giving an answer to) the question whether we have a moral duty to trust would be way beyond the scope of this thesis. It would, however be interesting to discuss this in further work.

'trust' for expectations or beliefs we may have regarding others, which do not pertain to morality.

To support my claim I will present two arguments: The *first* argument is indirect; it refers to the contention already presented in chapter 1.4.5 that the feeling of betrayal caused by a breach of trust is a reactive attitude that is justified only in the case of moral issues. The *second* argument purports that the truster's belief in a moral obligation of the trustee to be trustworthy can be justified. To do so I will have recourse to what Nickels calls the 'obligation-ascription thesis' [Nickel 2007, p.309].

6.3.1 REACTING TO A BREACH OF TRUST WITH A FEELING OF BETRAYAL SHOWS THAT TRUST IS A MORAL CONCEPT

Let me start with an example to illustrate the difference between what I call a non-moral[281] expectation and trust using a simple example: Assume that I agree to lend you £10'000 under the condition that you return the loan within a month. Of course, I would not do so unless I had reason to believe that you will return the money. This belief may take two forms: (a) the belief that *you will return* the money or (b) the belief that *you ought to* return the money (i.e. that you have a moral obligation). Here is to what the *first belief* amounts: If I have good reasons to believe that you *will* return the money, my expectation is purely instrumental. My belief is "simply [the] believe there is a high probability that the expected will occur" [Wallace 2008, p.158]. This is a case of a 'non-moral'[282] expectation. If the expected does not occur (i.e. if my belief that you will return the money was mistaken) I can only blame myself. Luhmann calls this 'internal attribution' [Luhmann 2000, pp.97-98].

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281 To avoid any confusion with 'amoral' and 'unmoral' I will use the term 'non-moral' to refer to the absence of any moral connotation of a term.

282 [Hollis 1998, p.11] and [Cohen and Dienhart 2013, p.1] call this 'non-moral trust'. However, I prefer not to use this term because it unnecessarily confuses the issue.

Consequently, I can feel disappointed but I cannot feel betrayed (because it is not your fault). And here is to what the *second belief* amounts: If I expect you to return the money because I believe that you have a *moral obligation* to do so, this is a case of a 'moral expectation', i.e. of trust. If you do not return the loan, the blame shifts to you.[283] Luhmann calls this 'external attribution' [Luhmann 2000, pp.97-98]. In this case, I feel betrayed. And I am entitled to feel betrayed because you did not fulfil your moral obligation. Whereas in the first case, *I* have made an error of judgement, in the second case *you* have let me down. So, this is a case of a 'moral expectation', i.e. of trust.

Of course, the same can be applied to the patient-physician relationship: Assume that a patient (thinks she) has reason to believe that he is 'a good doctor' (perhaps because he has repeatedly appeared on television or in the tabloid press[284]). If the physician fails to meet her expectations, she may be disappointed, but she can only blame herself (and maybe she will revise her view of the value of television-appearances as quality indicator). If, however, the patient believes that the doctor has a moral duty to treat her competently and to be committed to her interests (in short, to be trustworthy), i.e. if she trusts him, she will justifiably feel betrayed if her trust is breached. To her, it will be as if the physician had promised her something and then broken this promise.

For Lagerspetz, 'trust' and 'betrayal' belong together [Lagerspetz and Hertzberg 2013, p.37]:

> "By invoking the language of trust and betrayal, we do not simply identify facts, possibilities, or risks that exist 'out there'. Instead, we take up a certain perspective. … this perspective is an ethical one" [Lagerspetz and Hertzberg 2013, p.39].

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283 Of course, this is only true if my belief that you had a moral obligation was justified. In the next sub-section, I will present an argument why I believe that the trustee has indeed a moral obligation.

284 Cynicism intended.

In other words, you feel betrayed if someone does not keep a promise, if he lies, etc. (which are moral concepts), but not if he shows up late (showing up late is not a moral concept, unless he has promised to be on time). Whereas we merely feel disappointed or perhaps annoyed if a non-moral expectation is not met, we are justified to feel betrayed or resentful if a moral expectation is not fulfilled. In the words of Baier "it is uncontroversial that the betrayal of trust … is a grave moral wrong" [Baier 1994, p.245]. From the fact that a breach of trust results in a feeling of betrayal I derive that trust is a moral notion.

The feelings of betrayal and resentment are often referred to as *reactive attitudes*. For me, as for Ruokonen, the fact that we respond to a breach of trust with a 'reactive attitude' such as betrayal shows that we take the trustee first and foremost to be a responsible (i.e. autonomous, rational, and reflective) agent and therefore subject to moral evaluation, hence that trust is a moral concept [Ruokonen 2013, p.10]. However, to some people my resorting to a reactive attitude to justify the moral significance of trust may seem dubious. Reactive attitudes are emotions, and as such are 'philosophically problematic', because much of the pertinent discussion on reactive attitudes refers to the moral value of 'disgust' (often referred to as the 'appeal to disgust', or more casually the 'yuck factor').[285] So, if I want to support my claim that the feeling of betrayal proves the morality of 'trust' I will have to 'rehabilitate' reactive attitudes. To do this, I will present three arguments: (1) I will show that there is a significant difference between general (i.e. non-relational) reactive attitudes and relational ones. (2) I will argue that reactive attitudes are a vital part of our everyday life. And (3) I will analyse how non-moral reactive attitudes are distinguished from moral ones and show that resentment and betrayal are moral reactive attitudes.

(1) Let me start with the *difference between non-relational (or general) reactive attitudes*

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[285] Since (as I will show) I do not use the term 'reactive attitude' in this sense, I will not discuss it any further. For a defense of the position that "there are indeed situations, in which properly directed disgust is indispensable to a morally accurate perception at what is at stake in the law", see [Kahan 1999, p.63]. For a good refutation of the position that disgust is suited to do moral work the interested reader is referred to [Kelly and Morar 2014].

and relational reactive attitudes. Assume that you experience a feeling of disgust at the thought of cloning humans.[286] This reactive attitude is clearly non-relational. This is true even if you are disgusted with a scientist friend, who has declared his intention of cloning humans, because your disgust is still caused by the idea of cloning and not by your friend's behaviour towards you. Now, when Strawson coined the term 'reactive attitude' in 1962, he had a different concept in mind:

> "I want to speak … of the non-detached attitudes and reactions of *people directly involved in transactions with each other*; … ; of the attitudes and reactions of offended parties, of such things as … resentment … and hurt feelings" [Strawson 1962, p.5, my italics].

Contrary to the reactive attitudes of the disgust type, this type of reactive attitudes is relational. I hold that the feeling of betrayal caused by a breach of trust belongs to this (relational) type of reactive attitudes: it can only arise within the relationship of the truster and the trustee. It is caused by the other's behaviour towards me.

(2) Most people will probably agree that our *(reactive) attitudes toward one another are a vital part of our everyday life* [Hildebrand 2013, p.1] and that this (relational) type of 'reactive attitude' "cannot be eliminated altogether, because doing so would involve exiting interpersonal relationships altogether" [Goldman 2014, p.1]. Just imagine *Don Giovanni* without Donna Anna, Donna Elvira *et al.* giving vent to their feelings (i.e. 'reactive attitudes') regarding Don Giovanni's immoral behaviour; or, better still, imagine what would happen if everybody behaved like Don Giovanni and nobody reacted to it.

(3) At the beginning of this section, I have argued that we feel betrayed if someone does not keep a promise but only annoyed if he shows up late and I have claimed that the reactions differ because the first is a moral expectation, whereas the second is a non-moral one. So, in my view, there are both moral and non-moral reactive attitudes. Yet, so

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[286] The example is taken from [Kass 1997].

far, I have not provided any support for this claim. To do so, i.e. to explain how we can *distinguish moral from non-moral reactive attitudes,* I want to quote Rawls:

> "In general, it is a necessary feature of moral feelings, and part of what distinguishes them from the natural [i.e. non-moral] attitudes, that the person's explanation of his experience invokes a moral concept and its associated principles. His account of his feeling makes reference to an acknowledged right or wrong" [Rawls 1971, p.421].

