

Michael Alberti and the Medical Therapy of the Internal Senses

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ABSTRACT

In the first half of the eighteenth century, the German physician Michael Alberti was responsible for hundreds of dissertations and other works in medicine. While the bulk of the production reflected the dominating medical topics of his time, he also developed an original focus on the internal senses and their effects on bodily health and disease. Depending on whether internal senses, such as imagination and memory, were cultivated in the right way or not, they could work as powerful remedies or as equally powerful triggers of disease and even death. This article explores this little known strand of early modern medicine in three steps. First, it shows that Alberti's medicine took form in intimate connection to the Stahlian brand of Pietist medicine. As such, it further elaborated an existing strand of medicine that was intimately connected to German Pietism. Second, it analyses in some detail the role of the internal senses from a pathological and therapeutic perspective as well as examining what kind of *persona* the physician ought to embody. Lastly, it raises larger questions regarding how to understand this strand of early modern medicine. Rather than approaching it from the perspective of disciplinary history, the article seeks to reconstruct it as a part of what has sometimes been referred to as the early modern *cultura animi* tradition.

KEYWORDS: medicine, senses, internal senses, imagination, memory, Stahl, Alberti, Francke, Pietism, *cultura animi*

In the first half of the eighteenth century, the German physician Michael Alberti was responsible for hundreds of dissertations and other works in medicine. While the great majority of these writings reflected the dominating medical topics of his time, he also developed a highly original focus that is perhaps best described as a holistic medicine oriented towards the internal senses and their effects on bodily states of health and disease. As Alberti believed, internal senses such as fantasy, imagination and memory were powerful faculties that caused many diseases and in some cases even death. At the same time, however, if only

cultivated in the right way, preferably through Christian spiritual exercises such as prayer, meditation and Bible reading, they were equally powerful remedies and sources of health.

In this article, I address Michael Alberti's medicine in three steps. First, I situate Alberti in the context of his time, emphasising the connection to the Stahlian brand of Pietist medicine. Placed in this context, Alberti's endeavour comes to view as a further elaboration of an existing and expanding strand of medicine that was intimately connected to German Pietism. Second, I analyse Alberti's medicine from a pathological and therapeutic perspective, arguing that it can be understood as an early modern holistic and placebo-directed medicine oriented towards the cultivation of the soul, especially its sensual and affectual parts. In this context I also examine what kind of *persona* the physician ought to embody. Third, I raise larger questions regarding the overall meaning and purpose of Alberti's medicine. In contrast to traditional disciplinary readings, I situate Alberti's medicine in the context of what has sometimes been referred to as the early modern *cultura animi* or *medicina cultura animi* tradition, that is, the tradition of viewing early modern philosophy and science as projects aiming at the cognitive and moral cultivation and perfection of the mind.

THE NEW MEDICINE

The early modern period has for a long time been considered formative in the history of medicine.¹ While traditional accounts have often highlighted heroic contributions such as Andreas Vesalius's mapping of the human anatomy or William Harvey's discovery of the circulatory system, more recent studies have drawn attention to the structural transformations connected to the larger process of what has sometimes been referred to as the scientific revolution.² At the core of this process were not only new theories of nature and the human being but also, and perhaps more importantly, new methodological approaches and scientific practices.³ The book of nature could be read, but only by using the right method and by diligently disciplining the mind and the senses in the art of drawing conclusions and making observations and experiments.⁴ If there was anything that the new generation of physicians agreed on in the late seventeenth century, it

- 1 See here the classical works, Lester S. King, *The Road to Medical Enlightenment 1650–1695* (London: Macdonald, 1970); idem, *The Philosophy of Medicine: The Early Eighteenth Century* (Cambridge, MA: Harvard University Press, 1978).
- 2 For updated states of the art see: E. C. Spray, "Health and Medicine in the Enlightenment," Thomas Rütten, "Early Modern Medicine," and Staffan Müller-Wille, "History of Science and Medicine," in *The Oxford Handbook of the History of Medicine*, ed. Mark Jackson (Oxford: Oxford University Press, 2013); Roger French, *Medicine before Science: The Rational and Learned Doctor from the Middle Ages to the Enlightenment* (Cambridge: Cambridge University Press, 2003).
- 3 See especially: Spray, "Health and Medicine in the Enlightenment;" Müller-Wille, "History of Science and Medicine."
- 4 Müller-Wille has argued that historians of medicine have much to gain from the history of science and vice versa. Since the 1980s, historians of science have explored early modern scientific theories and practices in detail as well as having developed a number of useful theories and analytical concepts. See here especially the works of Steven Shapin and Simon Schaffer: Steven Shapin and Simon Schaffer, *Leviathan and the Air-Pump: Hobbes, Boyle, and the Experimental Life* (Princeton: Princeton University Press, 1985); Steven Shapin, *A Social History of Truth: Civility and Science in Seventeenth-Century England* (Chicago: University of Chicago Press, 1994); Steven Shapin, *The Scientific Revolution* (Chicago: University of Chicago Press,

was that medical knowledge had to be based on the joint effort of reason and the senses, of rationality and experience.

When it came to the new theories that took form as a result of the growing critique of Aristotelian and Galenian science and medicine, physicians at the time developed a variety of partly overlapping, partly competing theories of the human body. The perhaps dominating theory charted the body as a hydraulic machine circulating bodily fluids.⁵ This so-called iatromechanic model went hand in hand with a mechanistic worldview. Accordingly, God had created nature as a complex machine where all the different parts were connected through mechanical movement. Underlying this view was a dualism between matter and spirit, body and soul. In the first half of the seventeenth century, the iatromechanical model gained in popularity, much through authorities such as Harvey and Descartes, at the same time as it also encountered problems.⁶ The view of atoms and corpuscles as static and inert units seemed especially problematic when it came to explaining how processes such as generation and healing worked in living bodies. Hence, some philosophers and physicians instead developed more vitalist accounts, often by drawing on chemistry and particularly the vital philosophy of the Paracelsians.⁷ A central conception here was that of the *semina* or seed as the organising principle for development, transition and generation in living organisms. As a result, a new brand of vitalist and in some cases vitalist-mechanical models of the body developed in the second half of seventeenth century.⁸

THE STAHLIAN MEDICINE

Toward the end of the seventeenth century, several iatromechanical and vitalist models of the human body competed for space. Nowhere else did this become as strikingly evident as at the newly founded University of Halle in Germany. As the university was founded in early 1690s, the two chairs in medicine went to Friedrich Hoffmann and

1996). For the early modern notion of the book of nature, see: Klaas van Berkel and Arie Johan Vanderjagt, eds., *The Book of Nature in Early Modern and Modern History* (Leuven: Peeters, 2006).

- 5 The mechanic and iatromechanic medicine has caught much scholarly attention. See, for instance: Antonio Clericuzio, "Mechanism and Chemical Medicine in Seventeenth-Century England: Boyle's Investigation of Ferments and Fermentation," Peter M. Distelzweig, "Mechanics' and Mechanism in William Harvey's Anatomy: Varieties and Limits," and Domenico Bertoloni Meli, "Machines of the Body in the Seventeenth Century," in *Early Modern Medicine and Natural Philosophy*, ed. Peter M. Distelzweig, Benjamin Goldberg, and Evan Ragland (Dordrecht: Springer, 2016); Ingo Wilhelm Müller, *Iatromechanische Theorie und ärztliche Praxis im Vergleich zur galenistischen Medizin: Friedrich Hoffmann, Pieter van Foreest, Jan van Heurne* (Stuttgart: Franz Steiner, 1991).
- 6 See: Jole Shackelford, "Transplantation and Corpuscular Identity in Paracelsian Vital Philosophy," in *Early Modern Medicine and Natural Philosophy*; Clericuzio, "Mechanism and Chemical Medicine in Seventeenth-Century England."
- 7 See: Shackelford, "Transplantation and Corpuscular Identity in Paracelsian Vital Philosophy;" Ku-ming (Kevin) Chang, "Alchemy as Studies of Life and Matter: Reconsidering the Place of Vitalism in Early Modern Chymistry," *Isis* 102 (2011): 322–29.
- 8 For context oriented critical studies see: Shackelford, "Transplantation and Corpuscular Identity in Paracelsian Vital Philosophy;" Clericuzio, "Mechanism and Chemical Medicine in Seventeenth-Century England;" Hiro Hirai, "Mysteries of Living Corpuscles: Atomism and the Origin of Life in Sennert, Gassendi and Kircher," in *Early Modern Medicine and Natural Philosophy*; Chang, "Alchemy as Studies of Life and Matter."

