

Proto-Geriatrics

A Subdiscipline of Late Medieval Medicine under the Banner of Humanism?

Abstract

Relating to content, quality and quantity, the nearly 400 years which the European High and Late Middle Ages lasted offer impressive developments in the field of medicine. The broad unfolding of intellectual cultures in the 12th century also led to a modest flourishing of proto-gerontology with the publication of monograph treatises and special investigations during the High and Late Middle Ages. In terms of content, proto-geriatric traditions can be traced back at least to Greco-Roman antiquity; but until modern times, they did not constitute nuclei for an independent specialist discipline. This chapter will start with methodological considerations concerning the search of relevant text types. Then I will present the High and Late Medieval development of this special medical knowledge. I will try to identify the most essential sources, authors, and contents of natural-philosophical and medical research on old age during those times. Subsequently, some examples of the reception of this proto-geriatric knowledge in other, non-medical texts will be discussed. Above all, letters written by the humanist Petrarch disclose the links between late medieval (scholastic) medicine and the humanities. Finally, two great proto-gerontological-geriatric works by Marsilio Ficino and Gabriele Zerbi – both published in 1489 and both written by humanistic authors – are examined to learn whether this was the starting point of a fundamental new development in proto-geriatrics.

1 Introduction

Gerontology and geriatrics are terminologically and technically (sub-)disciplines that originated in the 20th and 21st centuries.¹ It was the Austro-American Ignaz Leo Nascher

1 Daniel Schäfer/Ferdinand Peter Moog, Gerokomie – Gerontologie – Geriatrie. Geschichte der Altersheilkunde im Spiegel ihrer Benennungen, in: Deutsche Medizinische Wochenschrift 130 (Nr. 47) (2005), pp. 2719–2722.

who, in 1909, coined the term “geriatrics”;² the first geriatric societies and scientific journals emerged in the 1930s and 1940s. In terms of content, proto-geriatric traditions can be traced back – as not yet clearly defined branches of knowledge – at least to Greco-Roman antiquity; but until modern times, they did not constitute nuclei for an independent specialist discipline. This disciplinary and professional marginality³ does not only apply to premodern scholarly proto-geriatrics: especially in the Middle Ages, in many social areas (e. g. culture, art, literature and law) the elderly were only of marginal importance; an exception here may be the Church with its hierarchical and gerontocratic organization, which will be of some significance for our topic.

Relating to content, quality and quantity, however, the nearly 1 000 years which the European Middle Ages lasted offer impressive developments: the broad unfolding of intellectual cultures in the 12th century⁴ also led to a modest flourishing in the field of studying old age with the publication of monograph treatises and special investigations in the High and Late Middle Ages.⁵ However, there can be no question of a systematic collection and study of this proto-geriatric knowledge as it was true for the arising gerocomies since the end of the 16th century.⁶

This chapter starts with a discussion of the development of this knowledge along with eminent texts and protagonists, followed by some examples of the reception in other, non-medical texts. Finally, two great gerontological-geriatric works both published in 1489, and both written by humanistic authors, are examined to determine whether they prompted the beginning of a fundamental new development in proto-geriatrics under the banner of Humanism.

2 Ignaz Leo Nascher, *Geriatrics*, in: *New York Medical Journal* 90 (1909), p. 358.

3 Correspondingly, Josef Ehmer postulates a general marginalization of the topic of old age in premodern literature; Josef Ehmer, *Das Alter in Geschichte und Geschichtswissenschaft*, in: Ursula M. Staudinger/Heinz Häfner (Eds.), *Was ist Alter(n)? Neue Antworten auf eine scheinbar einfache Frage*, Berlin 2008 (SCHRIFTMATH 18), pp. 149–172, at p. 160.

4 Chiefly, under the influence of the Aristotle-reception (see below), and maybe due to a temporary increase in the number of elderly people in the population resulting from plague epidemics; cf. George Minois, *History of Old Age. From Antiquity to Renaissance*, Cambridge 1989, pp. 210–220.

5 Ehmer, *Alter in Geschichte* (see note 3), pp. 149–172, presents a survey across epochs and topics. Metzler provides the best access to the older and newer research literature in the notes of her cultural and social historic overview; Irina Metzler, *A Social History of Disability. Cultural Considerations of Physical Impairment*, New York 2015 (Routledge Studies in Cultural History 20), pp. 92–153.

6 Daniel Schäfer, *Gerokomien – eine vergessene Fachliteratur der frühen Neuzeit*, in: *Würzburger medizinhistorische Mitteilungen* 21 (2001), pp. 7–17.

2 Development of Proto-Geriatric Knowledge

Despite the fact that there was no systematic gathering and study of proto-geriatric knowledge, it is possible to identify the most essential sources, authors and contents of natural-philosophical and medical research on old age during those times. To solve these complicated questions, former medical historians drew upon the medical training of the authors or used information given by them relative to the channels of reception: thus the focus was placed on texts of learned ‘physicians’ or ‘medical schools’ such as Salerno or Montpellier, and on the use of original ‘medical’ sources of Greco-Roman antiquity and the Islamic Middle Ages.⁷ This pragmatic, but also anachronistic approach, because modern ideas of the medical profession and medicine were anticipated, is inadequate in many respects. The concept of the “learned physician” only took root in the late Middle Ages (after modest beginnings between the 11th and 13th century); he primarily was a graduate in the *artes liberales* with a scholastic education in the study of books and had little contact with medical practice. Hence, for a long time many scholars who concerned themselves with geriatric medicine in the broadest sense were often not graduates in medicine nor experienced in medical practice.