In other words, my feeling of annoyance if someone shows up late is non-moral because 'being late' does not refer to an accepted moral concept of right and wrong. Contrary to this, the feelings of guilt, shame, resentment, and indignation are all caused by a transgression of moral principles [Rawls 1971, p.424]. This shows not only that we can distinguish 'moral' from 'non-moral' reactive attitudes but also that 'trust' is a moral concept, because we react[287] to it with a feeling (i.e. a reactive attitude) of resentment (or betrayal).[288]

With these three arguments (conceiving reactive attitudes as relational, reactive attitudes being inescapable, and defining reactive attitudes as moral if they refer to an underlying moral concept), I hope to have refuted the objection against the use of reactive attitudes[289] in order to prove that trust is a moral notion. I admit, however, that the reactive attitude of betrayal may be a rather trivial indicator of the morality of trust. Moreover, I agree with Nickel: "there is something dissatisfying about a proof which draws on a secondary, reactive attitude, such as betrayal, resentment, disappointment…" [Nickel

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[287] I.e., we *all consistently* react this way. If someone does not react this way, this proves that he did not trust rather than that trust is not a moral concept.

[288] Throughout my thesis, I have used the term 'betrayal' rather than 'resentment', because most authors use this term in the context of 'trust' (e.g. [Baier 1994; Lagerspetz and Hertzberg 2013]). Yet, 'betrayal' could always be replaced by 'resentment'.

[289] I admit, however, that not everyone agrees with this: Wallace, e.g., argues that Rawls approach excessively moralises the concept of 'reactive attitudes' [Wallace 2008, p.158].

2007, p.318]. It would be much more satisfying to be able to prove that the 'belief in a moral duty to be trustworthy' is justified. This is what I intend to do in the next sub-section.

6.3.2 JUSTIFICATION OF THE BELIEF IN A MORAL OBLIGATION TO BE TRUSTWORTHY

In the introduction to this section, I have argued that trust is a moral concept if it is based on the belief that the trustee *has an obligation to do* what the truster expects him to do (rather than on the belief that he *will do* what the truster expects him to do), provided (and this is important) that this belief is justified. There are two arguments put forward to justify this belief: one refers to *general morality or socially accepted norms* of behaviour; it posits a general moral duty to be trustworthy. The other relates to the concept of trust as *'obligation-ascription'*.

I start with the *claim of a moral duty to be trustworthy* (i.e. to do what we are trusted to do), where 'moral' may refer to 'universal reasons for action' as well as to 'local reasons embodied in social norms' [Hollis 1998, p.11]. Typically, we spell out moral concepts by couching them in terms of moral rules or commands such as 'do not lie' for 'honesty' or 'do not harm others' for 'non-maleficence'. The answer to the sceptic's query why he should be honest or refrain from harming others is that 'reasonable people (or people in the Rawlsian 'original position' [Rawls 1971, p.11]) would agree to do so. Of course, the same answer could be given to the question why one should be trustworthy. Intuitively this sounds reasonable. Yet there is a snag with this argument. Let us look at three typical trust situations: (a) Patient 'A' trusts his physician to be honest. (b) Patient 'B' trusts his physician to call him as soon as he has the results from the biopsy. And (c) patient 'C' trusts his physician to assist him committing suicide. So, what is the difference? In the first case, trust refers to something that is generally considered morally right. In the second case, trust refers to something that is morally neither right nor wrong. And in the third case, trust refers to something that many people consider immoral. Obviously, the appeal to a 'general moral duty to do what we are trusted to do' applies only to the first case.

There is no reason why we should have a moral duty to do something, which is morally irrelevant, or even morally reprehensible. Consequently, the appeal to general morality is insufficient to justify our belief that the trustee has a moral duty to do as expected. What we want is a justification of the belief that the trustee has an obligation to be trustworthy irrespective of what the truster trusts the trustee to do.

The concept of *trust as obligation-ascription* proposed by Cohen and Dienhart offers such a justification. On this account, the duty to be trustworthy is derived from an *invitation to acknowledge an obligation:*[290]

> "When A trusts B to do x, A invites B to acknowledge and accept an obligation to do x. When – or if – B accepts the invitation, B takes on that obligation. In that way trust creates an obligation and forms a trust relationship" [Cohen and Dienhart 2013, p.1].

In other words, I offer you my trust and invite you to acknowledge and accept an obligation to be trustworthy. Contrary to a moral duty to be trustworthy grounded in 'universal reasons for action' or 'local reasons embodied in social norms' [Hollis 1998, p.11], this conception of the trust as a form of 'moral contract' does not depend on what we expect the trustee to do. If I acknowledge and accept the obligation to be trustworthy (in return for the patient's trust), I myself impose the obligation to be trustworthy on me. If, in return for my trust, you accept my invitation (i.e. acknowledge the obligation) to be trustworthy and then fail to fulfil this obligation (without good, i.e. overriding reason) you commit a serious moral wrong. And, since the trustee has accepted the obligation to do x, it does not matter what x is, i.e. this account of the obligation to be trustworthy applies to all three examples mentioned above. Obviously, in most instances the offer and the acceptance of trust are implicit. However, I do not think that this invalidates the argument.

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[290] As Cohen and Dienhart acknowledge, their account is similar to Nickel's 'obligation-ascription thesis' [Nickel 2007, p.309].

Every physician starts from the premise that a patient who consults him is in principle willing to trust him, and hence expects the physician to accept his offer of trust. It is important, however, that the trustee is aware of the obligation he has accepted, i.e. what exactly he expects him to do.[291]

I think that the concept of obligation-ascription is quite a powerful argument, which might conceivably be used to justify trust itself. However, for lack of space I will have to defer this to some further work.[292]

IN SUM, I have argued that trust is a moral good because a breach of trust leads to a feeling of resentment or betrayal, reactive attitudes, which are only warranted in cases pertaining to morality, and because the belief in a moral obligation of the trustee can be justified by the concept of obligation-ascription.

6.4 SUMMARY OF CHAPTER 6

The purpose of this final chapter was to show why we have (both instrumental and moral) reasons to deplore the decline of trust. Moreover, I wanted to show that my account of trust has the necessary power to explain the value of trust, and that it can therefore be regarded as a contribution to the discourse of trust.

In the *first section,* I have identified the advantages trust offers in a relationship, as well as at what we lose, if we replace trust by mistrust and I have critically analysed the means proposed as alternatives to trust. In particular, I have presented three arguments why trust is advantageous: trust helps the patient to cope with uncertainty, risk, and complexity; it reduces transactions costs; and it is a means of inducing trust in the physician. All three arguments bear upon specific features of my account of trust and once more underline the explanatory power of my account of trust. Moreover, I have argued that neither the

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[291] See page 35.

[292] I will come back to the idea in chapter 7.3.

measures taken to compensate for the loss of trust (such as regulations and controls) nor contracts can adequately replace trust and that none of them can ultimately dispense with trust, because in effect they only transfer the need to trust from a first order object (e.g. physicians) to a second order object (e.g. those responsible for making or implementing the regulations).

In the *second section*, I have started out with explaining the difference between 'non-moral' expectations' we may have regarding others and 'trust' (a 'moral' expectation). Next, I have presented two arguments to support my claim that trust is not merely value-free (as some authors claim), but also a moral good: *First*, the fact that a breach of trust leads to a feeling of betrayal on the part of the truster (i.e. to a reactive attitude that is only warranted in cases pertaining to morality), and *second*, the fact that the belief in a moral obligation of the trustee can be justified by the concept of obligation-ascription. The arguments in the two sections justify my claim that we have reason to be concerned about the decline of trust.