Georg Ernst Stahl.⁹ While sharing the enthusiasm for the new scientific medicine, with its emphasis on rigorous observations and experiments in combination with thorough demonstrations, their respective views soon developed into two partly opposed schools of medicine. On one side, there were Hoffmann and his followers who spearheaded an iatromechanic medicine where the body was seen as a hydraulic pump circulating body fluids.¹⁰ On the other side, there were Stahl and the Stahlians who, often in sharp contrast to the mechanistic medicine, emphasised a holistic understanding of body and soul as the “living organism.”¹¹ In the dissertation *De medicina medicinae curiosae* (*On the medicine of the curious medicine*, 1714), Stahl contrasted his theory of the living organism with mechanical medicine:

The great medicine against this misconception [the mechanistic view] is to understand and know in an exact and rational way the essence, character and also the difference between Organism and Mechanism. ... Thus this useful consideration of the Organism helps us so much in medicine that we recognise that there is in the living body the cause and effective energy for the director to act or renounce to act. ... No machine – no matter how carefully constructed it could have been – can direct itself to such complicated and admirable effect, let alone to a goal.¹²

Stahl argued that bodily movement could not be explained in terms of mechanisms inherent in the body itself. Whereas the body was thus strictly speaking passive, the soul was defined in terms of its ability to act and cause movement. And yet, rather than

- 9 Ingo W. Müller, “Mechanismus und Seele – Grundzüge der frühen hallensischen Medizinschulen,” in *Aufklärung und Erneuerung: Beiträge zur Geschichte der Universität Halle im ersten Jahrhundert ihres Bestehens (1694-1806)*, ed. Günter Jerouschek and Arno Sames (Hanau: Verlag Werner Dausien, 1994); Jürgen Konert, ‘Hoffmann oder Stahl? – Medizinische Fakultät und Franckesche Stiftungen in der Gründungsära’, in *Die Geburt einer sanften Medizin: Die Franckeschen Stiftungen zu Halle als Begegnungsorte von Medizin und Pietismus im frühen 18. Jahrhundert*, ed. Richard Toellner (Halle: Verlag der Franckeschen Stiftungen, 2004).
- 10 Ingo Wilhelm Müller has written the most thorough modern study of Hoffmann’s medicine. See: Müller, *Iatromechanische Theorie und ärztliche Praxis im Vergleich zur galenistischen Medizin*. For further studies of Hoffmann and particularly for his connection to Descartes, Leibniz and other natural philosophers see: K. E. Rothschuh, “Studien zu Friedrich Hoffmann (1660–1742): Erster Teil: Hoffmann und die Medizingeschichte. Das Hoffmannsche System und das Aetherprinzip,” *Sudhoffs Archiv* 60 (1976): 163–93; K. E. Rothschuh, “Studien zu Friedrich Hoffmann (1660–1742): Zweiter Teil: Hoffmann, Descartes und Leibniz,” *Sudhoffs Archiv* 60 (1976): 235–70.
- 11 Johanna Geyer-Kordesch is today the leading expert on Stahl’s medicine. Geyer-Kordesch has especially emphasised the connection to German Pietism. See: Johanna Geyer-Kordesch, *Pietismus, Medizin und Aufklärung in Preussen im 18. Jahrhundert: das Leben und Werk Georg Ernst Stahls* (Tübingen: Niemeyer, 2000); Johanna Geyer-Kordesch, “Georg Ernst Stahl’s Radical Pietist Medicine and Its Influence on the German Enlightenment,” in *The Medical Enlightenment of the Eighteenth Century*, ed. Andrew Cunningham and Roger French (Cambridge: Cambridge University Press, 1990); Johanna Geyer-Kordesch, “Psychomedizin – die Entwicklung von Medizin und Naturanschauung in der Frühaufklärung,” in *Vernünftige Ärzte: Hallesche Psychomediziner und die Anfänge der Anthropologie in der deutschsprachigen Frühaufklärung*, ed. Carsten Zelle (Tübingen: Niemeyer, 2001).
- 12 Georg Ernst Stahl, *Dissertatio inauguralis medica de medicina medicinae curiosae* (Halle, 1714), 27–28.

sustaining a classical body-soul dualism, Stahl used the term “organism” to refer to the sum of cooperating mental and physical processes that could not be separated in any meaningful way.¹³

Stahl’s medicine of the living organism entailed a critique of any attempt to reduce the soul and the mental to mere effects of bodily processes. In this context, he never tired of emphasising the many ways in which the soul affected and influenced the body and bodily processes. To support this viewpoint, Stahl launched substantial evidence in the form of empirical observations and concrete cases. One such example told the story of a wounded boy: “The wound was cleaned with success. The symptoms disappeared and the threat to life was removed. Then, fourteen days later he flew into a rage and the fever and frenzy came back so that four days later he died.”¹⁴ Another example charted a young man sick with fever. “A young man who suffered from tertian fever walked to another city to get better air. On the way there he saw soldiers in the far distance and was struck by fear and anxiety. Fearing for his own security he did not feel the fever any more.”¹⁵ A third example depicted a noble woman receiving the news of the death of her son. “She was so deeply shaken and struck by sorrow that having hardly read the letter she suddenly fell struck by sudden unconsciousness, on her bed. Eventually an apoplectic fit put an end to her life.”¹⁶ By using examples such as these, Stahl accumulated evidence regarding the effects of the soul on health and disease.

STAHLIAN MEDICINE AT THE ORPHANAGE

While Stahl and Hoffmann have traditionally been situated in the context of the modern vitalism-mechanism debate, more recent and less anachronistic readings have acknowledged the local cultural context, emphasising especially the intimate connection to Pietism.¹⁷ Most prominently, Johanna Geyer-Kordesch argued that Stahl’s medicine

13 Geyer-Kordesch, “Georg Ernst Stahl’s Radical Pietist Medicine and Its Influence on the German Enlightenment,” 69.

14 Georg Ernst Stahl, *Disputationem inauguralem de passionibus animi corpus humanum varie alterantibus* (Halle, 1695), 9–10. See also: Georg Ernst Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen auf den menschlichen Körper (Halle 1695),” in *Georg Ernst Stahl*, trans. Bernhard Josef Gottlieb, *Sudhoffs Klassiker der Medizin* 36 (Leipzig: Johann Ambrosius Barth, 1961), 32.

15 Stahl, *De passionibus*, 10–11. See also: Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen,” 33.

16 Stahl, *De passionibus*, 10. See also: Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen,” 33.

17 For recent contextual and critical readings see: Francesco Paolo de Ceglia, “Hoffmann and Stahl: Documents and Reflections on the Dispute,” *History of Universities* 22 (2007): 98–140; Francesco Paolo de Ceglia, “Soul Power: Georg Ernst Stahl and the Debate on Generation,” in *The Problem of Animal Generation in Early Modern Philosophy*, ed. Justin E. H Smith (Cambridge: Cambridge University Press, 2006); Ku-ming (Kevin) Chang, “Motus Tonicus: Georg Ernst Stahl’s Formulation of Tonic Motion and Early Modern Medical Thought,” *Bulletin of the History of Medicine* 78 (2004): 767–803; Konert, “Hoffmann oder Stahl? – Medizinische Fakultät und Franckesche Stiftungen in der Gründungsära;” Geyer-Kordesch, “Psychomedizin – die Entwicklung von Medizin und Naturanschauung in der Frühaufklärung;” Geyer-Kordesch, *Pietismus, Medizin und Aufklärung*; Geyer-Kordesch, “Stahl – Leben und seine medizinische Theorie,” *Acta Historica Leopoldina* 30 (2000): 33–48; Geyer-Kordesch, “Georg Ernst Stahl’s Radical Pietist Medicine and Its Influence on the German Enlightenment;” Jürgen Helm, “Hallesche Medizin zwischen Pietismus und Frühaufklärung,” in *Universitäten und Aufklärung*, ed. Notker

must be understood in relation to the Pietist movement that prospered in Halle, with much thanks to the work of the theologian August Hermann Francke. A disciple of the leading Pietist theologian Jacob Spener, Francke brought the Pietist cause to Halle where he got the chair in theology at the new university in 1693. In addition to his duties as a university professor and priest, Francke soon channelled his energy into Christian charity work. Through what was probably the fund-raising campaign of the century, he managed to raise money for the building of an orphanage in the second half of the decade. The project soon grew beyond all recognition; moreover, as the orphanage was inaugurated in April 1701, it included, in addition to purely educational units, a bookstore, a bookbindery, a printing office, a pharmacy, a laboratory and an infirmary. In 1727, the year of Francke's death, over 3000 students, orphans, teachers, administrators and artisans studied, worked and lived there.¹⁸

