PDF hosted at the Radboud Repository of the Radboud University Nijmegen

The following full text is a publisher's version.

For additional information about this publication click this link. http://hdl.handle.net/2066/21263

Please be advised that this information was generated on 2017-12-05 and may be subject to change.

THE ANTHROPOLOGICAL TRADITION IN THE PHILOSOPHY OF MEDICINE

HENK TEN HAVE

Department of Ethics, Philosophy and History of Medicine,
Faculty of Medical Sciences,
and Center for Ethics, Faculty of Philosophy,
Catholic University of Nijmegen,
Nijmegen, The Netherlands

ABSTRACT. The tradition of anthropological medicine in philosophy of medicine is analyzed in relation to the earlier interest in epistemological issues in medicine around the turn of the century as well as to the current interest in medical ethics. It is argued that there is a continuity between epistemological, anthropological and ethical approaches in philosophy of medicine. Three basic ideas of anthropologically-oriented medicine are discussed: the rejection of Cartesian dualism, the notion of medicine as science of the human person, and the necessity of a comprehensive understanding of disease. Next, it is discussed why the anthropological movement has been superseded by the increasing interest in medical ethics. It is concluded that the present-day moral issues cannot be interpreted and resolved without clarification of the underlying anthropological images.

Key words: anthropological medicine, doctor-patient relationship, FJJ Buytendijk, meaning of disease, medical ethics, philosophy of medicine, scientific method in medicine, V. von Weizsäcker

1. INTRODUCTION

In the recent history of medical philosophy, examination of the anthropological basis of medicine has led to an anthropological tradition, particularly in Germany and the Netherlands. This tradition has declined with the general and rapid growth of interest in moral issues over the last three decades. Recently, patients, philosophers and physicians are becoming more aware that many moral problems cannot be resolved without the clarification and interpretation of the images of persons that underlie ethical perplexities. Such awareness has led to a renewed interest in the writings and ideas of anthropologically-oriented scholars of the first half of this century. Since they try to change medical practice and theory "from within," connecting daily experiences with philosophical insights, and delineating a renovated science of the human person, they have in fact the same motivations and values as many scholars interested in medical ethics and medical philosophy today. This issue of *Theoretical Medicine* will reappraise and present the basic ideas of anthropological medicine. In this

contribution, we will analyze and briefly describe the tradition of anthropological medicine within the setting of the philosophy of medicine, as a continuous attempt over the last hundred years to understand medical activities more thoroughly.

2. THE EVOLUTION OF THE PHILOSOPHY OF MEDICINE

In its history, medicine has maintained a long-standing dialectical relation with philosophy. To define the identity of medicine and to demarcate medicine as an autonomous discipline, authors of medical treatises used to dispute the contemporary speculations about the nature of the world. The philosophical conception of order in nature, for example, was useful to demarcate medicine from mythology and religion, postulating natural disease causation and regularity in the natural history of diseases. The confrontation with philosophy led these physicians to discover the relevance of experience and precise observation as regards the practise of medicine. The emancipation of medicine arose, therefore, not from a rupture with philosophy but from a philosophical reinterpretation of what is characteristic of medicine itself.

However, when medicine had become firmly established as a unified science of disease, using the methodology of the natural sciences as the basis for obtaining and applying knowledge, a fundamental change of the relationship with philosophy occurred. Philosophy is no longer in competition with medicine, itself trying to understand and explain the phenomena of illness, suffering, incapacity, and death, but philosophical reflection takes the medical approach of these phenomena as its object of analysis. This is an important shift in the level of reflection and study. Instead of operating at the same conceptual level as medicine and examining the same objects, philosophy has moved to a meta-level, analyzing medicine as its proper object.