Assuming that such a learned doctor or scholar wanted to write about proto-geriatric topics and searched, in the typical way of the respective epoch, for appropriate templates produced by authorities, he would not find any central monograph stemming from the Greco-Roman antiquity or the Islamic Middle Ages to refer to. Above all, until the late 13th century, he would have had no access to the relevant authentic writings of Galen (“De marasmo”; book 5 of “De sanitate tuenda”), because these works were not yet available in Latin translations.⁸ Rather, he would have had to fall back on general compendia of medicine and compilations dating from late antiquity or the 11th century, for example the “Articella”, in other words he would have had to rely on texts translated

7 Still worth reading is Luke Demaitre, *The Care and Extension of Old Age in Medieval Medicine*, in: Michael M. Sheehan (Ed.), *Aging and the Aged in Medieval Europe*, Toronto 1990 (Papers in Mediaeval Studies 11), pp. 3–22. Demaitre closely builds on the older medical-historical literature, among others Mirko D. Grmek, *On Ageing and Old Age. Basic Problems and Historic Aspects of Gerontology and Geriatrics*, Den Haag 1958 (Monographiae biologicae V,2); Gerald J. Gruman, *A History of Ideas about the Prolongation of Life. The Evolution of Prolongevity Hypothesis to 1800*, Philadelphia 1966 (Transactions of the American Philosophical Society, N. S. 56,9); Joseph T. Freeman, *Aging. Its History and Literature*, New York 1979.

8 Demaitre, *Care and Extension* (see note 7), p. 5 (note 11); Luke Demaitre, *The Medical Notion of ‘Withering’ from Galen to the Fourteenth Century. The Treatise on Marasmus by Bernard of Gordon*, in: *Traditio* 47 (1992), pp. 259–307, at p. 261.

from Arabic or Greek containing only few specifics on old age. From the 12th century onward, there existed translations of equally unspecific synopses of Islamic authorities (especially the “Canon” of Ibn Sina / Avicenna⁹). But let us suppose that our doctor wanted to advise a rich and powerful patient on his dietetics, his choice would have been the ancient Greek or Islamic texts dealing with health (the so-called “*regimina sanitatis*”). Certainly, these texts occasionally offered some remarks on dietetics in old age,¹⁰ but the discussion with regard to the different stages of life was often unspecific. The first *regimina sanitatis* that specifically focused on the elderly appeared in the early 14th century, for instance Guido da Vigevano’s “*Liber conservacionis sanitatis senis*”, that appeared around 1335.¹¹

What does ageing mean? And what kind of physiological processes are going on? Treating these issues relative to the theoretical-natural philosophy, a graduate of the medieval university was inclined to fall back on relevant passages of the rediscovered Aristotelian “*Parva Naturalia*” and the “*Meteorologica*”. Since the middle of the 13th century, these texts were widely commented on, yet mainly by scholars, who – like Albertus Magnus, Adam of Buckfield or Petrus de Hibernia (Peter of Ireland) – had no direct

9 In particular Avicenna, *Canon*, ed. Venice 1507/reprint Hildesheim 1964, p. 3v (lib. 1, fen. 1, doct. 3, ch. 3: illustration of the complexions in the different stages of life); *ibid.*, pp. 53r–64v (lib. 1, fen. 3, doct. 1–3: dietetics of different stages of life. In her study, Paola Carusi compares the six chapters of this dietetics of old age with the writings of Galen (mainly “*De sanitate tuenda*”, lib. V) and comes to the conclusion that Avicenna, more explicitly than Galen, “*individua la medicina geriatrica come una parte ben distinta della medicina*” (“distinguishes geriatric medicine as a part of medicine in its own right” [own translation]) (Paola Carusi, *Età avanzata e qualità della vita nel canone di Avicenna*, in: Chiara Crisciani / Luciana Repici / Pietro B. Rossi [Eds.], *Vita longa. Vecchiaia e durata della vita nella tradizione medica e aristotelica antica e medievale*, Firenze 2009 [Micrologus’ Library 33], pp. 41–60, at p. 47).

10 On the model of the “*Canon*” by Ibn Sina, of the “*Liber Regalis*” by Haly Abbas (al-Mağūsi) (“*Liber totius medicine necessaria continens*” [“*Kitab al-Malaki*”]), Lyon 1523, fol. 153v (II. 1.24 “*De regimine senum*”) or of the “*Liber medicinalis*” by Rhazes (al-Razi), *Contenta in hoc volumine. Liber Rasis ad Almansorem ... Venedig 1497*, fol. 21v (lib. IV, chap. XXXI “*Summa de regimine aliarum etatum*”). – Cf. Averroes, “*Colliget*”, in: *Aristotelis ... opera ... cum Averrois in ea opera ... comentarii*, vol. 10, Venetiis 1562 (reprint Frankfurt a. M. 1962), pp. 138–139 (VI. 9 “*De regimine senilis aetatis*”).