In order to minimise the running expenses, Francke engaged university students to teach at the various institutions of the orphanage, including the infirmary. With this strategic move also followed the implementation of the latest medical theories and practices. This was something that Francke himself emphasised in one of his programmatic writings. Having stated that the new, more scientific and thorough medicine had now been imported to the orphanage, he continued by making his readers attentive to a new piece written in German:

The work is not only arranged in such a way that it agrees with reason in the sense that the reader finds it convincing out of his own accord, but that it also at the same time harmonises with the Word of God and the rules of the Christian life. It hereby at the same time edifies godliness and brings to people the kind of truths that have hitherto been completely neglected by the physicians.¹⁹

Hammerstein (Göttingen: Wallstein, 1995); Wolfram Kaiser, "Pro memoria Georg Ernst Stahl (1659–1734)," and idem, "Der Lehrkörper der Medizinischen Fakultät in der halleschen Amtszeit von Georg Ernst Stahl, in *Georg Ernst Stahl (1659–1734)*, ed. Wolfram Kaiser and Arina Völker, *Wissenschaftliche Beiträge der Martin-Luther-Universität Halle-Wittenberg* 66 (Halle, 1985).

Stahl and Hoffmann became early contributors to the modern vitalism mechanism debate that would first reach its peak in the nineteenth century. For readings on this theme, see: Reinard Mocek, "Zum Mechanismus-Vitalismus-Paradigma der Stahl-Ära," *Wissenschaftliche Beiträge der Martin-Luther-Universität Halle-Wittenberg* 66 (1985): 59–66; Lester S. King, "Stahl and Hoffmann: A Study in Eighteenth Century Animism," *Journal of the History of Medicine and Allied Science* 19 (1964): 118–30; idem, "Rationalism in Early 18th-Century Medicine," *Journal of the History of Medicine and Allied Science* 18 (1963): 257–71; Johannes Karcher, "Die animistische Theorie G. E. Stahls im Aspekt der pietistischen Bewegung und der Universität zu Halle and der Saale im zu Ende gehenden 17. und beginnenden 18. Jahrhundert," *Gesnerus* 15 (1958): 1–16; Gottlieb Bernward Joseph, *Das Problem des Lebendigen im ärztlichen Weltbild: G. E. Stahl, Hahnemann und Virchow* (Leipzig, 1943); Gottlieb Bernward Joseph, "Vitalistisches Denken in Deutschland im Anschluß an G. E. Stahl," *Klinische Wochenschrift* 20 (1942): 445–48.

18 Helmut Obst, *August Hermann Francke und sein Werk* (Halle: Verlag der Franckeschen Stiftungen, 2013), 97.

19 August Hermann Francke, "Der große Aufsatz," in *August Herman Franckes Schrift über eine Reform der Erziehungs- und Bildungswesens als Ausgangspunkt einer geistlichen und sozialen Neuordnung der Evangelischen Kirche des 18. Jahrhunderts. Der grosse Aufsatz. Mit einer quellenkundlichen Einführung*

The work that Francke lauded was Friedrich Richter's forthcoming *Kurzer und deutlicher Unterricht von dem Leibe und natürlichen Leben des Menschen* (*Short and Distinct Teaching of the Body and the Natural Life of Man*, 1705).²⁰ Richter was a Stahlian physician who had studied medicine at the University of Halle in the 1690s and who became the *orphanage medicus* in 1699.²¹ With the publication of the *Unterricht*, the fusion of Pietism and Stahlian medicine was taken one step further. Jürgen Helm has even claimed that the work became somewhat of a Pietist medicinal manifesto.²²

When it comes to the content of the *Unterricht*, one finds the same inclination towards the soul and its ability to affect disease and healing as one finds in Stahl's oeuvre. This was especially the case with the parts discussing immaterial causes of disease.²³ Rather than discussing foul air, fumes and exhalations, Richter focused on passions such as anger, lust, greed, fear, terror, sorrow and anxiety. Much as Stahl had done, Richter mobilised an array of examples to illustrate how the passions cause bodily diseases.²⁴ In addition, he also discussed specific religious "disturbances" such as sin. Sin and particularly sinful action led to disturbances of the blood that "ruin the human nature" and caused "confusion and lack of order."²⁵ The religious thematic, and in this case the connection to Pietism, came to view also in the discussion of cures. To cure the stirrings of the passions, it was important to instil in patients a "peace of the soul and the passions" resting on the conviction that "one has God as one's friend."²⁶ To make this happen, physicians were to "lead people in. . . observation and examination" concerning their ability to live in accordance with the "rules of God's words" so that they turn to God in "penance prayer" and "cling to the promised mercy with a fearless courage in faith."²⁷ Such undertaking was not to be "taken as superstition, or as a thing that does not belong here, or as something that should be left to the preacher."²⁸ Instead, "love of and community with God" was at the very core of healing and health.²⁹

herausgeben von Otto Podczek, ed. Otto Podczek, vol. 3, Philologisch-historische Klasse 3 (Berlin: Akademie-Verlag, 1962), 125.

- 20 Christian Friedrich Richter, *Kurzer und deutlicher Unterricht von dem Leibe und natürlichen Leben des Menschen* (Halle, 1705).
- 21 Arina Völker, "Die medizinischen und pharmazeutischen Einrichtungen der Franckeschen Stiftungen während der halleschen Amtsphase von Georg Ernst Stahl," in *Georg Ernst Stahl (1659–1734)*; Kaiser, "Der Lehrkörper der Medizinischen Fakultät in der halleschen Amtszeit von Georg Ernst Stahl;" Wolfram Kaiser, Karl-Heinz Krosch, and Werner Piechocki, "Collegium clinicum Halense," in *250 Jahre Collegium Clinicum Halense 1717–1967*, ed. Wolfram Kaiser, Karl-Heinz Krosch, and Werner Piechocki, *Wissenschaftliche Beiträge der Martin-Luther-Universität Halle-Wittenberg* 3 (Halle, 1967).
- 22 Jürgen Helm, "Christian Friedrich Richters Kurtzer und deutlicher Unterricht (1705) – Medizinische Programmschrift des Halleschen Pietismus?," in *Die Geburt einer sanften Medizin: Die Franckeschen Stiftungen zu Halle als Begegnungsstätte von Medizin und Pietismus im frühen 18. Jahrhundert*, ed. Richard Toellner (Halle: Verlag der Franckeschen Stiftungen, 2004).
- 23 Richter, *Kurzer und deutlicher Unterricht*, 125–40.
- 24 *Ibid.*, 131–33.
- 25 *Ibid.*, 129.
- 26 *Ibid.*, 197–98.
- 27 *Ibid.*, 198.
- 28 *Ibid.*
- 29 *Ibid.*, 200.

Richter's *Unterricht* illustrated the way in which Stahlian medicine fused with Pietist theories and practices at the orphanage. When it came to this union, Geyer-Kordesch has remarked that the Stahlian holistic and anti-mechanic medicine provided scientific legitimacy for many of the "anthropological assumptions" on which the Pietist theology rested.³⁰ These included the view that the soul often ruled over the body, and that thoughts and emotions were central for a good pious life in honour of God. The fusion of Stahlian medicine and Pietism also provided the immediate background to much of Alberti's medical work.