In the emancipatory process of individual sciences a speculative, philosophical approach has existed alongside of empirico-experimental approaches for some time. Well-known examples are the medical systems propounded by idealist philosophers in nineteenth century Germany. These systems of philosophical medicine were felt to be competitive with the new ethos of medicine as a natural science. The long-standing and intimate bond between medicine and philosophy was therefore reinterpreted in the last century as an antagonistic relationship. Many clashes between the two disciplines arose. The conflict was solved by redefining the role and object of philosophy vis-à-vis medicine. Philosophy was relocated as a science

of science on another level of abstraction, not concerned any longer with medicine's object of study and intervention but with the concepts and methods employed by medicine in studying and manipulating its objects. The outcome of this relocation was the emergence of the philosophy of medicine as a separate intellectual discipline. Conceiving philosophy as a meta-activity, thus turned a competitor into a critical ally.

The rise of the philosophy of medicine in the last century was connected with transformations in the social status and the self-image of medicine which were formed in most countries in the second part of the century. Until that time medicine was practised by many kinds of healers. University-trained physicians were a minority. It was estimated that around 1840 in the Netherlands 25 types of medical practitioners with various forms of training and licenses were working.² The heterogeneity of medical practitioners and their constant struggle over competencies and privileges gave rise to much satire, ridiculing the doctors' ignorance and false pretensions. Medicine was associated with poor status and low income. The nineteenth-century process of professionalization reversed this situation. One of the claims promoting the creation of an unified and organized medical profession was that medicine should be developed and practised upon a scientific foundation superior to that of other healers. This claim generated a renewed interest in philosophical reflection. Professional cohesion and uniformity of medical practise, brought about by external forces, were in need of internal justification; they motivated a search for the identity of the now unified discipline. What was the specific characteristic of medicine? Formulating answers to this basic question had become the modus operandi of the new discipline of the philosophy of medicine.

It is remarkable that from 1870 there was a rapid growth of medico-philosophical literature, particularly in Germany, France and Poland. Three traditions in the thematic development of the philosophy of medicine over the last hundred years can be distinguished; an epistemological tradition (flourishing around the turn of the century), an anthropological tradition (from 1920 to 1960), and an ethical tradition (attracting increasing attention from the 1960s onwards). This distinction not only brings some structure in the history of the philosophy of medicine but it also shows the continuity of its basic preoccupations. The few historical studies available, notably Szumowski's, do not demonstrate any evolution of the discipline. Retrospectively, there seems to be a haphazard accumulation of issues addressed and views criticized. From today's perspective, it might even appear that the philosophy of medicine is a very recent affair and that the present preoccupation with medical ethics shows a marked discontinuity with earlier efforts to philosophize about medicine.

However, the present-day domination of medical ethics has been continuous with the various traditions of the philosophy of medicine since the last century in that it is moved by the same commitments and fundamental problems. This continuity will became more apparent by examining the other traditions, in particular that of anthropologically-oriented medicine which flourished prior to the current interest in ethics.

3. THE EPISTEMOLOGICAL TRADITION

Initially, the identity and intrinsic coherence of modern medicine has been described in epistemological terms. Medicine is characterized as a natural science. Essential to this perspective is the method of acquiring and applying knowledge. Medicine can only progress through unbiased observation in the laboratory, the dissection room and at the bedside, through collecting facts and deducting conclusions. By following these methodological rules rigorously, it can be proved to deserve its recently granted external support.

The scientific conception of medicine was a very productive one. But precisely the success created problems. With more and more data accumulating and new facts multiplying, it became difficult to detect any cohesion and common perspective in the rapidly growing body of knowledge. It became hard to believe in an encompassing identity of medicine with the proliferation of independent specialisms. It was felt that the unity and coherence of medicine were endangered by its own development. When medicine found its identity as a natural science, then it seemed to lose that identity because of its scientific progress.