With this comment, I end my conceptual analysis of trust in medicine, which has led me to define trust and explain its decline as well as its instrumental usefulness and moral significance.

CHAPTER 7 DISCUSSION AND CONCLUSIONS

7.1 INTRODUCTION

Rather than reiterating the arguments which I have presented in the thesis and summarised at the end of each chapter, I will use the remaining space (1) to discuss and supplement some of my arguments or claims, (2) to point out a few ideas I would want to develop in future work, and (3) to show why I believe that this thesis contributes to the ongoing debate about trust in medicine.

OUTLINE OF THE CHAPTER: The chapter has three sections. In *the first section*, I will come back to the concept of 'pattern based definitions' in order to clarify some points and rule out possible misunderstandings regarding the application of my definition of 'trust'. In the *second section*, I will suggest that in addition to 'status' and 'merit', reference to a 'duty to be trustworthy' might also serve to justify trust. In the final *third section*, I will discuss the contribution, which I believe my thesis, and in particular my definition of 'trust', can make to the contemporary debate about trust and the decline of trust.

7.2 DEFINING TRUST: MAXIMAL COMPREHENSIVNESS VERSUS LOWEST COMMON DENOMINATOR

Unquestionably, the key part of my thesis is the definition of 'trust'. As I have stated at the outset, my goal was to come up with a coherent and (maximally) comprehensive definition of 'trust' and to demonstrate how 'trust' (in a narrow sense) differs from trust-related concepts such as 'confidence', 'reliance', 'belief in', and 'hope'. As a reminder, here is a brief summary of my definition:

> 'Trust' refers to a *justified expectation* regarding the *competence* and *commitment* (i.e. trustworthiness) of the trustee under conditions of uncertainty and *risk*. Moreover, trust implies *choice*, and a breach of trust causes a *feeling of betrayal*. Lastly, it follows that trust refers to a *relationship between competent and autonomous agents*.

In order to avoid any possible misunderstanding regarding the application of this definition (which is based on the 'pattern of trust', as highlighted with italics in the definition above), I will discuss the characteristics of a 'pattern-based' definition by comparing it with another, more standard type of definition. To do so, I will use a very prosaic example, namely the definition of different types of beer.

Lager, Pilsner, Ale, Stout, and Wheat-beer all belong to a group of beverages commonly called 'beer'. They share (to use Wittgenstein's term again) a 'family resemblance'. A simple definition such as:

> 'beer refers to a lightly alcoholic beverage obtained by fermenting grain and spicing with hops',

applies to all five types of beer mentioned and differentiates 'beer' from other beverages such as cider or wine. All conditions are necessary (even though they are hardly sufficient) to define 'beer'. This definition is inclusive, in as much as it includes the vast majority of drinks, which in common usage are called beers. As it stands, it represents the 'lowest common denominator' of 'beer'. If we substitute 'grain' with 'barley', we start to restrict the definition by excluding wheat beers. If, in addition, we substitute 'fermenting' with 'top-fermenting', we narrow the definition even more. Of the five examples, only Ale and Stout still conform to this narrower definition. Of course, we can add any number of conditions, until we finally have a maximally comprehensive definition, which only applies to a single type of beer (e.g. 'Lambic').[293] Now, a beer tester, who wants to find the best 'Lambic', will use the maximally comprehensive definition to make sure he is not including a beer that is not truly a 'Lambic'. Contrary to this, a social scientist analysing the 'beer consumption habits' in different social groups or countries, will more likely use the basic

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[293] A beer typically produced in the Pajottenland region of Belgium, which is made from *un-malted wheat*, and which unlike most beers is not fermented with carefully cultivated strains of brewer's yeast, but *spontaneously fermented* by being exposed to wild yeasts and bacteria native to the area. [Jackson 1994, pp.32-36 (Italics denote necessary conditions)].

definition representing the lowest common denominator of 'beer'. In other words, depending on what we are interested in, we will use a more general or a more specific (i.e. narrow) definition.

Now, let us return to 'trust'. 'Trust', 'confidence', 'reliance', 'belief in', and 'hope' are, at least in the vernacular, often used interchangeably. So we may assume that they can be seen as a family of related terms. Perhaps the simplest definition comprising all five terms might be 'the belief regarding the contingent behaviour of others'. Since I felt that this was too unspecified and since I agree with Hardin that

> "in virtually all conceptions of trust, there is an element of expectation"
> [Hardin 2006, p.29],

I replaced 'belief' with 'expectation' in the above-mentioned definition of 'trust'. [294] This had an important consequence: Since 'belief in' does not refer to an expectation, the term 'belief in' is no longer comprised in the definition.[295] Now, my definition only referred to 'trust', 'confidence', 'reliance', and 'hope'. To further refine the definition of 'trust', I analysed the sentence 'I trust my doctor'. From this analysis, I concluded that the rather vague 'contingent behaviour' had to be replaced by 'competence and commitment'[296]. Since, from my analysis I further concluded that 'to trust' always implied a risk I felt that in order to be responsible, trust had to be a 'justified expectation'. Following this, I identified and successively incorporated a number of other features, which I believe are part of the full pattern of 'trust', until I ended with the definition cited above.

So far, there does not seem to be a big difference between the definition of 'beer' and that of 'trust'. But this is misleading: 'beer' is a product, which can be defined by (i.e. reduced

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[294] See p. 27.

[295] I will justify this further down when I come to the definition based on the 'lowest common denominator'.

[296] See p.31.

to) facts, whereas 'trust' is a concept, which can only be reduced to other, simpler concepts, which will themselves have to be defined. And whereas the conditions defining a type of beer are 'necessary conditions'[297] of equal importance, the terms defining 'trust' are only features of a pattern which we recognise as 'trust'; features which, moreover, are neither all necessary nor of equal significance [Jackson 2010, p.179]. Whereas we would say that a beverage is only a 'Lambic' if it fulfils *all* conditions (a), (b), (c), etc., we would say that an expectation is *not* 'trust' unless it fulfils at least *some* of the conditions (l), (m), (n), etc.[298] In other words, whereas the definition of e.g. 'Lambic' is highly specific, the definition of 'trust' is far more open.

Obviously, a maximally comprehensive definition of 'trust', i.e. one that includes the full pattern, will be very narrow, and arguably of limited use in everyday practice. Although, as I have demonstrated in chapter 2, using a maximally comprehensive definition of 'trust', the five related concepts ('trust', ''confidence', 'reliance', 'belief in', and 'hope') can be differentiated, we are at liberty to use a less selective definition that covers only a number of the five terms. The question is, however, 'where to draw the line'[299]. Although 'trust', 'confidence', 'reliance', 'belief in', and 'hope' are often used interchangeably, I would argue that we use a definition, which excludes 'belief in' and 'hope': 'belief in' because it does not refer to an expectation, and 'hope' because 'hope' belongs to the discourse of fate, whereas 'trust', 'confidence', and 'reliance' belong to the discourse of agency.[300] A look at the table summarizing the various patterns[301] shows that the lowest common denominator (i.e. the basic definition), of 'trust', 'confidence', and 'reliance' is a *'rational, justifiable expectation'*. In sum, we have a spectrum of definitions of 'trust', ranging from the basic

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297 If, e.g. you leave out 'un-malted' it will now longer be a 'Lambic'.

298 See p.26.

299 See p.135.

300 See chapter 2.3.

301 See p.71.

definition based on the lowest common denominator of 'trust', 'confidence', and 'reliance', to the maximally comprehensive (i.e. very narrow) definition of 'trust'. Anyone, who intends to use my definition, should keep this in mind.

Now that I have hopefully clarified some points regarding my pattern-based approach to defining 'trust', I will turn my attention to the problem of justifying one's trust and to the presentation of some ideas, which I believe would be worth developing in future work (be it by myself or by others).