ALBERTI AT HALLE

Michael Alberti was born in Nürnberg in November 1682.³¹ His father, who was a pastor, made his son study the Bible and the catechism, as well as trained him in basic philosophy and science.³² After finishing high school in his hometown, Alberti began university studies in the adjacent city of Altdorf. Here, he followed in his father's footsteps by studying theology. In 1701, he published the text *Modum dirigendi omnes actiones nostras ad gloriam Dei* (*The Way to Direct All Our Actions to the Glory of God*).³³ The fact that Alberti dedicated his first academic publication to human action and piety is, as we will see, not unimportant given his later focus on how to cure diseases and gain health by cultivating pious virtues.

Also in 1701, Alberti stayed for a short period in Jena where he studied medicine under Stahl's former teacher Georg Wolfgang Wedel.³⁴ Later the same year, he went to Halle where he became acquainted with Francke. The latter put him into contact with

30 Geyer-Kordesch, *Pietismus, Medizin und Aufklärung*, 80.

31 The primary source on biographical information is probably Alberti's so-called autobiography. After Alberti's death in 1757, a manuscript containing an autobiographical account was found among his personal papers. While the manuscript has now been lost, a copy was made by his friend and colleague Friedrich Eberhard Rambach. Rambach added the copy as a supplement to his funeral oration on Alberti, which is still available. A problem with Rambach's text is that it was written in third person, something that could mean either that Rambach rewrote the text or that Alberti followed the common practice of writing his own autobiography in third person. In this article, I will follow previous scholars in treating the text as Alberti's autobiography, while at the same time doing this with some caution. See: Friedrich Eberhard Rambach, "Des Wohlseiligen hof- und Consistorial-Raths Herrn Herrn D. Michael Alberti, kurtzer doch von Ihm selbst entworfenen Lebenslauf," in *Das edelste Geschäfte in dem kurtzen Raum des zeitlichen Lebens, wurde, als Der Wohlgeborne und Hochgelahrte Herr, Herr D. Michael Alberti. . . Standrede* (Halle, 1757).

A second biographical source is available in Friedrich Börner's monumental work on the lives of German physicians. It is hard to say if Börner's work was based on first hand information from Alberti, but since the work was published in 1749 we can at least exclude that it was based on Rambach's revised version of Alberti's autobiography. See: Friedrich Börner, *Nachrichten von den vornehmsten Lebensumständen und Schriften jetztlebender berühmter Aerzte und Naturforscher in und um Deutschland* (Wolfenbüttel: Meißner, 1749), 401–41. For two more recent biographical accounts based mainly on Rambach and Börner, see: Steve Naragon, "Alberti, Michael," in *Dictionary of Eighteenth-Century German Philosophers*, ed. Heiner Klemme and Manfred Kuehn (London: Continuum, 2010); Wolfram Kaiser and Arina Völker, *Michael Alberti (1682–1757)*, *Wissenschaftliche Beiträge der Martin-Luther-Universität Halle-Wittenberg* 4 (Halle, 1982).

32 Rambach, "Lebenslauf," 3.

33 Michael Alberti, *Modum dirigendi omnes actiones nostras ad gloriam Dei* (Altdorf, 1701).

34 Rambach, "Lebenslauf," 3–4; Börner, *Nachrichten*, 405.

Stahl and probably also with Friedrich Richter and Daniel Gohl who oversaw the orphanage infirmary.³⁵ The contact with Stahl and the Stahlians led to further studies in medicine and eventually to a doctoral grade in 1704.³⁶ Although Alberti continued to cultivate an interest in theology and philosophy, it was by now clear that his professional career would be as a physician. The choice of profession turned out well, and in 1710 Alberti was promoted to associate professor of medicine. Seven years later, in 1716, he assumed the second full professorship as Stahl was called to Berlin to become personal physician to the Prussian King Frederick William I. With the full professorship followed a prolific period that would last for decades. Alberti's complete production was impressive and included his supervision and presentation of more than 300 dissertations and the writing of a number of full-length treatises covering a broad spectrum of medical topics.³⁷ Of these at least a dozen discussed the internal senses and related topics.³⁸ When it comes to the dissertations, it is necessary to say a few words on authorship. The fact that early modern dissertations were typically supervised and prepared by a professor but presented and defended by one of his students has for a long time fuelled discussions of authorship.³⁹ More recently, scholars have tended to abandon the attempt to determine a single author and instead approach these texts in terms of co-production. Kevin Chang has thus argued that early modern dissertations were co-produced by the professor and the student, a collaboration through which the professor promoted his ideas at the same time as the student acquired a degree as well as considerable intellectual status.⁴⁰ Drawing on the recent scholarly work on co-production I will refer to the dissertations as "Albertian", thereby acknowledging that

35 Kaiser and Völker, *Michael Alberti (1682–1757)*, 13–14.

36 Although Alberti worked mainly within the framework of the Stahlian medicine, he also collaborated with Hoffmann, especially when it came to forensic medicine. The collaboration is yet another sign of the complex relation between the Stahlian medicine and that of Hoffmann and his followers. For further information on this collaboration see: Heiner Fangerau and Irmgard Müller, "Forensische Begutachtung in Der Frühen Neuzeit: Das Diarium von Michael Alberti (1682–1757)," in *Medizinisches Gutachten: Geschichte Einer Neuzeitlichen Praxis*, ed. Alexa Geisthövel and Volker Hess (Göttingen: Wallstein Verlag, 2017).

37 For a discussion of Alberti's production see: Kaiser and Völker, 27; Naragon, "Alberti, Michael;" Börner, *Nachrichten*, 416–41; Johann Christoph Dreyhaupt, *Pagus Neletizi et Nudzici, oder ausführliche diplomatisch-historische Beschreibung des zum ehemaligen Primat und Ertz-Stift, nunmehr aber durch den westphälischen Friedens-Schluß secularisirten Herzogthum Magdeburg gehörigen Saal-Kreyses. . . Zweyter Theil* (Halle, 1755), 573–76.

38 The analysis provided in this paper is based on a selection of dissertations on the various internal senses and their effects on bodily states of health and disease, as well as on related topics such as the medical function of morality and piety.

39 The question of authorship was discussed by Ewald Horn in his thorough and still acknowledged work on disputations and doctoral degrees at German universities. See: Ewald Horn, "Die Disputationen und Promotionen an den deutschen Universitäten vornehmlich seit dem 16. Jahrhundert," in *Beihefte zum Centralblatt für Bibliothekswesen*, vol. 4 (Leipzig: Otto Harrassowitz, 1893).

40 Ku-ming (Kevin) Chang, "Collaborative Production and Experimental Labor: Two Models of Dissertation Authorship in the Eighteenth Century," *Studies in History and Philosophy of Biological and Biomedical Sciences* 41 (2010): 347–55; idem, "From Oral Disputation to Written Text: The Transformation of the Dissertation in Early Modern Europe," *History of Universities* 19 (2004): 129–87. For further discussions of authorship see also the anthology: Mario Biagioli and Peter Galison, eds., *Scientific Authorship: Credit and Intellectual Property in Science* (New York: Routledge, 2003).

they mediated Alberti's ideas at the same time as they were collaborative results rather than the products of a single author in the modern sense of the word.

As we have seen, Stahlian medicine emphasised the power of the soul over the body and bodily processes. If this was clear in Stahl's own work, it became even more striking with the orphanage medicine developed by Richter, Gohl and others.⁴¹ Given Alberti's background in theology and inclination towards Pietism, it is not hard to understand that he found the Stahlian medicine appealing. Following, I will focus on a selection of hitherto unnoticed dissertations that dealt with the internal senses. The bearing argument is that Alberti further elaborated a strand of early modern medicine focusing on how the soul and especially its sensual and affectual parts affected bodily health and disease.

THE INTERNAL SENSES

The early modern period is well known for the dichotomy between empiricism and rationalism, senses and reason. What is less known, however, is that many early modern intellectuals relied, directly or indirectly, on the division between external and internal senses. Although the division went back to Latin, Arabic and Hebrew interpretations of Aristotle, its heyday came as medieval philosophers elaborated detailed models within the framework of an overall faculty psychology.⁴² By the mid-fourteenth century, philosophers in the scholastic tradition held a more or less common conceptualisation of the internal senses; one century later, the German philosopher Gregor Reisch distinguished five internal senses: *common sense*, *imagination*, *fantasy*, *estimation* and *memory*.⁴³ The five internal senses worked in the following way. The *common sense* first receives (from the external senses) and puts together the forms of an object, which are then passed on to *imagination* for storage. *Estimation* receives and evaluates intentions, and *fantasy* composes and divides forms and intentions in order to arrive at new composite information that may not have been sensed and that may not even exist. Finally, *memory* stores information for further reference to past time (imagination stores without reference to past time).