These problematic feelings can be recognized in the contemporary philosophy of medicine under the slogan "medical synthesis" or the more ambiguous catchword "Neo-Hippocratism." Zimmerman argues that the problems of medicine are twofold: first, medical knowledge is fragmented and medical practise is one-sided because of specialization; second, the patient as the object of medicine is no longer adequately addressed since the conceptual tools of medicine are insufficient and too simple. The solution to these problems is synthesis in the realm of medical practice as well as in the field of medical thinking. Many agree that it is philosophy that can facilitate this solution. It can distinguish between relevant and irrelevant knowledge, trivial and crucial findings so that it uncovers the general framework and the core concepts of medicine. This philosophical activity of sorting out and weighing data is particularly important for medical education. Medicine should be presented within a broad perspec-

tive during philosophical propedeutics for every medical student, as Szumowski⁶ proposes. In general, philosophy has two tasks, argues Inlow.⁷ The one has to do with clarifying epistemological issues, the other with medical synthesis. The last task has been grossly neglected according to Inlow: "It studies the significance and meaning of medicine, its relationship to other sciences and departments of human activity, its place in knowledge and action in general In short, it attempts a theoretical organization of the whole of the field of medicine." Nevertheless, there were serious efforts to meet the challenge, such as the founding of journals and the organizing of international conferences.⁹

At a more fundamental level, with the newly built unity of medicine in jeopardy, two different epistemological strategies were deployed to respond to the call for synthesis.

The first was the attempt to strengthen the conceptualizing hold of the knowing subject according to his or her world. Proliferating knowledge needs only to be grasped, placed in order and to be understood as long as the subject is using a rigorous methodology. Synthesis therefore is not a goal but a method. If medicine in all its specialties and branches will critically examine its methods, and will consistently use the same methods, it can be reinterpreted and reconsolidated as a stringent natural science. Such a project requires a commitment to analytical study and to seeking the interconnections of the results, cultivating synthesis not by speculating but by reducing the multiplicity of phenomena to basic laws and simply processes. No theorizing without facts.

This strategy implies a strong rejection of speculative thinking, and for some, of philosophy in general (not recognizing their own point of view as philosophical). Famous examples of such negativism are provided by Bernard and Bleuler. The best philosophical system in the opinion of Bernard¹⁰ consists in not having any. And, according to Bleuler, philosophy has produced nothing but a graveyard of theoretical systems; it is useless, at best only having historical value. Medicine must not be contaminated by philosophy; it would be "a mixture of garlic and chocolate." Contamination is dangerous because philosophy prevents the formation of realistic ideas. Bleuler even went so far as to insinuate that philosophizing itself may be a symptom of a morbid thinking-faculty. 12

The second strategy is more interesting than the first because it questions the status of the knowing subject itself. Instead of instigating the subject in order to advance methodically towards objectivity and preciseness, it calls for appreciation of its own subjectivity. Central in this strategy is the self-interpretation of medicine as an art. Richard Koch for example defines medicine as *Heilkunst* and as "a specific, educated kind

of assistance."¹³ Being a practical art, medicine is situated between the unconscious reflex to help, elicited by the infirm, and the analytic work of the scientist. If medicine must be characterized as an art, special attention must be given to the personality of the doctor. The personal qualities of the artist determine his or her achievements. The conclusion of this philosophical position is summarized by Honigmann: "Being a physician means being a whole human being."¹⁴ Gradually, it was recognized that medicine is more concerned with acting than knowing. When the personal qualities of the physician are so important for the accomplishments of medicine, serious doubts could arise about the central role of epistemological issues in philosophizing.