11 Guido da Vigevano, *Liber conservacionis sanitatis senis* (around 1335; Ms. Paris, Bibl. Nat., Lat. 11015, fols. 32–41), written for the 45 year old French King Philip V. – Overview to the *regimina sanitatis*, in: Wolfram Schmitt, *Theorie der Gesundheit und „Regimen Sanitatis“ im Mittelalter*. Habilitation thesis, Heidelberg 1973; Pedro Gil Sotres, *The Regimens of Health*, in: Mirko D. Grmek (Ed.), *Western Medical Thought from Antiquity to the Middle Ages*, Cambridge, Mass.-London 1998, pp. 291–318, at pp. 316–318.

relation to medicine. Nevertheless, the reception of Aristotle (and that of Ptolemy¹²) was an integral part of late medieval scholastic-Arabic medicine: a learned physician like Petrus Hispanus (Portugalisensis) (Peter of Spain) was not only familiar with Hippocrates, Galen or Rhazes, but also with the “Parva naturalia”. In general, in the 13th century, “lay-medical men dealt with a medically underpinned natural philosophy”¹³, while physicians trained in natural philosophy explored the biological arguments of Aristotelian writings (like Galen in the 2nd century A. D.). It is due to this reciprocal influencing that staunch medical critics such as the (natural) philosopher Roger Bacon focused their attention on subjects regarding proto-geriatrics – Bacon not only produced texts on the prolongation of life (see below), but he is also seen as the author of a classic dietetics for the elderly, with reference to Ibn Sina and Rhazes.¹⁴

Along with authors and sources, the content-related spectrum expanded over the centuries. Propaedeutic basic knowledge about the differences of the life stages already circulated in the early Middle Ages. Basically, the four-part scheme chosen by Beda Venerabilis (“De temporum ratione”, ch. 35) was a better fit to the humoral and quality theory of ancient medicine than the rather theologically motivated division into six to eight life ages, which we also find in Beda, but above all in Isidore of Seville (“Etymologiae”, XI. 2) who followed Augustine in this matter.¹⁵

Since the 11th century, dietetic knowledge reached the West, first through the reception of dietetic-therapeutic texts to be found for example in the “Canon”¹⁶, and later in the context of the above-mentioned general health *regimina*. In these tracts, topics

12 Ptolemy, Tetrabiblos, Cambridge, Mass. 1940 (Loeb Classical Library 435), IV. 10, p. 447 (division of the human ages of life in seven stages, the last one was assigned to Saturn). Regarding the reception, cf. Harry Peters, Jupiter and Saturn. Medieval Ideals of “Elde”, in: Albrecht Classen (Ed.), Old Age in the Middle Ages and the Renaissance. Interdisciplinary Approaches to a Neglected Topic, Berlin 2007 (Fundamentals of Medieval and Early Modern Culture 2), pp. 375–392.

13 Esteban Law, Etas – Die theoretischen Grundlagen des Alters in der mittelalterlichen Heilkunde, in: Christoph Oliver Mayer / Alexandra-Kathrin Stanislaw-Kemenah (Eds.), Die Pein der Weisen. Alter(n) in Romanischem Mittelalter und Renaissance, München 2012 (Mittelalter und Renaissance in der Romania 5), pp. 59–75, at p. 70.

14 Roger Bacon, Fratris Rogeri Bacon De retardatione accidentium senectutis cum aliis opusculis de rebus medicinalibus, ed. by Andrew G. Little / Edward T. Withington, Oxford 1928, pp. 90–95 (“De universali regimine senum et seniorum”). About Avicenna and Rhazes see note 10.

15 John A. Burrow, The Ages of Man. A Study in Medieval Writing and Thought, Oxford 1988, pp. 12–13, 82–84.

16 Avicenna, Canon (see note 9), pp. 63v–64v (lib. 1, fen. 3, doct. 3, ch. 1–6). – A short *regimen senum* treating mainly the excretion of superfluous humours is to be found within the didactic poem “al-Urguza fit-tib” (Latin version printed *ibid.*, p. 570v).

specifically connected with old age were on the increase,¹⁷ mainly in cases when the rules were in accordance with the pathophysiological theory, meaning that they were substantiated and classified in harmony with the theory of temperaments and complexions. Assuming that the vital heat and moisture were dwindling from birth onwards, the temperament of older people was defined as being “cold” and “dry”. Accordingly, dietic countermeasures (warm climate, baths, appropriate foodstuffs and exercises) were deemed to ensure a cautious compensation. It is one of the tenets of Salernitan medicine that the temperament of an individual changes over time; it was also held that children and the elderly were ‘defective’ by nature and lingered between the condition of health and disease (the same argumentation can also be found in the “Kitab al-Malaki” by Haly Abbas, i. e. in his Latin version “Liber pantegni” by Constantinus Africanus).¹⁸

In the realm of old age pathology, Galen’s analogy in which he drew a parallel between hectic fever and dried out old age was already known from Islamic Literature in the middle of the 12th century, 150 years before the Latin translation of “De marasmo”.¹⁹ The list of elderly diseases, included in the Hippocratic *aphorisms*, was also made known very early.²⁰ However, no systemized clinical pathology of old age developed from this foundation and this deficiency was only overcome in early modern times.