In contrast to the medieval period, the fate of the internal senses in the early modern period has caught little scholarly attention. In an article on renaissance psychology, Katharine Park remarked that the more complex models tended to be compressed into one or a few internal senses.⁴⁴ In the Albertian dissertation *De sensuum internorum usu*

41 This argument has been made by Paolo Francesco de Ceglia who also pointed out that scholars have too often supported the claim that Stahl founded a Pietist medical system by quoting his students rather than by quoting Stahl's own works. See: de Ceglia, "Soul Power: Georg Ernst Stahl and the Debate on Generation," 283.

42 Harry A. Wolfson, "The Internal Senses in Latin, Arabic and Hebrew Philosophic Texts," *Harvard Theological Review* 28 (1935): 69; Nicholas H. Steneck, "Albert the Great on the Classification and Localization of the Internal Senses," *Isis* 65 (1974): 193.

43 Nicholas H. Steneck, "Albert on the Psychology of Sense Perception," in *Albertus Magnus and the Sciences*, ed. James A. Weisheipl (Toronto: Pontifical Institute of Mediaeval Studies, 1980), 263; Katharine Park, "The Organic Soul," in *The Cambridge History of Renaissance Philosophy*, ed. Charles B. Schmitt, Quentin Skinner, and Eckhard Kessler (Cambridge: Cambridge University Press, 1988), 466–67.

44 Park, "The Organic Soul," 480–81.

in *oeconomia vitali* (*On the Use of the Internal Senses in the Lifegiving Order*, 1726), the author followed this trend in discussing three principal senses:⁴⁵

To the internal senses are generally counted the so called common sense [sensus communis], fantasy [phantasia] and memory [memoria], where we with common sense mean a general and abstract knowledge of the things. . . With fantasy we mean a disparate, either congruent or incongruent, combination and separation of ideas that are especially excluded from the external senses. Finally, memory is to us a new treatment and application of ideas, which are either simple or composite, and that have once been perceived and then stored in the intellect.⁴⁶

When the author chose to treat the internal senses, he entered what was typically a highly abstract philosophical discourse that went back to medieval comments on Aristotle. The discourse suggested that the author was familiar with the technicalities and main texts in this tradition. When discussing memory, for instance, he referred to Avicenna, who was considered an authority on the internal senses and who was also the one launching what became the standard model of five internal senses.⁴⁷

A second early modern trend that Park stresses was the tendency to abandon the older abstract theories to turn instead to classic and contemporary medicine for more precise models.⁴⁸ The author of *De sensuum internorum* reflected on this tendency in emphasising concreteness and clinical usage and value. The internal senses were to be investigated not in an “abstract way” but by accounting for their concrete “activities and functions.”⁴⁹ When it came to the value of the treatise for medicine, the author listed a number of points for usage. The dissertation 1) “defends and strengthens the primary and cardinal truth in medicine” and thus helps the physician to 2-3) understand how powerful the soul is and 4) “how subtle, inner, hidden and unpleasant the causes of sickly changes often are.”⁵⁰ It further 5) “teaches the physician how nature administers the vital movements either accurately or inaccurately, whence he may form various diagnoses, so that many diseases can be controlled as to their course and event.”⁵¹ Related to causes and cures, the work 6-7) teaches the physician “semiotics” and “provides the key” when it comes to “the theory of inherited, common, periodical, critical, mystical, arcane and sympathetic diseases.”⁵² With regard to the cures of disease, the author emphasised 8-9) that the work helps the physician to “find, defend and apply a rational cure” and “avoid doubtful remedies and eradicate diseases at their

45 It should be added that Alberti’s discourse was not always clear when it came to the limits between internal senses and higher faculties such as judgment, intellect and the like.

46 Michael Alberti, *Dissertatio inauguralis medica, de sensuum internorum usu in oeconomia vitali* (Halle, 1726), 14–15.

47 Ibid., 15.

48 Park, “The Organic Soul,” 480–81.

49 Alberti, *De sensuum internorum*, 8.

50 Ibid., 9–10.

51 Ibid., 10.

52 Ibid., 10–11.

roots.”⁵³ The dissertation not only covers bodily diseases but also 10) illustrates how to “trace and cure the diseases of the soul.”⁵⁴ As point 11), he added that the work should prevent the physician from, as “stupid empiricists” do, engaging in “simple empiricism conducting stupid observations.”⁵⁵ Finally, the work 12) not only “encourages the study of moral in relation to medicine but also increases and confirms it.”⁵⁶

The twelve points summarised the usage and value of a theory of the internal senses within medicine. Knowledge of the internal senses would not only enable the physician to better identify and understand diseases but also to forge new remedies and therapies. When it came to the question of how to understand the internal senses and their role in medicine, Alberti elaborated his theories within the context of humoral medicine.

THE PATHOLOGY OF THE INTERNAL SENSES

In the early modern period, humoral medicine still provided a central framework for how to understand physiological processes.⁵⁷ Health and disease were seen as the result of the equilibrium or lack of equilibrium among the four bodily fluids. Although the composition between bodily fluids was unique for each individual, the lack of equilibrium was categorised into four major types or temperaments. Each temperament – the choleric, the sanguine, the melancholic and the phlegmatic – was ascribed qualities linked to the four elements and connected bodily fluids. The humoral model went well with Stahlian medicine. In the short writing *De synergeia naturae in medendo* (*On the Importance of the Principle of Synergy in Medicine*, 1695), Stahl drew on the humoral model when stressing that health depended on equilibrium in the living organism.⁵⁸ In another text published the same year, *De passionibus animi corpus humanum varie alterantibus* (*On the Various Effects of the Passions on the Human Body*, 1695), Stahl followed the same line of argument but focused specifically on the passions or *Gemüthsbewegungen*. “After thorough consideration I thus assume that human health above all requires the peace of the passions. Just as the greatest of moral happiness, comes from this, almost everything else that physically affects the human body is dependent on the movements of the soul.”⁵⁹ Health not only requires bodily equilibrium but also equilibrium of the soul. Too strong passions led to disturbances and disease such as in the case with the choleric who is often tormented by “headache, sleeplessness, violent catarrhs and agonizing pains.”⁶⁰ Another case in point was the melancholic. “Thus, [the melancholics] live in a constant state of deep sorrow, succumbed to a series of chronic states of disease with worries and

53 Ibid., 11.

54 Ibid.

55 Ibid.

56 Ibid.

57 Vivian Nutton, “Humoralism,” in *Companion Encyclopedia of the History of Medicine*, ed. W. F. Bynum and Roy Porter (London: Routledge, 1993).

58 Georg Ernst Stahl, *Propempticon inaugurale de synergeia naturae in medendo* (Halle, 1695).

59 Stahl, *De passionibus*, 3; Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen,” 24–25.

60 Stahl, *De passionibus*, 6; Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen,” 28.

trepidations, hectic fever, quartan fever, destructive hypochondria palpitations of the heart, and melancholy.”⁶¹ The excessive appetites of the sanguine, in turn, “put the digestion out of order, and disturb the life-force.”⁶² Finally, the phlegmatic got “cancer” and “diarrhoea” due to the complete lack of passion.⁶³ The connection among temperament, passion and disease characterised also Richter’s *Unterricht*. Much as Stahl had done, Richter connected temperament, passion and disease. Rage “causes great movement in the blood,” which in turn leads to “stomach pains, nausea. . . colic, diarrhoea,” pleasure makes “the human nature lazy and uncomfortable” and so on.⁶⁴ Although both Stahl and Richter discussed the internal senses, their role in humoral medicine would become somewhat of Alberti’s expertise.