4. THE ANTHROPOLOGICAL TRADITION

The interpretation of medicine as an art evolved into a new conception of medicine as anthropological medicine. It was popular, particularly in Germany and the Netherlands, from approximately 1920 until 1960. The main contenders were F. Buytendijk, V. von Weizsäcker, V. von Gebsattel, H. Plügge, and P. Christian. Many advocates of anthropologically-oriented medicine were practising physicians who became prolific writers with a broad interest in the humanities. Their main interest was to redefine and reinterpret medicine as a science of man. In philosophically rethinking medical activities they used ideas from several contemporary philosophical schools, particularly phenomenology (Husserl, Merleau-Ponty), existentialism (Marcel, Sartre), and philosophical anthropology (Scheler, Gehlen, Plessner). In their writings, they tried to reflect upon human existence in its concrete specificity and ambiguity. Instead of starting from or working towards an ideal image of the human being, they attempted to identify what is anthropologically characteristic and common to human beings. But at the same time they were very much aware that any image was too abstract and "clean," because in everyday reality the specific individual was always changing, pluriform, and was not fully described by the designed image of a person. 15 Given this theoretical point of view, advocates of anthropological medicine have not presented a clear-cut theory that has been defended and elaborated upon by all representatives. Furthermore, as physicians they preferred casuistry over systematic exposition, empirical practise over consistent theory. Their ideal was to change medicine from within, not from an external basis of general theoretical views. Individualized medical activities were prior to any systematic and theoretical approach. The subsequent works of Von Weizsäcker about clinical presentations,¹⁶ clinical cases,¹⁷ the ill person,¹⁸ and even the composition of the latter books (casuistry first, then theoretical exposition) illustrate this "method."

Notwithstanding the lack of systematic unity found in the works of advocates of anthropological medicine, there is a certain "family of ideas" that became influential at that time. Recently, many studies have examined the basic tenets of this movement, and have argued for the relevancy of the ideas for contemporary medicine. 19-25

4.1. Rejection of Cartesian Dualism

One basic idea in the anthropological tradition is that human beings cannot be subdivided into a physical and mental compartment. Although medicine has profited from this subdivision, it has also restricted itself to the human body by studying and explaining the body's physico-chemical machinery. This medical approach of the human being and its body should be criticized because it reduces the human being to a specific animal species, and the human characteristics of the human body to its physical level of being. Even psychosomatic medicine has not overcome dualism since any assumption of an interaction between body and mind implies a separateness of two substancies. Any demarcation between body and mind is artificial. Dualistic thinking, moreover, not only involves a reduced image of the human person, but it also has a more general tendency. The focus of critique is the general distinction made between object and subject. Von Weizsäcker, for example, strongly rejects the idea that there is an objective, real world, independent from an isolated, individual subject. A human being cannot relate him/ herself to the world as an neutral observer. We cannot know the world in which we live, without at the same time changing it.²⁶

4.2. Medicine as Science of the Human Person

Anthropologically-oriented physicians argue that the methodology of the natural sciences is not fully appropriate in the context of health care. Scientific methods used to be abstract, analytical; they proceeded from a model of linear causality. These methods also focussed on intervention, control and manipulation, introducing the technical point of view of the engineer into the domain of disease and suffering.

Such critique does not conclude that the causal thinking and technical approach of the natural sciences should not be allowed in medicine; on the contrary, they are highly valuable and useful; but medical thinking and practising should not restrict itself to these scientific methods. In the words

of Von Weizsäcker: "Medicine is not technology; it is technology, too." 27 Instead of rejecting scientific methods, they should be considered according to their relative value. The problem is that such methods cannot grasp what is essential to human beings. As a living organism, every person constitutes a whole, a meaningful entity, which is disconnected and distintegrated by abstract, analytical approaches. Buytendijk, for example, argues that from the mechanical viewpoint of the scientific method only those aspects of living organisms can be explained, that are not intrinsic to life itself. This method can be applied to human beings, but it will naturally remain within a theoretical intermediate sphere, since it is always disengaging itself from human existence.²⁸ Anatomical, physiological and biochemical research only determines the conditions, teaches us what is possible and probable - not what really happens. The macroscopic images of bodily events, the dynamic Gestalt, and the intrinsic meaningful connections have disappeared from the scientific view. To examine the living being, we should participate in life, and focus upon the purposeful coherence and interrelationships, the significance of experience and conduct. If medicine wants to evolve into a science of the human person, it should overcome the usual distinction between the objective and subjective. This means that the subject should be introduced into medicine. If medicine is not objective, it is impossible; if medicine is only an objective science, it is inhuman.²⁹