7.3 JUSTIFICATION OF TRUST: STATUS, MERIT, AND DUTY

The claim that we have to justify trust is a core feature of my definition of trust, both with regard to the philosophical debate and with regard to the role, which the definition plays in the debate about the decline of trust. Unfortunately, it is very difficult to give an account of how trust can be justified without running into problems with (some sort of) circularity. I will come back to this at the end of this section. In chapter 4, I have offered the physicians' *status* (as professionals) and their individual *merit* (i.e. trustworthiness) as the two principal justifications of trust in physicians. Here I want to add a third option, namely the belief that physicians have a *moral duty* to be trustworthy,

50 years ago, 73% of patients (said that they) trusted physicians[302]. At this time, patients believed that the physicians' status as professionals guaranteed their trustworthiness and accepted the key feature of professionalism, namely paternalism. Over the next 25 years, patients became increasingly disenchanted with paternalism and professionalism. As a consequence[303], the level of trust dropped to an all-time low of 23%. During this time, the

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[302] For this and the following, see figure 1 in Appendix I (p.200).

[303] Of course, I have no evidence for the causal correlation between the discrediting of professionalism and the decline of trust, but I think it is a reasonable claim.

traditional status-based patient-physician-relationship model was gradually (and through various intermediary stages[304]) replaced by the now standard 'shared decision-making model' (or 'deliberative model'), which in principle should enable the patient to judge the physician's trustworthiness through the necessary interaction. This shift from 'status trust' to 'merit trust' is hailed as a major step forward in the patient-physician-relationship [Buchanan 2000, p.208]. However, the fact that the level of trust declined so drastically despite the move to shared decision-making indicates that 'merit trust' has not been able to compensate for the loss of 'status trust'.[305] There remains the (probably unanswerable, but) interesting question how those patients who still trust physicians justify their trust. Are they the 'last Mohicans', who still believe in professionalism, or are they the ones that have succeeded in judging the physician's merit (i.e. trustworthiness)?

In chapter 6.3.2, I have argued that the truster's belief that the trustee has a moral duty to be trustworthy (irrespective of what the truster trusts the trustee to do) can be justified by the concept of *trust as obligation-ascription.*[306] I have also alluded to the possibility of using obligation-ascription to justify trust per se.[307] Here is (very briefly) why: If my trust is justified by my belief that you are trustworthy, and if, moreover, I am justified to believe that you have a moral obligation to be trustworthy, I am justified to trust you. In other words, one might say that the patient's trust in his doctor is justified by his justified belief in the physician's moral obligation to be trustworthy. So, to 'status-based trust' and 'merit-based trust', we can add a third option, namely 'moral obligation-based' (or 'duty-based') trust. Obviously, this is only a brief sketch of my argument, but I believe that it would be worth developing further in future work. I think, it might also be interesting to see whether

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304 For a good discussion of four (roughly consecutive) stages of the development of the patient-physician-relationship, see [Emanuel and Emanuel 1992].

305 See chapter 5.3 for a discussion of the reasons for this.

306 See p.182.

307 See p.183.

'duty trust' could be integrated into my definition of 'trust'. Lastly, it might perhaps even be possible to extend it to a concept of 'mutual duty-based trust'. Here is, very briefly, what I mean by this: As we have seen, the concept of 'obligation-ascription' offers a justification of the belief that the trustee has a moral obligation to be trustworthy. Now, the acceptance of this obligation might itself be interpreted as an invitation by the trustee to accept the duty to trust him. For lack of space, I cannot develop these ideas any further. But I think they deserve further attention and stand certainly at the top of the list of topics, which I would want to develop in future work.

The three justifications of trust (status, merit, and duty) need not be seen as exclusive. I think that the idea that we have moved consecutively from 'status trust' to 'merit trust' (and perhaps to 'duty trust') is wrong. The three may well all play a role at the same time. To illustrate this, let me use an example from my surgical practice. Most of my patients had cancer, and I spent a lot of time with them before a treatment decision was made. On the day before surgery, I always had another long talk with the patient, which primarily served to reassure him (and to gain or boost his trust). Quite a few times, this conversation ended somehow like this:

> Patient: Thank you, doctor, for taking your time. I know you are a good surgeon and I trust you to give your best tomorrow.
>
> Me: I appreciate your trust and I will certainly do my best to deserve it.
>
> Patient: I know you will. Good bye.

Let me unpack this: Most of these patients took my surgical competence for granted ('I know you are a good surgeon') because of my position as professor and head of the department. So, part of their trust was 'status trust'. The statement regarding 'giving my best' refers to my commitment. During the course of our interactions they had obviously concluded that I could be trusted to act in (what we had decided to be) their best interest. So, here we have 'merit trust'. Finally, the three brief sentences 'I trust you', 'I will do my best to deserve your trust', and 'I know' show obligation-ascription at work: the patient has offered me his trust; I have accepted the offer; and he now 'knows' that I have a moral

duty to be trustworthy. In sum: the patient's trust is partly 'status trust', partly 'merit trust' and partly 'duty trust'.

Of course, I am aware that the justification of trust with a moral duty suffers from the same problem as 'status trust and 'merit trust'. Much as many people pay off one debt by incurring another debt, all three justifications of trust justify trust by transferring trust to another object: In the case of 'status trust', professional organisations are invoked to act as guarantors for their members' trustworthiness. Yet, how is trust in these organisations justified? The assessment of physicians' merits almost inevitably has to rely on assessments made by others[308]. So, we are again transferring trust in physicians to trust in others. Finally, in the case of 'duty-based trust', we transfer our trust in the physician's competence and commitment to trust that he will abide by his moral duty. So, however we justify trust, we ultimately do this by invoking another type of trust. I do not have (and I do not think there is) a solution to this dilemma. To trust remains to run a risk. And whereas some people can cope with this risk (and hence are able to trust), an increasing number of people cannot accept this risk (and therefore are not able or not willing to trust).

7.4 CONCLUSIONS: CONTRIBUTION TO THE DEBATE ABOUT THE DECLINE OF TRUST AND TO THE ETHICS OF MEDICINE

I want to conclude with a summary of what I believe I have contributed to the ongoing debate about the decline of trust in medicine and to the role that trust plays (or should play) in medical ethics.

Back when patients believed in professionalism, the question of trust in the medical profession simply did not arise. Nor did 'medical ethics' figure in medical curricula (except for a brief reference to the 'Hippocratic oath' at the graduation ceremony). At that time, a

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[308] See chapter 5.3.

definition such as 'trust refers to the belief that the physician would act in the patient's best interest' was sufficient. It was only when patients began to assert their right for autonomy and when the level of trust began to decline seriously, that people (philosophers, health care professionals, and patients) started to reflect on the meaning of 'trust', and that the debate about 'trust' gained momentum.[309] Yet, surprisingly, so far no useful definition of 'trust' has been proffered in the literature. In chapter 1.2, I critically discussed the available definitions of trust. Here are some examples:[310] (1) 'trust as the expectation that the physician will act in the patient's interest' [Norris 2009, p.32] or (2) that the physician will act as the patient's agent (see e.g. [Goold 2001; Illingworth 2002; Iltis 2007; Mechanic 1998; Rhodes 2000]); (3) 'to refrain from taking precautions against an interaction partner' [Elster 2007a, p.344]. As I hope to show below, none of the available definitions is sufficient.

One of the key topics in the debate is the 'USEFULNESS OF TRUST' (e.g. in comparison with contracts). I do not see how definitions such as the aforementioned can effectively explain the usefulness of trust. Most of these definitions refer solely to the physician's agency and consequently have only limited explanatory power. Contrary to these definitions, my account of trust, which defines trust as 'a *justified* expectation regarding the *competence* and *commitmen*t of physicians, which moreover entails a *risk*') has far superior explanatory power. It follows from the definition that trust is useful because it helps patients cope with uncertainty and risk; because it reduces transactions costs; because it is a means of inducing trust in the physician; and lastly because neither the measures taken to compensate for the loss of trust (such as regulations and controls) nor contracts can adequately replace trust.