Alberti was especially interested in fantasy (*phantasia*) and imagination (*imaginatio*). In the medieval and renaissance tradition, imagination was sometimes conceived of as passive storage, whereas fantasy was active in composing new, often fictive, objects. In the Albertian discourse, however, the relation between the two was often ambivalent. Sometimes they seemed to be used synonymously, signifying the ability of the soul to produce new imaginary objects. But sometimes fantasy also seemed to be an overarching concept that included, among other things, imagination.⁶⁵ The role of fantasy and/or imagination was discussed in detail in the dissertation *De valetudinariis imaginariis* (*On the Imaginary Sick*, 1721). “With imaginary sick we mean those people who are altogether sensitive and who distinguish themselves through intensive impressions, thoughts and imagination and who show signs of different diseases.”⁶⁶ The imaginary sick people, the author continued, “are altogether occupied with worrying about diseases, and then it may happen that they get in a state of disease and that this state either decreases or increases and gets worse.”⁶⁷ Imagination was a two-edged sword that threatened health by falling victim to worries and anxiety but that also bore on the potential of curing disease if only cultivated and channelled in the right way. In the following passage, the author illustrates this dual quality through an example depicting an imaginary sick man:

When his son’s wedding drew near, he not only hated all of those who would participate, but got weaker from imagination, perspired anxiously and was completely fettered to the bed. But his relatives and servants invited him in all possible ways to the wedding and basically dragged him there. Soon he forgot about his illness and participated joyfully together with the other friends and guests. On the whole, he was the last one to leave the wedding. After the wedding, this recovery continued for a couple of days because of the temperateness of imagination, but the hypochondriac then anew indulged in loneliness and

61 Ibid.

62 Stahl, *De passionibus*, 7; Stahl, “Über den mannigfaltigen Einfluß vom Gemüthsbewegungen,” 29.

63 Ibid.

64 Richter, *Kurzer und deutlicher Unterricht*, 131–33.

65 Michael Alberti, *Dissertatio inauguralis medica, de phantasiae usu, lusu et abusu in medicina* (Halle, 1722), 7.

66 Michael Alberti, *Dissertatio inauguralis medica, de valetudinariis imaginariis, von Menschen die aus Einbildung kranck werden* (Halle, 1721), 7.

67 Ibid., 14.

speculation and he was then back to his disastrous state again and continued to get sick through his imagination.⁶⁸

To connect fantasy to excessive passions and disease was not in any way original but reflected a common assumption within humoral medicine. What was a bit original and what marked the Albertian dissertations, however, was the emphasis on the ways in which the inner senses could be cultivated in order to cure disease and enhance health.

Connected to fantasy was the inner sense of memory. Memory was, as we have seen, traditionally conceived of as storage. While Alberti would not have argued against this view, he and his colleagues nevertheless ascribed to memory an active role intimately connected to fantasy. In *De sensuum internorum usu*, the author stressed that fantasy was often conflated with memory in the sense that the objects produced through fantasy often fell back on actual memories.

When some people take emetics and purgatives that are either taken with aversion or nausea, or when these are given in an ominous way, it often happens that they thereafter, when the medicine has been supplied, suddenly recall an earlier process in memory (where imagination also plays a role) and then they immediately feel that earlier horror and experience the effect of the sickly change in the body. If such people get another nourishment that convenes with earlier medical inconveniences. . . , which they not only conceive, in fantasy but recall in the mind, they are struck with the same fear.⁶⁹

In addition to conflating with fantasy, memory also played an important role when it came to periodical diseases such as menstruation and the like. Here, memory provided a schema for how to behave and feel in coming situations. Taken together, fantasy and memory were strong forces that in some cases caused disease and even death but that were equally powerful when it came to curing and facilitating healing. With regard to the second aspect, one of the author's principal goals was to provide an actual therapy of the internal senses.

THE THERAPY OF THE INTERNAL SENSES

As mentioned before, Alberti's studies in theology led to the 1701 publication on how to direct human actions towards God. Alberti's interest in the cultivation of the soul would remain also after the shift towards medicine, and as early as 1714 he presided over the dissertation *De therapia morborum morali* (*On the Moral Therapy of Diseases*).⁷⁰ According to the author, health and disease reflected the constitution and movements of the bodily fluids and connected temperaments. While the physician's goal was to enhance health and cure disease by reinstalling and ensuring equilibrium, this was to be done through moral therapy rather than physical treatment. The author

68 Ibid., 18.

69 Alberti, *De sensuum internorum*, 31.

70 Michael Alberti, *Dissertatio medica practica de therapia morborum morali* (Halle, 1714).

defined moral therapy as a “method of nature,” aiming at curing bodily diseases through moral “advices and aid.”⁷¹ By doing so, the doctor cured by directing the forces of the soul away from vice towards virtue in a way that reminded the reader of the classical stoic doctrine of living a virtuous life according to nature.

The idea that therapy should include moral as well as physical treatment was a recurrent theme in several dissertations. In *De valetudinariis imaginariis* he stated, “we shall now turn to the positive therapy of the imaginary sick, which again on the one hand consists of a moral part and on the other of a medical part.”⁷² Regarding the moral part, one shall treat the patient with “leniency, modesty and patience” and calm the soul by mobilising “pious and honest moderation” as well as neither “exaggerating” nor “diminishing” damage too much.⁷³ It thus worked by cultivating, channelling and directing passionate and unruly souls away from vice towards virtue. This basic therapeutic work with the passions was intimately connected to the internal senses. Especially imagination threatened to lead the soul away from virtue to the point of imaginary illness. In *De fantasiae usu, usu et abusu in medicina* (*On the Use, Mockery and Misuse of Fantasy in Medicine*, 1722) published one year later, the author discussed the ways in which the physician should strengthen his patient’s fantasy in a positive way. A “legitimate use of fantasy” was advisable but required that “the wise physician gains the patient’s confidence.”⁷⁴ Overall, the treatment of patients required therapeutic skills, psychological insights and moral character of the physician. As will be discussed in more detail in the next section, the physician must himself be and act as a virtuous person in order to be a good doctor for his patients.

Although the therapy of the internal senses was discussed in many of the Albertian dissertations, the perhaps most detailed discussion was provided in *De therapia imaginaria* (*On the Therapy of Imagination*, 1728). Drawing on ancient authorities such as Socrates, Plato and Hippocrates, the author stressed that the physician must obtain knowledge of both body and soul. “We consider him to be a real physician who possesses exact knowledge of both body and soul regarding the remaining parts of medicine.”⁷⁵ And even though treatment of diseases with the soul may seem paradoxical, numerous examples confirm that it works. In this context, the author emphasised imagination or fantasy. “We should meanwhile in this order consider and commend the fact that it is not seldom imagination itself that usually helps medicine and constitutes the medicine of the body. Thence it follows that physicians sometimes can and should alleviate the weakened health through physical and material things, sometimes by moral and ideal things.”⁷⁶ The therapy of imagination, the author continued, can be used “when patients severely reject ingestions of other medicines and out of obstinacy instead await death or endure all torments of the sickness rather than accepting the offer

71 Ibid., 9.

72 Alberti, *De valetudinariis imaginariis*, 30.

73 Ibid., 30–31.

74 Alberti, *De phantasiae usu*, 28–30.

75 Michael Alberti, *Dissertatio inauguralis medica, de therapia imaginaria, von Menschen die aus Einbildung Gesund werden* (Halle, 1728), 5.

76 Ibid., 6.

of medicines.⁷⁷ Other advantages of the therapy would be that it “often reaches its greatly desired and healthy goal faster than other widely spread medical methods for healing” and that it is “not only palliative but delivers a clear result.”⁷⁸ When it came to the more concrete content of the therapy of imagination, the author again stressed the physician’s ability to lead and direct the souls of his patients. “Therefore in this method of healing the duty of the physician is to be able to persuade in a fine way and like a rhetorician and doctor touch the emotions of the people. Even though diseases otherwise according to testimony. . . cannot be cured through eloquence, this therapy nevertheless requires a physician that is eloquent and good at persuading.”⁷⁹ When the physician behaves in a gentlemanly and virtuous way, he will make his patients trust him and listen to him. “It is therefore obvious that this trust sometimes helps more than splendid medicine. Thereupon it often happens that through this chief benefit or fundamental confidence or a mere friendly conversation with the physician, trust contributes much in order to restore health.”⁸⁰ In addition to being a virtuous person who cures by directing his patients towards virtue, diseases could also be cured “through words, song, poetry, curse and prayer.”⁸¹ That the author listed activities and practices such as these was no coincidence but reflected the fact that activities such as singing, poetry reading and prayer constituted a considerable part of the daily routines at the orphanage.⁸² Although it is hard to say whether and to what extent they were actually implemented in the medical practice, their status and role at the orphanage give us no reasons to assume that they were not.