4.3. Comprehensive Understanding of Disease

The conception of disease, current in modern medicine, is incomplete, according to anthropologically-oriented doctors. The reason is not that the science of pathology is insufficient and not fully developed, but that pathology operates with inadequate notions and assumptions. Focusing on the causal mechanism of disease, medicine cannot fully understand the ill person, because explaining disease also refers to the problem of the significance of a symptom, the meaning of a particular complaint. Science-based medicine in fact hinders that insight that disease has meaning; in its approach the only relevant question concerns the pathogenesis and pathophysiology of the disease; the anthropological question "Why here and now" is irrelevant. The argument is not that medicine should address the psychological dimensions of disease more. Since dualistic thinking is rejected, we cannot say that the body and/or the mind are involved in the disease process; it is impossible to find out "where or who started the disease," thereby recognizing the primacy of body or mind.

Anthropologically-oriented physicians argue that it is impossible not to

consider that disease has meaning. The body gives expression to the human person. Disease therefore gives voice to a threatened existence; it is, in Von Weizsäcker's words, "eine Materialisierung des Konfliktes." Being ill primarily is an existential category; only secondarily, we can make any differentiation between organic and psychic suffering. Being ill is a way of being a human person. When I not only have my life, but also give expression to it, when I not merely have my body, but also am my body at the same time, then it is also the case that I am not only having my disease and suffering it, but also make my disease. Thus, being ill is a response of the person to his or her own individual existence. In this perspective, disease is not a negative event, a blind fate, waiting to be eliminated from the world; the important thing is what we make of it, whether we consider it as an occasion to reconsider and improve our life.

5. THE ETHICAL FOLLOW-UP

It seems amazing that the anthropological orientation has been so rapidly superseded by the growing interest in medical ethics since the 1960s. After all, there is a marked continuity between both phases in the philosophy of medicine. By concentrating on the subjectivity of the patient, anthropological medicine has paved the way for the subsequent interest in ethical issues in health care. The programmatical demand of Von Weizsäcker to introduce the subject into the life sciences and medicine implied not only acknowledging the subjectivity of the knowing and acting subject (the physician) but also that of the object (the patient). Doctor as well as patient experience themselves as psychosomatic organisms. That means for example that medicine should examine the relation between personal biography and illness. The identity of medicine, therefore, is constituted through internal determinants, viz. the personal qualities of its practitioners, but, more significantly, also through external determinants, viz. the individual qualities of patients. Medicine is a unique profession in systematically and methodically attending to the patient as an irreducible person.

The tradition of anthropological medicine made visible and laid open, so to speak, the moral dimension of medicine. It did so by criticizing the presuppositions of the dominant conception of medicine as natural science, and by incorporating medical science's analytical methods and mechanistic image of a human being in a broader framework of an authentic science of humans. The point is that anthropological medicine brought to the fore the fact that the internal characteristics of medicine are not identifiable without involving the external context. In fact, it appears that anthropo-

logical medicine is itself a normative program, an extended argument for a normative science of life. This is evident for example in the Weizsäckerian concept of the subject which includes "organic" and "pathic" subjectivity: the subject is an acting subject, performing biological acts, as well as a sentient and perceiving subject. The concept of a pathic subject originates from the practical context of medicine in which life is not an event but an experience, not activity but passivity. The pathic subject has to suffer and endure the existence (it is "subjectum"). Von Weizsäcker's philosophy is an attempt to reconcile organic life (zooè) and biographical life (bios). Scientific medicine must recognize and do justice to the dual nature of the subject. Medicine's understanding of humanity is limited as long as it concentrates on the physiological, organic and ontic aspects of life. It has to accept that any human life "... fits within the 'pathic' categories of want, must, can, may and shall."31 These categories are in the end normative. They embody values and ideals that must be realized in human life to call it really human (bios). It is through the uncovering and construction of a normative dimension of medicine, as really essential to its identity, that the anthropological phase is, in the formal respect, continuous with the ethical phase. Without a conception of medicine as an anthropological, and eventually normative science, the later upsurge of interest in moral issues would not have gone so fast.