Another and perhaps even more important topic of the debate is the DECLINE OF TRUST.

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309 This is nicely illustrated by figure 4 of Appendix I (see p. 135), which correlates the number of publications on 'trust' (as retrieved by PubMed) with the level of trust.

310 For details and references, see pp. 15 and 17.

Just as I have not been able to find a sufficient definition of trust in the literature, I have not been able to find a (at least reasonably) comprehensive explanation for the decline of trust in medicine. Moreover, I do not see how any of the proposed definitions could explain this decline. Most definitions restrict trust to an expectation regarding the physician's commitment but neglect his competence. Moreover, they fail to give the trust inherent risk its due weight, and lastly, they make no notice of the need for trust to be justified. Therefore, they only predict that anything that compromises the physician's commitment will lead to a decline of trust. To the contrary, since my definition refers to the *justification* of trust, to the *competence* and *commitmen*t of physicians, and to the trust inherent *risk,* anything that negatively affects any of the four criteria will affect trust: The discrediting of professionalism and the difficulty of assessing trustworthiness make it difficult to justify one's trust. The disavowal of the basic tenets of scientific medicine undermines the medical authority and hence the physicians' perceived competence. The commodification of medicine and the perceived loss of physicians' directive authority lead to doubts regarding their commitment. And, lastly, the heightened awareness of possible risks together with a decreased willingness to accept risks induces patients to mistrust.

It has been beyond the scope of this thesis to discuss to address the RESTORATION OF TRUST, i.e. the question of whether and if so how we can restore trust. All I can do here is to make few suggestions regarding potentially promising approaches to restore trust. Two of the five causes I have identified for the decline of trust obviously do not lend themselves to trust restoring interventions: the wide-spread irrational fear of (mostly non-existent) risks with the "unrealistic hankering for a world, in which safety and compliance are total" [O'Neill 2002a; O'Neill 2002b, p.19] and the highly contagious attraction towards all kinds of 'snake oil medicine' [Bausell 2007]. This increasing popularity of 'alternative medicine' at the expense of scientific medicine belongs to the realm of relativism and anti-scientific or even anti-rational reasoning. Obviously, there is no simple remedy against this. Moreover, an increasing number of physicians (and hospitals) contribute to this development by opportunistically adopting (and thereby sanctioning!) such 'treatments'

[Fitzpatrick 2001, pp.146ff]. We can only hope that the pendulum will eventually swing back to a more enlightened attitude.

The three other causes for the decline of trust are more promising: It is certainly naïve to hope that *professionalism* as it is still perceived today will eventually regain its former glory. Yet, I believe that it is not a priori unthinkable that we find an alternative conception of 'professionalism', a concept that will replace paternalism with shared decision-making and do away with the self-regulation and self-policing of physicians, and which many patients will accept as guarantor of trustworthiness. It is also conceivable that the gain of *'merit trust'* may be facilitated by providing patients with tools and information, which will enable them to better evaluate the trustworthiness of physicians. Lastly, with regard to patients' fear that physicians have lost their *directive authority*, i.e. their freedom of decision-making and acting as the patients' agent I agree with Buchanan that a model of managed care could possibly be developed based on

> "a conception of organizational legitimacy that includes procedural justice, empowerment of constructive criticism within the organization, and organizational accommodation of the non-instrumental commitment to patient well-being that is distinctive of medical professionalism" [Buchanan 2000, p.189].

These are necessarily just very cursory suggestions. Others may well be superior.

To end my thesis I return to the very beginning: I have started my thesis with the following quotation (taken from a publication entitled '*Rebuilding an Enduring Trust – A Global Mandate')*:

> "One of the most critical issues facing our [i.e. the medical] profession today is the erosion of trust" [Jacobs 2005, p.3494].

This citation not only demonstrates that at the heart of the present debate about trust in medicine lies the worry about the decline of trust and the wish or demand that we re-establish trust as the basis of the patient-physician-relationship. It also points to the claim that 'trust' belongs to the realm of medical ethics by calling the 'rebuilding of trust' a 'global

mandate', i.e. duty; a claim, which I have given more detailed thought in chapter 6.3. I think it also shows that the role of trust in the patient-physician-relationship should find a place in the teaching of ethics in medical curricula.

IN SUMMARY, I have presented a definition of trust in medicine, which

- *is internally coherent*, which means that trust can be understood by previously understood terms (expectation, competence, commitment, risk, etc.), and that the definition leads neither to inconsistencies nor to anything new.
- *is comprehensive*, which means that it encompasses the relevant features of trust, and *yet is flexible enough* to allow it to be adapted to different situations.
- *is applicable both to individuals* (physicians and other health care professionals) and (through representatives) *to the institutions,* in which these people work.
- *has the discriminatory power* to differentiate trust from similar concepts, a quality, which may be more important to the philosopher than the clinician or social scientist.
- *has the explanatory power* to explain the instrumental and moral value of trust.as well as its decline, and which may therefore serve as a basis for a discussion about how to re-build trust.

FINIS

NUNC BENEVOLENTIAE LECTORUM COMMENDO OPUSCULUM MEUM

APPENDIX I EMPIRICAL EVIDENCE FOR THE DECLINE OF TRUST

Although the erosion of trust and its consequences is a concern of many people,[311] not everyone agrees that it is real rather than imagined. Since the claim that trust has declined is a factual claim, it should be possible (at least in theory) to prove or refute it empirically. Of course, trust is not simply out there to be measured or calculated (like e.g. the Gross National Product). Nevertheless, the level of trust can be assessed using sophisticated survey methodology.[312]

Most empirical studies on trust measure trust and examine the influence of certain variables (such as age, sex, education, and ethnicity) on trust at a specific moment in a specific, usually small segment of the population. Such studies can tell us a great deal about the quality and the quantity of trust at a given time in a given part of society. Yet only data collected from the general population over an extended period (so-called longitudinal data) can tell us whether overall trust has declined or not. With the exception of the study presented by the American Medical Association (AMA), all longitudinal studies come from opinion poll institutions, such as Harris Poll® or Gallup® in the U.S. and Ipsos MORI in the U.K.

THE HARRIS POLL® study is the most commonly cited study (among others by [Blendon 2007] and by [Jacobs 2005]). For their survey, conducted annually since 1966 by Harris Poll® an allegedly representative sample of 1010 adults is asked the following question by telephone [Corso 2010]: "As far as people in charge of running (e.g. medicine) are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?" Figure 1 shows that the confidence in physicians

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311 See e.g. the book *'The Trust Crisis in Health Care – Causes, Consequences, and Cures',* edited by D.A. Shore and published by Oxford University Press in 2007.

312 It is beyond the scope of this appendix to discuss the methodology of measuring trust. A detailed discussion can be obtained from the author (mwolfensberger@bluewin.ch).

('in those in charge of running medicine') has declined from about 75% in the 1960s to about 30% by 1988 and stayed at that level ever since [Corso 2010].