THE PHYSICIAN

The discourses on medical therapy and especially on moral therapy were intimately linked with accounts of what kind of *persona* the physician should embody.⁸³ In Stahlian medicine there was a gradual tendency towards intersection and fusion between the Stahlian physician and the Pietist theologian, between medical therapy and pastoral care. Although this tendency can be seen in Stahl’s own work, it became a

77 Ibid., 13.

78 Ibid.

79 Ibid., 17.

80 Ibid., 24.

81 Ibid., 18.

82 Tanja Täubner, “Zum andern soltu meditirn”: Die Meditationspraktiken in der Pädagogik August Hermann Franckes, *Hallesche Forschungen* 38 (Halle: Verlag der Franckeschen Stiftungen, 2014); Peter Menck, *Die Erziehung der Jugend zur Ehre Gottes und zum Nutzen des Nächsten*, *Hallesche Forschungen* 7 (Halle: Verlag der Franckeschen Stiftungen, 2001); Margarete Welp, *Die Willenserziehung bei August Hermann Francke unter besonderer Berücksichtigung der Erziehungspraxis in den Franckeschen Anstalten* (Dortmund, 1977).

83 *Persona* is here used as an analytical concept referring to the manifestation of a socially recognisable type or office such as for instance the philosopher, the theologian, the physician etc. For an overview of the concept of *persona* and its usage in history and social science see: Conal Condren, Stephen Gaukroger, and Ian Hunter, “Introduction,” in *The Philosopher in Early Modern Europe: The Nature of a Contested Identity*, ed. Conal Condren, Stephen Gaukroger, and Ian Hunter (Cambridge: Cambridge University Press, 2006); Lorraine Daston and Otto H. Sibum, “Introduction: Scientific Personae and Their Histories,” *Science in Context* 16 (2003): 1–8.

more salient feature in the works of Richter and the other orphanage physicians. One work that was particularly revealing was here the hotchpot of texts and notes written by Stahl and his students and edited and published by Johann Storch as the *Praxis Stahlianiana* (*Stahlian Practice*, 1728).⁸⁴ Although this monstrous text of more than 1,300 pages covered most aspects of Stahlian medicine, the discussion of the education and characteristics of the medicus occupied a prominent position.

Apart from being well disciplined in the art of making observations and drawing conclusions, the *medicus* ought to embody a number of epistemic virtues connected to scientific knowledge production.⁸⁵ The medicus ought to be a trustworthy teller of truth (*veritas*, *Wahrheit*) and a possessor of wisdom (*prudentia*, *Weisheit*), in the sense of an ability to use reason to address the larger context of causes connected to health and disease. In addition, he must also possess patience (*patientia*, *Geduld*) and courage (*animositas*, *Herzhafftigkeit*). For instance, by lacking wisdom, the *mechanical medici* were unable to draw the correct conclusions from their observations. Or, to take another example, by lacking patience the *methodici* were potentially lethal in their eagerness to blindly apply methodological rules.

Virtues were also of a more general social importance. In the *Praxis Stahlianiana*, a particularly recurrent theme was that of the great responsibility that rested on the shoulders of the *medicus*. If he failed to act in a virtuous way, the result could easily be the death of his patients. While this was the case with truth and wisdom, courage provided a particularly revealing example. The medicus who fell prey to his imagination and feelings of horror, fear of contagion and disgust was in constant mortal danger. Likewise, a patient who saw his own horror mirrored in the face of the physician had little chance to recover. “Woe such poor man when he is to visit people who lie dying in escalating plaque! And woe also the sick who lay their lives in the hands of a man who fears his own shadow!”⁸⁶ In contrast, as long as the medicus was able to listen to the patient and make him understand that there was still hope, then he would keep fighting the disease. By acting in such a manner, the *medicus* gave nature a helping hand in the struggle against the disease.

So far, I have drawn attention to the kind of virtues that characterised the medicus as a producer of scientific knowledge and as clinical physician. In addition to these, however, there was also a superior category of virtues connected to Pietism. If the medicus did not lead a pious life in honour of God, all the other virtues were in vain, as was the method with all its particular techniques and operations. In the *Praxis Stahlianiana*, the author emphasised fear of God and piety as the principal virtues of the *medicus*:

That he above all practices fear of God. From this, I have composed my small proverb: aut pius, aut medicaster. And with this, I insinuate that even though a medicus shows good study technique and erudition, he is still unworthy of the

84 Georg Ernst Stahl, *Praxis Stahlianiana* (Leipzig, 1728).

85 *Ibid.*, 80–86.

86 *Ibid.*, 83.

name of a true and honest medicus as long as he is not also a follower of fear of God and piety.⁸⁷

The reason for why the *medicus* must lead a pious life marked by both love and fear of God was that God is the source of all healing and all recovery. “The Medici must remember that the profession is not their own but rather that of God. . . Thus, the one who has once began the profession of healing the sick he does not primarily serve the sick but rather God himself.”⁸⁸

Now, as we have seen, Alberti found his way to medicine through theology. In fact, following in his father’s footsteps, he actually published his first text on how to direct all human action to God at Altdorf in 1701. Given this background, and the interests in its psychological dimensions, it is not surprising that Alberti felt at home in the Stahlian medicine, with its emphasis on the soul and its power over the body. Throughout the Albertian dissertations, it was emphasised that the physician must himself be a moral and virtuous person. This was clear in the early dissertation *De therapia morborum morali*, where the physician shouldered the role of being the moral teacher leading and directing the souls of his patients in the moral therapy. In the later disputations *De valedudinariis* and *De usu et abusu medicine* on the imaginary sick and in the use and misuse of fantasy, the Albertian authors came back to the person who was the physician as someone who embodied qualities such as wisdom and self-restraint, gentleness and peace of mind. The logic behind these thoughts was that the physician cured by leading the patients toward virtue and peace of mind, something, that in turn, required the physician to embody these qualities. If the picture of the physician was discussed and emphasised in several Albertian dissertations, nowhere else did this become so clear as in the 1722 dissertation *De religione medici*.⁸⁹ “The Lord has created the physician and medicine comes from the highest. . . . So great is the connection between God, religion and physician that without God and Religion there can be no complete physician.”⁹⁰ Having stated the intimate connection between God and medicine and between God and the physician, the author continued by examining the consequences of this connection in more detail, arguing that a good teacher must also be a man of God. The “obligations and requirements” of the religious physicians were treated in a separate paragraph where the author emphasized piety.⁹¹ “First of all we stress the true, sincere, serious and approved piety. . . . This ἐνσέβεια or pietas is useful to everything, or is useful in every thing, which has been promised life in this world and the coming one, so why should medicine itself not also be of use.”⁹² Much as did Francke and the other Pietists, the author saw piety not as some abstract theoretical virtue but as intimately connected to concrete exercises.

87 Ibid., 106–7.

88 Ibid., 111.

89 Michael Alberti, *Dissertatio medica inauguralis de religione medici* (Halle, 1722).

90 Ibid., 11.

91 Ibid., 19.

92 Ibid.

And as the apostle advised *exercise yourself in piety*, this is to be commended to those who learn and exercise medicine. In this culture and this study of piety, all religious physicians can exercise themselves in order to gain knowledge without offending God or humans. This is the famous genuine *askesis*. Through this, the physicians of the *collegia askesis* gain their authority. . . . This truly requires exercises in piety, not only contemplation or empty exercises of reason, but effective exercises through which all that is turned into effect, which piety prescribes, demands and urges.⁹³