As regard to continuity, it is also obvious, however, that a considerable discontinuity exists between both phases. This discontinuity is manifest when we look at the material components of the normative dimension of medicine. Within the anthropological approach, the intended normative science of life is primarily dependent on the person of the physician. It is he or she who uses the criteria to appraise what subjectivity really means. As Von Weizsäcker's clinical case analysis shows, on many occasions the meaning of illness is concealed from the individual patient, while the physician knows how to uncover its meaning from the patient's biography. In practice, anthropological medicine has shown a tendency towards paternalism. The patient is indeed introduced into the self-interpretation of medicine but his or her role is staged by the anthropological director.

Another point is the emphasis upon pathic subjectivity. Its connotation of passivity has been more and more out of tune with the revolutionary development of medicine, particularly since the 1960s. In an era in which medicine has become an exemplar of technoscience and technical power, reflection should focus on notions as activity, intervention, control, and manipulation. The concept of the pathic subject therefore opened up the normative dimension of medicine, but, having done so, it was no longer generative in making sense of the normativity.

6. CONCLUSION

The overwhelming impact of moral issues in post-modern health care, as well as the urgency to address and resolve such issues, has induced a certain amnesia concerning the various perspectives that used to be characteristic of the philosophy of medicine. In order to understand and clarify the problems of present-day medicine, epistemological, anthropological and ethical perspectives are all indispensable. The identity of medicine nowadays is no longer solely based upon internal characteristics (the special kind of knowledge, the art-like application of its practitioners) but also upon external determinants (such as the personal qualities of patients). But this insight implies recognition that medicine itself is part of society and culture, and indeed is one of the most powerful expressions of culture. Dominating cultural values (such as "immortality" and "invulnerability") have been specifically articulated in contemporary medicine. The question what medicine essentially is, is no longer answered by medicine itself. The response is apparently the outcome of ideas and values prevailing in societies and cultures. Instead of the objectivity of medical knowledge, now the value of knowledge is of paramount importance. Instead of the existential meaning of illness, now the social meaning of medical action is in need of clarification. The agenda for the philosophy of medicine is therefore changing. The important item is not "What do we know?" but "What do we want to do with our knowledge?" At present, medicine is identified as a complex of meaningful knowledge and practices. But these changing questions presuppose one common denominator: that of the human being. Philosophical elucidation of what it is to be a human being and to be treated as a human being, will therefore be inevitable for any theory of medical practice.

REFERENCES

- 1. Risse GB. 'Philosophical' medicine in nineteenth century Germany: an episode in the relations between philosophy and medicine. J Med Philos 1976;1:72-92.
- 2. Ten Have HAMJ. Gezondheidszorg en samenleving. Over de idee van geneeskunde als sociale wetenschap. Scripta Medico-Philosophica 1986; 1:10-28.
- 3. Szumowski W. La philosophie de la médecine, son histoire, son essence, sa dénomination et sa définition. Archives Internationales d'Histoire des Sciences 1949;2:1097-1139.
- 4. Aschner B. Neo-Hippocratism in everyday practice. Bull Hist Med 1941;10:260-272.
- 5. Zimmerman H. Ueber Ärztliche Synthese. Klinische Wochenschrift 1934;13:453-456.
- 6. Szumowski W. L'Histoire de la médecine et la réforme des etudes médicales. Cracovie: Librairie Gebethner & Wolff, 1937.
- 7. Inlow WD. The philosophy of medicine. Medical Life 1937;44:399–434.