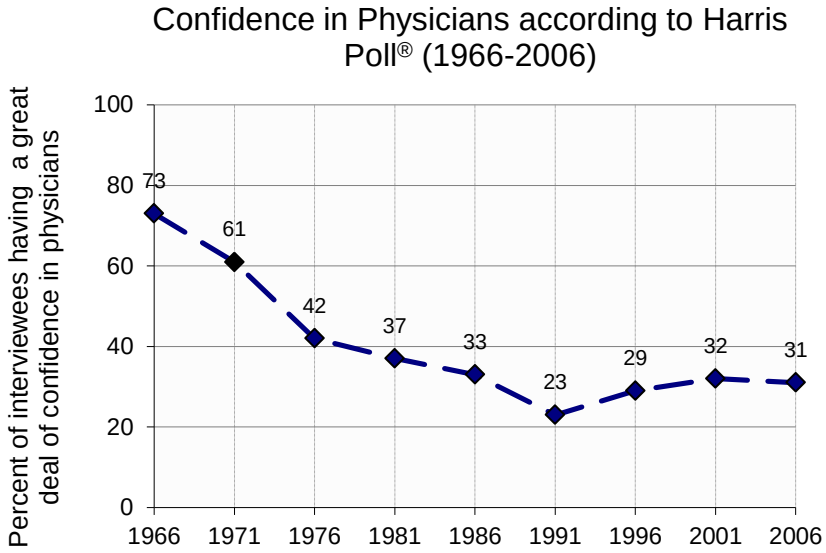

Figure 1

In chap synonymous, it is to be expected that a decline of confidence will also lead to a decline of trust. Two additional empirical studies underpin this claim,[313] one from the U.S. performed by the AMA [Jacobs and Shapiro 1994], the other one from the U.K. published by Ipsos Mori [Ipsos MORI 2009]. Unfortunately, neither of these studies goes as far back as the 1960s and 1970s, which is the period when (according to Harris Poll®) the most important decline of confidence took place. Yet, if these studies show that at a given time confidence and trust levels are comparably low, then the trust level must have fallen (at least roughly) together with the confidence level, because it is unconceivable that trust was already low

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313 I have eliminated a third survey, published by Gallup® because to me it is methodologically flawed. Gallup® polls are based on telephone interviews with a randomly selected national sample of 1004 adults, 18 years and older. The interviewees are asked a single question. In principle, there is nothing wrong with measuring trust with a single question, provided the question is well formulated, offers a balanced choice of response, is asked in a clearly defined context, and unambiguously states the object of trust [Hall 2006, p.464]. However, the question *"would you rate the honesty and ethical standards of (e.g. physicians) very high, high, average, low, or very low?" [*Gallup 2003, my italics] clearly does not fulfil these conditions. Though the question sounds (deceivingly) simple, it is not clear at all: With regard to what is the doctor trusted to be 'honest'? And how many out of the 1004 people surveyed know what is meant by 'ethical standards'?

at a time when confidence was still high.

THE AMA STUDY covers the period from 1982 to 1993. The interviewees were asked to state whether they agreed with the following five statements: *"doctors usually explain things well to their patients", "most doctors spend enough time with their patients", "doctors act like they are better than other people", "doctors are too interested in making money", and "people are beginning to lose faith in doctors".* By reversely coding negatively worded statements, one can calculate an overall value for how people judge doctors. Whether the responses to these statements truly reflect people's trust is debatable, but at least the statements are understandable to everyone. Moreover, I would argue that you probably do not trust a doctor, who does not explain things well, who does not spend enough time with you, and who is too interested in making money.

IPSOS MORI covers the period from 1984 to 2008. Ipsos MORI each year presents the following statements to about 2000 British adults:[314] "*Generally, I trust doctors to (a) give accurate information, (b) have the most up-to-date information, (c) recommend the most effective treatment, and (d) speak up for patients when it comes to matters of health & healthcare."* The interviewees are then asked to rate their agreement with these statements with (1) strongly agree, (2) tend to agree, (3) neither, nor, (4) tend to disagree, and (5) strongly disagree [Ipsos MORI 2007, p.10]. With regard to the questions asked this is clearly the best survey. It assesses the doctors' competences (statements b, c, and d) as well as their commitment (statements a and e).

Figure 2 graphically represents people's confidence / trust in physicians as reported by Harris Polls®, AMA, and Ipsos MORI.

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[314] The results have been weighted by gender, age, location, and social class, to reflect the known population profile of Great Britain. So they should be representative for the entire population.

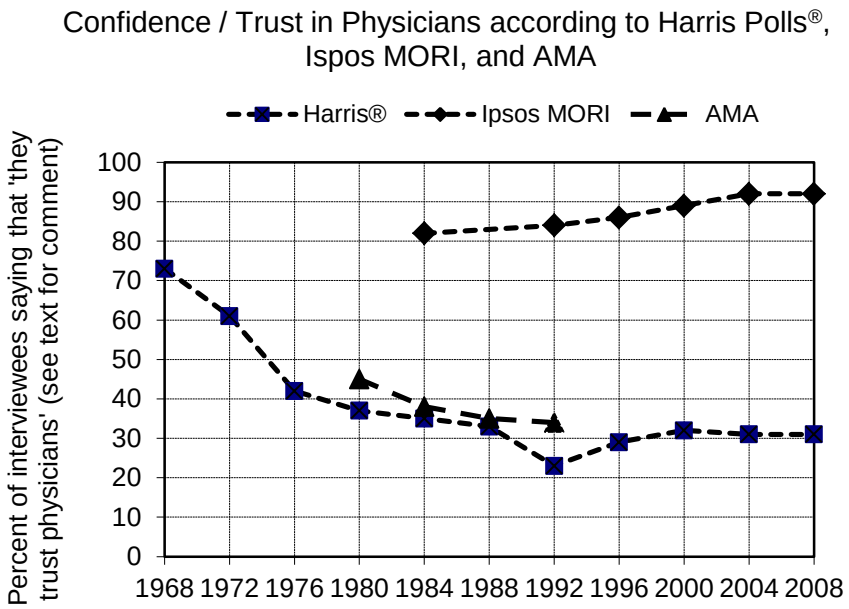

Figure 2

Whereas the AMA study shows that the level of trust in the period surveyed was indeed practically identical with the level of confidence (as reported by Harris Polls®), there appears to be a striking difference between the confidence level as measured by Harris Polls® and the trust level as reported by Ipsos Mori. I have said 'appears to be' rather than 'is' because I think that the difference is spurious. Here is why: The interviewees of Harris Polls® are asked one single question: *"As far as people in charge of running medicine are concerned, would you say you have a great deal of confidence, only some confidence, or hardly any confidence at all in them?"* Only those answering 'a great deal' are considered to have confidence. Ipsos MORI, however, presents the interviewees with five statements regarding their trust in physicians and asks them to rate each statement with one of five options: (1) strongly agree, (2) tend to agree, (3) neither, nor, (4) tend to disagree, and (5) strongly disagree. Anyone saying that he 'strongly agrees' or that he 'tends to agree' is counted as trusting. As figure 3 shows, this difference of interpreting the individual answers greatly influences the overall result.

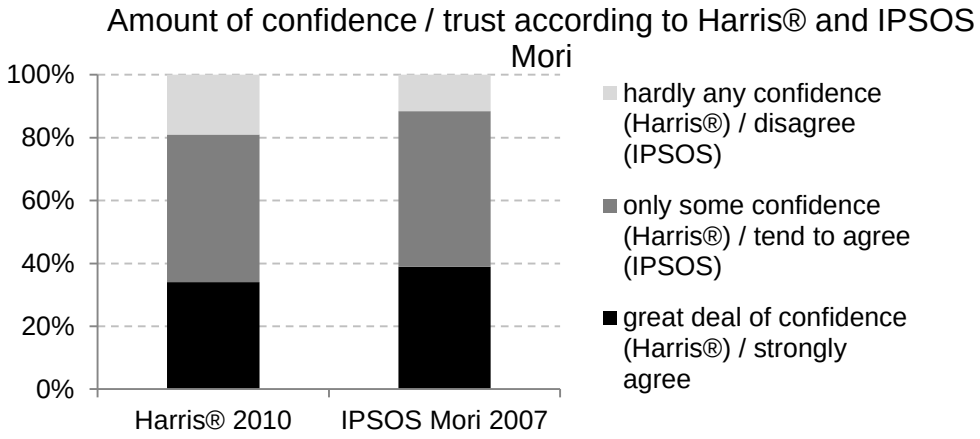

Figure 3

For Harris Polls® only people who have a great deal of confidence (but not those who have only some confidence) are used to calculate the 'confidence index'. Ipsos MORI, however, also includes those who only 'tend to trust'. I think that this is misleading. People who have no clear opinion tend to cluster at or around the centre. Myself, I would not count anyone who only 'tends to believe' that I am trustworthy among those whose trust I enjoy. If we exclude those, who only tend to trust, the difference between the confidence level (Harris Polls®) and the trust level (Ipsos MORI) virtually disappears. The claim that there is no major difference between the levels of trust in the U.K. and in the U.S. is also supported by cross-national comparisons, which show similar levels in most Western Societies [Norris 2009, p.41].