As evident, daily life at the orphanage was structured around spiritual exercises such as prayer and meditation. The purpose of these exercises was to temper and cure the mind from the harmful forces of passion, thereby contributing to the moulding of pious Christians. As Richter and the other orphanage physicians elaborated Stahl's medicine, they not only explored the effects of strong passions on bodily diseases but also prescribed prayer and meditation as powerful cures. They emphasised the important role of the physician who in order to make the therapy work must himself serve as a virtuous example. What the author did in *De religione medici* was to take this idea one step further by arguing that the physician ought to undergo special training in religious exercise. When warning against the "empty exercises of reason" he mirrored the common Pietist critique of purely intellectual book learning as dead and useless. One good example of this is Francke's biography or *Lebenslauf* where he, in a famous passage, reflected on his own struggle with failing faith. "I knew my theology in my head rather than in my heart, and it was a dead science rather than a living knowledge."⁹⁴ Francke's reflection echoed a common theological trope that had a long tradition and went back to St Paul's metaphoric description of faith as a fountain of living water. In seventeenth-century Germany, the metaphor became especially popular among Pietists, including Francke. But rather than understanding the appeal to living faith and knowledge as a purely metaphorical expression, it occupied a central role at the very core of the theology and the spiritual practice of persons such as Francke.⁹⁵ One of the central goals of prayer and meditation was thus to produce a sense of living faith and knowledge of God that would permeate the whole soul and that constituted the difference between a real Christian and a hypocrite. Ignited with living faith and knowledge of God, the Christian would constitute a very powerful tool in the service of God. There are reasons to believe that Stahl and the Albertian discourses on the living, on the living organism, and on the dangers of the intellectual and dead were not only a product of vitalist medicine but that they relied even more on the theological and particularly Pietist notions of living faith and knowledge as opposed to the purely intellectual and dead. Against this background, the physician comes to view even more as a *persona*, conjoining the character traits of the physician with that of the pastor.

93 Ibid.

94 August Hermann Francke, *Lebensläufe August Hermann Franckes*, ed. Markus Matthias, *Kleine Texte des Pietismus 2* (Leipzig: Evangelische Verlagsanstalt, 1999), 12.

95 Andreas Rydberg, *Inner Experience: An Analysis of Scientific Experience in Early Modern Germany* (Uppsala: Uppsala Universitet, 2017), 94–100.

CONCLUSION: ALBERTI AND THE EARLY MODERN MEDICINA CULTURA ANIMI

How should we understand Alberti's medicine? What was the overall project of which it was part? In line with the traditional reading of Stahlian medicine, Alberti could be seen as yet an early modern contributor to the mechanism-vitalism debate, a debate that would peak first in the nineteenth century. Another, less anachronistic option, would be to situate Alberti's medicine within the context of the "scientific revolution," thus approaching it as part of an emerging new set of scientific theories and practices where empirical observations and experiments became all the more important. Seen as such, Alberti's medicine contributes to the project of unmasking and revealing the underlying laws of nature that structure God's creation. There is, however, also a third option or narrative connected to the reading of ancient and early modern philosophy as a *way of life* or a *cultura animi*.

This reading was associated with the French philosopher Pierre Hadot. In the early 1980s, Hadot levelled critique at the understanding of ancient philosophy as an inconsistent and embryotic attempt to solve epistemological problems.⁹⁶ In sharp contrast to such reading, he argued that ancient philosophy constituted an attempt to affect the entire human organism. To engage in philosophy was to engage in a therapeutic activity, aimed at improving and perfecting the self cognitively and morally through carefully crafted spiritual exercises. Hadot's thoroughly argued and meticulously supported reinterpretation definitely struck a chord, and in the following decades a number of scholars launched similar readings. Most prominently, Martha C. Nussbaum argued, in the book *The Therapy of Desire*, that Hellenistic philosophy is best understood as a therapeutic project aimed at curing the human soul from its suffering.⁹⁷ By way of supporting her argument, she draws attention to a broad repertoire of discourses on philosophy as medicine and the philosopher as a physician who heals his patients by using philosophical arguments.

More recently, historians of philosophy and science have adopted the Hadotian reading and applied it to the early modern case. While some scholars have drawn attention to the case of Descartes, arguing that especially the *Meditations* ought to be understood in the context of spiritual exercises, others have made similar claims about Leibniz and others.⁹⁸ Ian Hunter has, for instance, argued that Leibniz's philosophical method of abstraction should be understood "as a speculative practice performed by the philosopher on himself" in order to reach wisdom.⁹⁹ If the reading of early modern

96 Pierre Hadot, *Philosophy as a Way of Life: Spiritual Exercises from Socrates to Foucault*, ed. Arnold I. Davidson, trans. Michael Chase (Malden: Blackwell, 1995). For a discussion of Hadot's influence, see: Michael Chase, "Introduction," in *Philosophy as a Way of Life: Ancients and Moderns: Essays in Honor of Pierre Hadot*, ed. Michael Chase, Stephen R. L. Clark, and Michael McGhee (Malden, MA: Wiley-Blackwell, 2013).

97 Martha C. Nussbaum, *The Therapy of Desire: Theory and Practice in Hellenistic Ethics* (Princeton: Princeton University Press, 1996).

98 John Cottingham, "Descartes as Sage: Spiritual Askesis in Cartesian Philosophy," in *The Philosopher in Early Modern Europe*; Matthew L. Jones, *The Good Life in the Scientific Revolution: Descartes, Pascal, Leibniz, and the Cultivation of Virtue* (Chicago: University of Chicago Press, 2006).

99 Ian Hunter, *Rival Enlightenments: Civil and Metaphysical Philosophy in Early Modern Germany* (Cambridge: Cambridge University Press, 2001), 109.

philosophy as a way of life marked by spiritual exercises has by now been fairly well established, there is one work that is particularly relevant when it comes to the topic of early modern medicine. In the book *Regimens of the Mind: Boyle, Locke, and the Early Modern Cultura Animi Tradition*, Sorana Corneanu approaches the early modern philosophy and medicine in terms of what she refers to as the *cultura animi* or *medicina cultura animi* tradition.¹⁰⁰ The *cultura animi* tradition constituted a broad phenomenon, which spanned several disciplines and that aimed at offering “‘medicine’ or ‘physick’, or else to prescribe the best ‘culture’, for a mind described as ‘diseased’ or ‘distempered’ or ‘perturbed.’”¹⁰¹ By adopting a perspective very similar to that of Nussbaum, Corneanu launches a reading that takes us away from abstract theories and premature science to exercises of reason and the senses working as a medicine of the mind, curing it from the diseases of misconceptions, false beliefs and the states of passion attached to them.

Taken together, Nussbaum and Corneanu advance powerful arguments for the view that ancient and early modern philosophy served as a therapeutic medicine for the mind. This said, neither makes any substantial attempts to relate philosophy as a medicine for the mind to actual medical theories and practices at the time. The obvious question here becomes if, and to what extent, the philosophical *cultura animi* had anything to do with medicine or if it should rather be understood as a distinctly philosophical endeavour? If the latter is the case, it opens up for a discussion of what significance we should ascribe to the “medical” part of the philosophical practice apart from being merely rhetorical. Now, it is against this background that the example of Alberti and the Stahlian medicine becomes particularly revealing. I think that the example of Alberti illustrates two things very clearly. First, it shows that medicine was not necessarily a practice separated from the *cultura animi* tradition but that it, at least in some cases, was deeply engaged in the problem of how to cure the human being by cultivating the soul. Second, it shows that medical identities were not always distinct but that they sometimes took the form of hybrid identities that benefited from the incorporation of a range of markedly practical exercises brought from the Christian and philosophical traditions. My point here is not that these other traditions, and the theories and practices that they entailed, somehow replaced traditional medical practices or identities, or that they made people turn to theology or philosophy for treatment, but rather that they in some cases seemed to have enabled new forms of apparently both powerful and successful medical identities.

Now, why is the *cultura animi* reading important? What does it have to offer the history of medicine? First, the *cultura animi* reading takes us away from presentist readings of the history of medicine as a gradual path from superstitious theories and practices towards a full-blown modern scientific discipline. Second, and related to the first, it also warns us against presupposing that early modern medicine should be understood as a distinct discipline in that same way as we today understand it. In sharp contrast to such presupposition it acknowledges that disciplinary borders were often vague in the early

100 Sorana Corneanu, *Regimens of the Mind: Boyle, Locke, and the Early Modern Cultura Animi Tradition* (Chicago: University of Chicago Press, 2011).

101 Corneanu, *Regimens of the Mind*, 4.

modern age and that identities often took form in the intersection between a wide range of cross-disciplinary practices that nevertheless might share a common vision. To acknowledge the *cultura animi* is to take seriously the project of reconstructing early modern philosophy, science and medicine not as premature attempts at modern disciplines but as different and historically distinct projects that have something to teach us about both the past and the present.

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