In general, the reception of the “Canon Avicennae” differentiated and varied the pathophysiological picture of ageing. The “Canon” bridges the apparent contradiction in correlating the qualities with the ages: on the one hand, the last phase of life was regarded as dry because of the continuous desiccation of man, on the other hand it was deemed moist because of the seasonal analogy (winter); only summer and autumn are dry.

17 The tables included in the “Taqwim as-sihha” by Ibn-Butlan, latinised in the 13th century, even contained a column displaying the ages of life in which the favorable effects of a certain lifestyle are listed, above all those related to various foods (Tacuinum sanitatis in medicina. Codex Vindobonensis ser. nova 2644 der Österreichischen Nationalbibliothek. Faksimile-Ausgabe, Graz 1967, figs. 1–2 [without pagination]).

18 Schmitt, Theorie (see note 11), p. 92.

19 Peter H. Niebyl, Old Age, Fever, and the Lamp Metaphor, in: Journal of the History of Medicine and Allied Sciences 26 (1971), pp. 351–368; Michael R. McVaugh, The “humidum radicale” in Thirteenth-Century Medicine, in: Traditio 30 (1974), pp. 259–283.

20 Daniel Schäfer, Old Age and Disease in Early Modern Medicine, London 2011 (The Body, Gender and Culture 4), pp. 32–34; Gabriele Zerbi refers in the prologue of his “Gerontocomia” to the relevant aphorism III. 31 without discussing specific diseases (Gabriele Zerbi, Gabrielis Zerbi Veronensis ad Innocentium VIII. Pon. Max. Gerontocomia [!] feliciter incipit, Roma 1489, prologus, no pagination).

According to Avicenna, the elderly are intrinsically dry, but extrinsically moist.²¹ In this context, he offers a rather complex, speculative understanding of the relationship between the pathophysiological lack of intrinsic heat and innate moisture: the desiccation is not only the result of external feverish heat or of innate warmth which, as a vital flame, is dependent on oily fuel.²² The body also dries out as a result of an insufficient regeneration of this inner moisture, because its restoration is partly dependent on the heat-related digestion of food.

In the case of a gradual decline in heat, the result was an irreversible vicious circle: the moisture consumed becomes ever more difficult to replace, since the heat necessary for its production and its intrinsic intake is lacking.²³ Instead, the insufficient digestion engenders an accumulation of moisture on the external solid parts of the body. This *humor extraneus* constitutes a superfluous waste and, as such, is another reason for ageing.

Eventually, the great medieval reception of the Aristotelian “Parva naturalia” not only extended the number of recipients (as already mentioned) but it also enriched the ancient picture of the lamp or flame metaphor propagated by Islamic authors²⁴ with hypotheses on longevity.²⁵ But, Aristotelian reception also meant the dissemination of the encyclopaedic treatise “Secretum Secretorum” that was ascribed to Aristotle for a long

21 Schäfer, *Old Age* (see note 20), p. 28. – This concept already appears in Galen (In Hipp. Nat. Hom. Comment. 3,7 [XV, 185–190 Kühn]; De temper. 2,2 [I, 580–582 Kühn]), but its dissemination in the medieval Western world goes back to Islamic medicine.

22 Avicenna does not explicitly equate the *humidum radicale* derived from semen with the *humidum nutrimentale* which develops in the last process of digestion, yet this was the interpretation made in the High and Late Middle Ages (e. g., in Arnau de Vilanova); cf. Law, *Etas* (see note 13), pp. 69–72.

23 Avicenna, Canon (see note 9), p. 53r (lib. 1, fen. 3, doct. 1), 4r (lib. 1, fen. 1, doct. 3, ch. 3); cf. Michael Stolberg, *Die Lehre vom „calor innatus“ im lateinischen Canon medicinae des Avicenna*, in: *Sudhoffs Archiv* 77 (1993), pp. 33–53, at p. 37; Niebyl, *Old Age* (see note 19), p. 359. – Avicenna’s metaphorical conception differs notably from Galen’s. According to him, the superabundant external moisture can indirectly lead to the extinction of the *calor innatus*, just as lamp oil can no longer be burnt after it has been diluted with water.

24 Aristotle, *Juv.* 470 a1; *Resp.* 474 b13–24; *GA* 784 b7 f.; *Pr.* 875 a4–15. Cf. Niebyl, *Old Age* (see note 19), pp. 351–368; Daniel Schäfer, *More than a Fading Light. Old Age Physiology between Speculative Analogy and Experimental Method*, in: Manfred Horstmanshoff/Helen King/Claus Zittel (Eds.), *Blood, Sweat and Tears. The Changing Concepts of Physiology from Antiquity into Early Modern Europe*, Leiden 2012 (*Intersections* 25), pp. 241–266.