IN SUMMARY, there is empirical evidence that both confidence and trust in physicians has declined since the 1960s and that this decline is similar in the U.S. and in the U.K. (and indeed in most Western countries)

AS AN ADDENDUM, I attach the following Figure, which illustrates that 'trust' only became a topic of interest, once trust had start to decline.

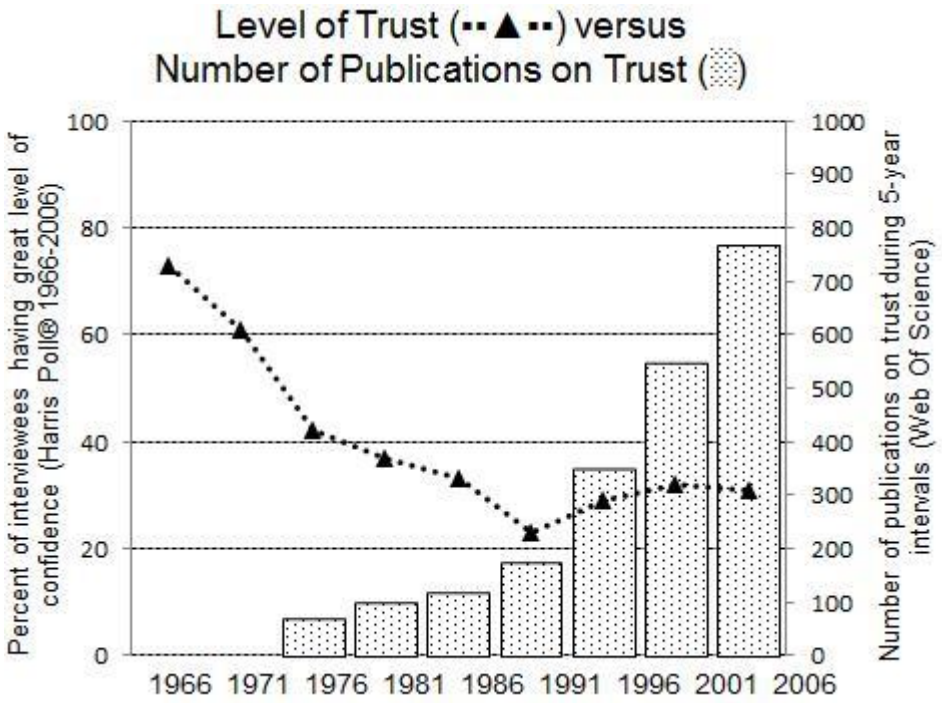

Figure 4

APPENDIX II EXTENDED SUMMARY

INTRODUCTION: When I started my surgical practice in 1975, "the question of trust in the medical profession simply did not arise. Doctors functioned in a quasi-ecclesiastic atmosphere of patient awe and confidence" [Clark 2002, p.14]. However, by the time I retired in 2010, the question of trust had become a major topic: in fact, "the erosion of trust had become one of the most critical issues facing our [i.e. the medical] profession" [Jacobs 2005, p.3494]. This decline of trust is not limited to physicians, but affects most people involved in health care. In fact, even people's 'trust'[315] in the core tenets of scientific medicine has waned. The decline of trust over the past three to four decades is an empirical fact [Corso 2010] and as such is value-free. Yet, the fact that people worry about this loss of trust[316] and appeal to rebuild this trust[317] shows that the decline of trust is not perceived as a value-free development, which we can neglect.

CHAPTER 1: I set out to understand what 'trust' means (not only, but particularly) in the context of medical practice and to find an explanation for the decline as well as support for my conviction that we have reason to be troubled by the loss of trust. My first step was to search the literature for a definition of 'trust'. Given what was needed of the definition for it to be comprehensive and fit for application in the medical setting, I stipulated that it had to fulfil the following conditions[318] [Belnap 1993]: it had to be (a) internally coherent, (b) comprehensive, and (c) applicable both to individual health care professionals and to the institutions they work in. Moreover, it had to have (d) the discriminatory power to separate trust from related concepts (such as confidence or reliance), and (e) the explanatory power to help us understand why trust has declined and why trust is valuable. Although

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315 I use the term 'trust' here in the way patients use it. According to my definition of trust, this would not be 'trust' but 'belief-in'.

316 e.g. [Shore 2007, p.3ff].

317 e.g. [Jacobs 2005, p.3494].

318 See page 16 for details.

the literature abounds with definitions of 'trust' (such as 'trust is the expectation that the doctor will act in the patient's interest' [Norris 2009, p.32], or 'the trustee will act as the truster's agent' [Goold 2001; Illingworth 2002; Iltis 2007; Mechanic 1998; Rhodes 2000], none of them fulfils these five conditions. In particular, none can distinguish trust from related concepts and explain the decline of trust.

Ideally, I would have preferred an analytic definition of the 'it is trust if and only if' type (usually referred to as 'explicit definition') [Moore 2009, p.7]. However, I could not find one in the literature and it became obvious that (irrespective of whether an explicit definition is at all feasible) it would be unlikely that I myself could come up with one [Jackson 2010, p.183]. So I decided to use conceptual analysis to develop what I call a 'pattern-based' definition (or account) of 'trust'. A 'pattern' is what all examples of a concept share 'to some extent' [Jackson 2010, p.179]. Patterns are something we can recognise, even in cases, in which there is no explicit definition. They are in many ways similar to Wittgenstein's concept of 'family resemblance' [Wittgenstein 1953, §§66-67]. On an explicit definition, *'it is trust if and only if*'. On a pattern-based definition, by contrast, *'it is not trust if it does not fulfil at least some of a number of criteria (i.e. it is not trust if it does not fit the pattern at least to 'some extent')'.* Since in an explicit definition all criteria are essential and jointly sufficient, an explicit definition would unequivocally identify trust (if all criteria are met) and unmistakably exclude everything which is not trust (if not all criteria are met). Contrary to this, in a pattern-based definition not all criteria are essential, i.e. it may still be trust if not all criteria are met. And even taken together they may not be sufficient to identify all possible cases of trust. In other words, a pattern-based definition only identifies trust with a certain probability, but the better a case fits the pattern, the more likely it is trust. Moreover, the better 'modelled' the pattern is, the better it will catch cases of trust, and exclude cases that are not trust.

Starting from an analysis of the sentence 'I trust my doctor' and from the conditions under which we trust I have identified the following common features of trust: (a) Trust is an expectation, which (b) regards the competence as well as the behaviour (the commitment)

of the trustee, and hence is agent-related. (c) Trust presupposes a situation of uncertainty and risk. (d) It is a free choice and implies the conscious acceptance of the risk inherent in trust. (e) A breach of trust produces a feeling of betrayal on the part of the truster. (f) It follows from (a) to (e) that trust refers to the relationship between competent and autonomous agents. Finally, (g) since 'to trust' implies 'to take a risk' we want our decision to trust to be responsible; i.e. the expectation regarding the other's behaviour must be justified (or justifiable).