- 8. Ibid: 406.
- 9. Löwy I. The Polish School of Philosophy of Medicine. From Tytus Chalubinski (1820–1889) to Ludwik Fleck (1896–1961). Dordrecht: Kluwer Academic Publishers, 1990.
- 10. Bernard C. Introduction à l'étude de la médecine expérimentale. Paris: Baillière, 1865.
- 11. Bleuler E. Naturgeschichte der Seele und ihres Bewusztwerdens. Eine Elementarpsychologie. Berlin: Springer, 1921:8.
- 12. Ibid: 9.
- 13. Koch R. Philosophische Grenzfragen der Medizin. Der Begriff der Medizin. Vorträge des Instituts für Geschichte der Medizin an der Universität Leipzig. Leipzig: G. Thieme Verlag, vol. 3, 1930:30.
- 14. Honigmann G. Das Wesen der Heilkunde. Historisch-genetische Einführung in die Medizin für Studierende und Aerzte. Leipzig: Felix Meiner Verlag, 1924:303.
- 15. Plügge H. Behagen en onbehagen. Bijdrage tot een medische antropologie. Utrecht/ Antwerpen: Het Spectrum, 1967:93.
- 16. Von Weizsäcker V. Klinische Vorstellungen. Stuttgart: Hippokrates Verlag, 1941.
- 17. Von Weizsäcker V. Fälle und Probleme. Stuttgart: F. Enke Verlag, 1947.
- 18. Von Weizsäcker V. Der kranke Mensch. Eine Einführung in die Medizinische Anthropologie. Stuttgart: K. F. Köhler, 1951.
- 19. Dekkers WJM. Het bezielde lichaam. Het ontwerp van een antropologische fysiologie en geneeskunde volgens F.J.J. Buytendijk. Zeist: Kerckebosch, 1985.
- 20. Ten Have HAMJ, van der Arend A. Philosophy of medicine in the Netherlands. Theor Med 1985;6:1-42.
- 21. Ten Have HAMJ, Bergsma JJ. Broekman J. Preface, Thematic Issue The Philosophical Foundations of Medical Practice. *Theor Med* 1987;8:99–103.
- 22. Ten Have HAMI. Antropologische geneeskunde. Silhouet van een specifiek menselijke geneeskunde. Metamedica 1983;62:10-21.
- 23. Ten Have HAMJ. Afscheid van antropologische geneeskunde? Metamedica 1987;66:245-259.
- 24. Kasanmoentalib S. De dans van dood en leven. De Gestaltkreis van Viktor von Weizsäcker in zijn wetenschapshistorische en filosofische context. Zeist: Kerckebosch, 1989.
- 25. Verwey G. Medicine, anthropology and the human body. In Ten Have HAMJ, Kimsma GK, Spicker SF, eds. *The Growth of Medical Knowledge*. Dordrecht/Boston/London: Kluwer Academic Publishers, 1990:133-162.
- 26. Von Weizsäcker V. Grundfragen medizinischer Anthropologie (1947). In Diesseits und Jenseits der Medizin. Stuttgart: K.F.Köhler, 1950:143.
- 27. Von Weizsäcker V. Medizin, Klinik und Psychoanalyse (1928). In Von Weizsäcker V, Wyss D. Zwischen Medizin und Philosophie. Göttingen: Vandenhoeck & Ruprecht, 1957:32.
- 28. Buytendijk FJJ. Het kennen van de innerlijkheid (1947). In Buytendijk FJJ. Academische redevoeringen. Utrecht/Nijmegen: Dekker & Van de Vegt, 1961:96.
- 29. Buytendijk FJJ. De relatie arts-patiënt. Ned Tijdschr Geneesk 1959;103:2504-2508.
- 30. Von Weizsäcker V. Psychosomatische Medizin (1949). In Von Weizsäcker V, Wyss D. Zwischen Medizin und Philosophie:92.
- 31. Kasanmoentalib S. De dans van dood en leven: 328.
- 32. Von Weizsäcker V. Der kranke Mensch.