25 One hypothesis, for instance, says that creatures of the same species live longer in hot than in cold countries or that female animals have a shorter lifespan than do male animals (Aristotle, *Long.* 466 b15–19). – It is interesting to note that in medieval comments such details were occasionally adjusted to the changing circumstances: for example, in book 3 of the “*Epitome*” of Averroes – summing up “*De Longitudine*” – the Latin version by Michael Scotus brings up the longevity of women;

time. Its complete Latin translation was available in the first half of the 13th century and contains a *regimen sanitatis* and alchemical instructions about gold making, astrological set pieces, and wonder herbals, gems, and animals as drugs. The text met with a strong response, and one of the introductions was written by Roger Bacon.²⁶

In general, in the 13th century, both the genuine and the (from a modern perspective) pseudo-Aristotelian writings centred on the gerontological topics dealing with longevity or age retardation as well as rejuvenation. In a transitional phase before this spectrum of new themes dominated, the anonymous treatise “(Epistola) De retardatione accidentium senectutis” was published, and for a long time was attributed to Roger Bacon.²⁷ This first medieval monograph treatise on proto-gerontology and -geriatrics, probably written around 1235, combines and explicitly distinguishes between ample ‘ancient’ mainly dietetic-humoural knowledge and early alchemical-therapeutical advice: while the conventional regimen pursues the goal of preserving health and preventing a morbid premature ageing, the new regimen is supposed to retard natural signs of old age (whiteness of the hair, wrinkles, paleness, shortness of breath, insomnia, general weakness, and sensory impairment).²⁸ First, the author touches upon the conventional causes of the most significant signs of old age (white hair, wrinkles, paleness, shortness of breathing, insomnia, limited sense perception, and general weakness). A warming, moistening diet counteracting these causes (cold, dryness, anaemia) as well as the expelling of the superfluous, extrinsic mucus would be helpful against the *accidentia* of old age, whereas drying or cooling food would intensify them. These classical dietetics were then sup-

cf. Patrick O. Lewry, Study of Aging in the Arts Faculty of the Universities of Paris and Oxford, in: McMahan Sheehan (Ed.), *Aging and the Aged* (see note 7), pp. 23–38, at p. 26.

26 Gundolf Keil, “Secretum Secretorum”, in: *Die deutsche Literatur des Mittelalters – Verfasserlexikon*, vol. 8, Berlin et al. 1992, cols. 993–1013; Steven J. Williams, Roger Bacon and the “Secrets of Secrets”, in: Jeremiah Hackett (Ed.), *Roger Bacon and the Sciences. Commemorative Essays*, Leiden 1997 (Studien und Texte zur Geistesgeschichte des Mittelalters 57), pp. 365–393.

27 The oldest manuscript, Paris BN, ms. lat. 6978, dates from the 14th century. Related to the dating, cf. the respective works by Agostino Paravicini Bagliani, for instance Agostino Paravicini Bagliani, *Der Leib des Papstes. Eine Theologie der Hinfälligkeit*, München 1997, pp. 192–203; cf. Annette Kehnel, *Altersforschung im Mittelalter. Strategien zur Altersvermeidung vom Jungbrunnen in Indien bis zur Kurie in Rom*, in: Mayer/Stanislaw-Kemenah (Eds.), *Die Pein der Weisen* (see note 13), pp. 27–57, at pp. 47–54. – In the 15th century the text was also translated into Middle English; cf. Carol A. Everest/M. Teresa Tavormina (Eds.), *On Tarrying the Accidents of Age*, in: M. Teresa Tavormina (Ed.), *Sex, Aging and Death in a Medieval Compendium. Trinity College Cambridge MS R.14.52. Its Texts, Language, and Scribe*, vol. 1, Tempe, Arizona 2006 (*Medieval and Renaissance Texts and Studies* 292), pp. 133–149.

28 Bacon, *De retardatione*, ed. by Little/Withington (see note 14), p. 80.

plemented by cosmetic recommendations, including morning massages with ointments, attendance at joyful activities and the seven *occulta*²⁹: gold, pearls or amber, snake flesh, rosemary, venison heart bone and aloe wood, maybe also human blood, breath or heat. Paravicini Bagliani assumes the origin and reception of this text at the papal or imperial court in Italy;³⁰ where at that time topics related to the preservation and prolongation of life, or for instance to the legends of a fountain or spring of youth were increasingly popular since the 12th century.