In short, I have come to the following DEFINITION OF 'TRUST':*'trust' is a justified expectation of the truster on the trustee's contingent behaviour regarding the truster himself. It is a free choice, made under conditions of uncertainty and risk. And: its breach causes a feeling of betrayal.*

CHAPTER 2: As a first test of the validity of this pattern-based approach, I decided to analyse (and define the patterns of) four concepts which are somewhat similar to (and which are often used synonymously with) 'trust': 'confidence', 'reliance', 'hope', and 'belief-in'. I found that, although all four concepts share some features with trust (and among themselves), none of them shares the entire pattern with 'trust' or with any of the other three concepts. In brief, 'trust' is a justified expectation under conditions of perceived and accepted uncertainty and risk, whereas a 'belief-in' is an affirmation of one's belief and (true) 'hope' is a rational, albeit not a justified, expectation. 'Reliance' and 'confidence' are, like 'trust', justified expectations. However, they differ from trust with regard to how they handle uncertainty and risk. In sum, the patterns of the five concepts are sufficiently different to distinguish e.g. cases of 'confidence' from cases of ' trust'. This shows that the concept is valid and has discriminatory power.

CHAPTER 3: Since 'to trust' implies 'to take a risk', we want to make sure that we place our trust responsibly. Therefore, one of the obligatory features of my account of trust is that our expectation regarding the other's behaviour is justified. The most common everyday situation of trust is trust in what people say, in what we hear and read (usually referred to as 'trust in testimony' or 'epistemic trust'). I therefore decided to start my analysis of the

justification of trust (i.e. of whether trust is justified, and if so what justifies it) with 'epistemic trust'. To begin with, I had to define what of the infinite amount of information with which we are continuously confronted counts as 'testimony'. My conclusion was that only information, which (once we have received it) we treat as our own (albeit 'second hand') knowledge counts as 'testimony' [Elgin 2002, p.291]. Irrelevant information, arguments, and pieces of evidence do not count as testimony and are not the subject of epistemic trust [Hinchman 2005, pp.563-64].

Based on my analysis of 'epistemic trust' I have argued that epistemic trust is inescapable, because our world is far too complex for us to get direct evidence on everything [Hardwig 1985, p.335] and that it is a success story (without it we would still be hunting and foraging for food rather than surfing the internet). If we reject epistemic trust the concept of trust *per se* collapses, or is at least relegated to some rather insignificant situations (such as trusting that someone will abstain from doing something). Moreover, a complete rejection of epistemic trust is not compatible with any form of social life. Next, I have argued that for reasons of probability and/or prudence epistemic trust is often a responsible choice. Admittedly, this does not prove that epistemic trust is justified. Yet, so I have argued, epistemic trust can (at least in principle) be justified by shifting from the truth content of a statement (the object of traditional epistemology) to the content relevance of a statement (i.e. the relevance, which a statement has for the recipient), i.e. to what Hardin calls 'street-level-epistemology' [Hardin 1993, p.502]. Between the extreme positions of complete rejection of epistemic trust (e.g. by [Locke 1690, Book I, chapter 3, #24]) and almost *a priori* acceptance of epistemic trust (e.g. by [Burge 1993, p.469]), I have adopted the position that *it is responsible to grant derivative authority, i.e. to accept testimony if and only if we have sufficient reason to do so* [Faulkner 2003, p.37]. To determine what counts as 'sufficient reasons' I have proposed two strategies: 'epistemic vigilance' and assessing the 'epistemic trustworthiness' of the trustee.

CHAPTER 4: Once I had established that, and under what conditions, epistemic trust is justified, I turned my attention to whether and if so how patients' trust in physicians can be

justified. Since epistemic trust is a constituent part of trust in physicians, adopting a more restrictive or a more liberal position for trust in physicians than for epistemic trust would lead to contradictions. It therefore appeared reasonable to adopt the position of granting derivative authority with regard to the justification of patients' trust in physicians as well. The two justifications usually cited as sufficient reason to warrant patients' trust in physicians are 'professional status' and 'individual merit' (i.e. trustworthiness). Whereas in 'status trust' professionalism is taken as a guarantor of trustworthiness, 'merit trust' is based on an assessment of the individual physician's competence and commitment (i.e. his trustworthiness) [Buchanan 2000, p.189]. This presupposes a clear understanding of the terms 'professionalism', 'trustworthiness', 'competence', and 'commitment'. Although all four terms are used liberally in the literature, they are under-explored and in need of elaboration: I have defined 'professionalism' as 'acting trustworthily in exchange for autonomy' [Holtman 2008, p.234]. While this was sufficient for most patients in the past and still is sufficient for many patients today, it has increasingly come under suspicion.

Next, I addressed 'trustworthiness'. Trustworthiness of a physician implies competence and commitment, both of which are complex constructs. I have defined 'competence' in terms of episteme (theoretical knowledge), techne (craft or skill), and phronesis (practical knowledge or experience) [Tyreman 2000, p.120]. The competent (and hence trustworthy) physician must have sufficient theoretical knowledge, sufficient practical experience, and adequate craftsmanship. As definition of 'commitment', I have offered 'commitment means to act in a way that the truster approves' [Iltis 2007, p.47]. I concluded that *in principle* trust in physicians is justified, since both professionalism and individual trustworthiness justify trust by granting derivative authority. Yet *in reality,* an increasing number of patients no longer believe that trust in physicians is justified, because they reject the concept of professionalism and find it difficult or even impossible to assess physicians' trustworthiness.

CHAPTER 5: Having finished my analysis of the concept of trust, I moved to discuss the reasons for the decline in trust. To start with, I have refuted the assumptions that the

physicians' decreasing trustworthiness [Norris 2009, p.35] and/or the recent scandals (and more particularly the 'scandal mongering press') [Calnan and Sanford 2004, p.92] are responsible for the decline of trust. I have then identified five reasons for the loss of trust, all derived from my definition of trust. Four explanations have to do with physicians' authority and one with the risk inherent in trust. Since trust is in essence a justified expectation*,* anything that negatively affects the justification of trust will lead to a decline of trust. In particular, I have argued (1) that the discrediting of professionalism leads to a loss of professional authority, (2) that the difficulty of assessing trustworthiness leads to a loss of merit-based authority, (3) that patients' increasing refusal to believe in the basic tenets of scientific medicine *(*commonly referred to as the 'crisis of modern medicine' [Ernst 2009, p.298]) leads to a decline of medical (or epistemic) authority, and (4) that the commodification of medicine and the re-conceptualisation of physicians as dependent employees leads to a loss of directive authority. All this jeopardises the justification of trust and leads to a decline of trust. The fifth explanation has to do with the risk inherent in trust. I have argued (5) that (contrary to what many people believe) it is not risks, which have increased but uncertainty, that people's risk perception has changed, that many people have become risk averse, and that together changed risk perception and increased risk aversion (the "unrealistic hankering for a world, in which safety and compliance are total" [O'Neill 2002a; O'Neill 2002b, p.19]) account for the decline of trust.

CHAPTER 6: The purpose of the final chapter was to show why we have (both instrumental and moral) reasons to deplore the decline of trust. I started by showing that there is no convincing empirical evidence for the usefulness of trust conceived in terms of positive patient welfare outcomes. In the *first section* I have presented evidence that trust is instrumentally useful, namely by facilitating cooperation, by reducing uncertainty and complexity, by engendering trustworthy behaviour [Pettit 1995, p.205] in the trustee, and by improving cost-effectiveness of personal interactions [Elster 2007b, p.344]. After having had a look at possible alternatives to trust, I have concluded that there is no better option than trust. In the *second section*, I have presented two arguments to prove that

trust is not a value-free commodity (as some authors claim), but a moral good: *First*, the fact that a breach of trust leads to a feeling of betrayal on the part of the truster, i.e. to a reactive attitude that is only warranted in cases pertaining to morality [Ruokonen 2013, p.10]. And *second*, the fact that the belief in a moral obligation of the trustee can be justified by the concept of obligation-ascription [Cohen and Dienhart 2013, p.1].

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This list contains only references that are mentioned in the text (either as 'verbatim quotations', paraphrased quotations, or simply to back up my arguments). A complete list of all references, which I have consulted during the preparation of this thesis, can be obtained from the author (mwolfensberger@bluewin.ch)

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