In about 1265, the (above mentioned) Roger Bacon seized on this “Epistola” and numerous other sources (for example the “Secretum Secretorum”) in his writings for Pope Clement IV.³¹ According to him, the additional *occulta* are supposed to act upon the heart as the cardinal organ (*cordalia*). Bacon justified their use by highlighting the impossibility of permanently following the dietetics deemed crucial for a long life.³² At the same time, he expanded his argumentation concerning a biblical-theological perspective, which was absent in the “Epistola”: He interprets the decline in prediluvian longevity (achievable before the Flood and recorded in the Bible) as a consequence above all of dietary mistakes which increased over the generations (“hominis stultitia et propria voluntas”);³³ thus he resorted to a rational concept. In his analysis, Bacon repeatedly harshly criticizes the medical profession: the teaching on dietetics was incorrect, and the knowledge of medicines, a helpful agent in preventing the shortening of life, was insufficient. Correspondingly, he sees opportunities to compensate these mistakes by devising better dietetics and by using the *occulta*, but principally by having recourse to the achievements of the *scientiae experimentales*. In this way, not only could the generally

29 They are called “occulta [medicamina]”, because they were unknown to the ancient authorities, or are to be hidden from the eyes of the inexperienced.

30 According to Paravicini Bagliani, it was addressed to Pope Innocent IV as well as to Emperor Frederick II; cf. Paravicini Bagliani, *Der Leib* (see note 27), pp. 301–302.

31 E. g. Roger Bacon, *The Opus Maius*, vol. 2, ed. by John Henry Bridges, Cambridge 1897, pars VI, exempla 2–3, pp. 204–213; id., *Opus Minus*, in: id., *Opera quaedam hactenus inedita*, vol. 1, ed. by John S. Brewer, London 1859, pp. 311–389, at pp. 373–374; id., *Part of the Opus Tertium. Including a Fragment now Printed for the First Time*, ed. by Andrew G. Little, Aberdeen 1912 (*British Society of Franciscan Studies* 4), pp. 45–54; cf. Agostino Paravicini Bagliani, *Ruggero Bacone e l'alchimia di lunga vita*, in: Chiara Crisciani/Agostino Paravicini Bagliani (Eds.), *Alchimia e medicina nel Medioevo*, Firenze 2003 (*Micrologus Library* 9), pp. 33–54, at p. 35.

32 Bacon, *Opus Maius* (see note 31), pp. 204–205.

33 Bacon does not exclude a weakening of the soul brought about by the Fall as the cause for its failure to care adequately for the body; Roger Bacon, *Liber sex scientiarum*, quoted according to Paravicini Bagliani, *Ruggero Bacone* (see note 31), p. 46.

presumed limit of life (to be attained by means of an optimal diet) be reached, but also a limit that would by far exceed this. The new *scientiae* are capable of bringing people nearer to that goal by optimizing foodstuffs and medicaments (plants, gemstones, etc.) by means of alchemy, astrology and optics. With regard to the *in-stellatio*, it was intended to use lenses to gather the beams of stars. The beams so collimated would be focused on those medicaments.³⁴

Obviously, Bacon's treatises attracted great interest, not only (as the "Epistola" a generation earlier), among the highly cultivated recipients at the papal court in Viterbo at the end of the 13th century, but also, for instance, among merchants, nobles, lawyers and the clergy in London. Around 1450, people placed great hopes in the potential of alchemy for both the multiplication of metals and the promotion of longevity.³⁵

In addition to the writings of Bacon, there are many others written around 1300 by authors such as Arnau de Vilanova with his treatise "De conservanda juventute et retardanda senectute"; its title immediately evokes the anonymous "Epistola". In a similar fashion to Bacon's work, it mainly offers various recipes related to dietetics and medicines to be applied to specific ailments of the elderly and to measures to be taken for rejuvenation along with commentaries on the pathology of old age.³⁶ Together with other late medieval writings by Johannes de Rupescissa (Jean de Roquetaillade), (Ps.-)Ramon Llull and many other authors, these texts established a rich alchemical-gerontological tradition. In this tradition, for instance, stands Paracelsus in the 16th century who shows astonishing parallels with Bacon: in his gerontological treatises "De renovatione et restauratione" and "De vita longa" he too amalgamates harsh criticism of the medical profession with a

34 Bacon, Liber, quoted according to Paravicini Bagliani, Ruggero Bacone (see note 31), p. 47. A parallel to this optic perception can be found in Bacon's comparison between different forms of retraction in the eye and the divine ray that shines on mankind; cf. Klaus Bergdolt, Der Sehvorgang als theologisches Analogon. Augen-anatomie und -physiologie bei Roger Bacon, in: Sudhoffs Archiv 75 (1991), pp. 1–20.

35 M. Teresa Tavormina (Ed.), Roger Bacon. Two Extracts on the Prolongation of Life, in: ead. (Ed.), Sex (see note 27), vol. 1, pp. 327–343, at pp. 336–338.

36 Arnaldus Villanovanus, De conservanda juventute et retardanda senectute, in: id., Opera, Lyon 1504, fol. 85r–90r; cf. id., Il libro di Arnaldo da Villanova sul modo di conservare la gioventù e ritardare la vecchiaia, transl. by Clodomiro Mancini / Gino Fravega, Genova 1963 (Scientia veterum 38). – The "Regimen senum et seniorum" (e.g. the early print of Félix Baligault, about 1500) also ascribed to Arnald corresponds at least in part to a précis of the anonymous "Epistola de retardatione accidentium senectutis".

laudation of the experience, acquired, in particular, in natural philosophy, alchemy and astrology as well as astonishing theological (lay) commentaries.³⁷

3 Reflections on Proto-Geriatric Knowledge in Non-Medical Texts

How was this proto-geriatric knowledge, accumulated over centuries, adopted outside medicine? In the light of this poorly coherent proto-gerontological-geriatric corpus of knowledge evolving over centuries and its diverse tiers of reception, only a cursory outline of its manifold aspects is feasible. As a consequence, it is difficult to verify a direct correlation between ‘medical’ and ‘non-medical’ texts. Additionally, it is necessary to distinguish between various types of texts in which potential medical knowledge was adopted. The question also arises whether the confirmed body of knowledge might not stem from different sources. In the following, the intention is to examine the reception of specific medical knowledge in some selected exegetical-ascetic sources, scholastic disputations as well as in encyclopaedias and poems.

Bible commentaries adopt medical-related knowledge – if at all – directly from scholarly Fathers and Doctors of the Church like Isidore of Seville and Jerome; the latter for example mentions typical disorders and conditions of the elderly in his interpretation of the old age metaphors by Kohelet (ch. 12, 1–5).³⁸ In the early 14th century, Nicholas of Lyra added further medical interpretations in his comment on the respective paragraph in the “Glossa ordinaria” of this exegetical canon.³⁹ But, it was only in the late

37 Urs Leo Gantenbein, *Paracelsus und die Quellen seiner medizinischen Alchemie*, in: Albrecht Classen (Ed.), *Religion und Gesundheit. Der heilkundliche Diskurs im 16. Jahrhundert*, Berlin 2011 (*Theophrastus-Paracelsus-Studien* 3), pp. 113–164, at pp. 124–128; Daniel Schäfer, *Lebensverlängerung – Verjüngung – Unsterblichkeit? Über eine Hauptattraktion der Paracelsus zugeschriebenen Heilkunde*, in: Christoph Strosetzki (Ed.), *Gesundheit und Krankheit vor und nach Paracelsus*, Berlin 2023, pp. 25–44 (in print).

38 Jerome’s exegesis contains details requiring a certain medical knowledge: for instance, when it comes to the insufficiency of the “mandibulae” (lower jaw bone) rendering chewing and speaking difficult, or to the cooling of the blood which along with a dry constitution of the humours causes insomnia and early awakening; cf. Daniel Schäfer, „Hebraeorum Hippokrates rei medicae peritissimus fuit“. Über die Rezeption der pseudosalomonischen Metaphern zum Greisenalter (Koh. 12, 1–6) in der frühneuzeitlichen Medizin, in: *Medizinhistorisches Journal* 35 (2000), pp. 219–250, at pp. 223–224.

39 Nicholas, for example, refers the pseudo-solomonic metaphor “Et conteratur hydria super fontem” (Eccl. 12,5) (“and the pitcher be broken at the fountain”), to the entirety of the limbs which in old age or in dying have lost the capacity to resort to the “spiritus vitalis” situated in the heart (“fons”) (Tex-

16th century that a cross-fertilization of theological and medical comments on Kohelet 12 began.

Furthermore, Lotario dei Conti di Segni, the later pope Innocent III, as one of the first proponents of ascetic literature, quoted a leitmotif of old age pathology included in the “Ars poetica” of Horace in the highly influential “De contemptu mundi” (around 1195): “Many complaints surround the elderly”.⁴⁰ Admittedly, this quotation also appears in Late Medieval medical texts, but it does not convey any specific medical knowledge. The age-related complaints listed by Lotario in rhythmic assonances recall the enumerations provided by (Ps.-)Augustine, Gregory and Bede;⁴¹ they only describe physical restraints in general. Around 1235, the professor of rhetoric, Boncompagno da Signa, wrote his late work “Libellus de malo senectutis et senii”. In it he explicitly opposes Cicero’s old age-apologetic writing: the “martirium” of old age could only be useful insofar as it was considered to be a penance for vices in which one had wallowed at a younger age.⁴² Boncompagno lists – with a vague reference to Hippocrates and Johannitus (Hunain ibn Ishaq) – the life ages, but his only explanation for the last phase is a reduction

tus Bibliae cum Glossa ordinaria ... Nicolai de Lyra postilla, Moralitatibus eiusdem, Pauli Burgensis additionibus, Mathiae Thoringi replicis, Lugduni 1528, tertia pars, fol. 154r).

40 Innocentius III, *De contemptu mundi sive De vilitate conditionis humanae*, Köln about 1473, ch. I.11 (“De incommodis senectutis”; no pagination): “Audi [Horatium] poetam: Multa senem circumveniunt incommoda.”

41 (Ps.-)Augustinus, *De duodecim abusionibus gradibus*, in: *Patrologia Latina*, ed. by Jacques-Paul Migne, vol. 40, Paris 1865, cols. 1079–1088, at cols. 1079–1080; Gregorius Magnus, *Homiliae in Evangelia*, lib. I, hom. 1 (about Lk 21, 25–33), in: id., *Homiliae in Evangelia / Evangelienhomilien*, lateinisch-deutsch, transl. and introduced by Michael Fiedrowicz, Freiburg 1997 (*Fontes Christiani* 28.1), pp. 59–60; Beda Venerabilis, *Collectanea et Flores*, in: *Venerabilis Bedae Anglosaxonis Presbyteri Operum*, vol. 3, Köln 1612, col. 482.

42 Formally, Boncompagno asks a certain “Ardingus” (Ardingo Foraboschi), bishop of Florence, in the prologue to review his writing scheduled for publication; the addressing of a supporter of the poor suggests that the author implicitly is begging for personal help in old age – according to the chronicler Salimbene de Adam, Boncompagno died completely impoverished in a Florentine hospital (“ad tantam devenit inopiam”) (“he was reduced to such a hardship”); quoted from Boncompagno da Signa, “Amicitia” and “De malo senectutis et senii”. Edition, Translation and Introduction by Michael W. Dunne, Paris 2012 (*Dallas Medieval Texts and Translations* 15), p. 5. Correspondingly, Boncompagno defines age related ailments and hardship: “Pena est afflictio corporis cum onere paupertatis. Miseria est afflictio spiritus et anime dolorosa cum infirmitatis et inopie grauamine” (“Penance is the affliction of the body in combination with the burden of poverty. Misery is the painful affliction of the spirit and the soul with the weight of illness and want” [own translation]) (ibid., pp. 138, 144).

of the natural heat. A small list of physical complaints in old age⁴³ is confronted with an extensive list of mental and social ailments. Like Lotario, Boncompagno also adopts the pertinent characteristics of old age propagated by Aristotelian “Rhetoric” (but not the “*Parva naturalia*!”).

It is mainly in the natural encyclopaedias of the High Middle Ages where one finds a notable reception of medical knowledge. The books VI and VII of “*De proprietatibus rerum*” by Bartholomaeus Anglicus contain a discussion of the ages of life, but above all of dietetics and pathology, mostly without direct relation to older people.⁴⁴ In the highly comprehensive “*Speculum maius*” by Vincent of Beauvais, completed in 1250, in the 31st book of the “*Speculum naturale*” there appears a specific section on elderly dietetics; it briefly refers to the relevant texts of Haly Abbas, Avicenna and Rhazes. Other chapters deal with the ages of life, the various complexions and with the causes of white hair and

43 Da Signa, “*Amicitia*” (see note 42), p. 146.

44 Only occasionally reference is made to a specific diet for the elderly, for example, in connection with a relevant Hippocratic quotation: “*Item alio modo cibandus est iuuenis et adolescens et alio modo ipse senex. Nam abstinentia cibi que senibus est facilis, pueris et iunioribus est difficilis. Iuxta illud ypcras: Senes facillime ferunt ieiunium, secundo consistentes facilius, pueri vero minus. Nam in senibus debilis est calor naturalis, in aliis autem est fortis*” (“So a young man and an adult shall eat in a different way, and an old man in turn in a different way. For abstinence is easy for old people, but difficult for children and young people. Hippocrates says about this: ‘Old people fast easily, people in their middle age more easily, but children less so. For in old people natural heat is weak, but in others it is strong.’” [own translation]) (Bartholomaeus Anglicus, *Liber de proprietatibus rerum*, Argentoratum [Strasbourg] 1485, lib. VI. 20 [“*De cibo*”] [without pagination], quoting *Corpus Hippocraticum*, *Aphorismi I. 13* [IV, 466 Littré]). At the beginning of Book VI, one finds an explanation referring to the physiology and pathology of old age that the Englishman might have come upon in a medical source: “*In senio autem calor naturalis extinguitur, deficit virtus regitua, et humor dissolvitur, deficit virtus, et carnositas consumitur, contrahuntur nerui, cutis corrugatur et incuruatur, corpore perit species, et decor corporis adnullatur ... tussibus, sputis et aliis fatigatur*” (“But in old age natural warmth extinguishes, the regnant power of soul is lacking, and the humour dissolves, strength is missing, fleshiness is consumed, the nerves contract, the skin becomes wrinkled, the species fades by the body, and the beauty of the body fades ... it is weakened by coughing, sputum and other things.” [own translation]) (Anglicus, *Liber* [see above], lib. VI. 1 [without pagination]). The following book VII (“*De infirmitatibus*”), is also centered on medical knowledge, and contains scattered information on diseases in old age: “*De cecitate: Aliquando fit propter humorum et spirituum consumptionem, ut est videre in senibus, quorum oculi primum caligant et defectum visus patiuntur. Tandem deficiente virtute videndi potentie penitus destruuntur*” (“About blindness: at some point, due to the consumption of the humours and vigours, what happens in old people is that their eyes first become dark and vision problems become manifest. Eventually they are completely destroyed by the loss of sight.” [own translation]) (Anglicus, *Liber* [see above], lib. VII. 19 [without pagination]).

baldness. In this 31st book, which includes a comprehensive portrayal of man, Vincent cites the medical authorities, but also Vergil, Horace, Maximianus, Seneca, the Bible and the Fathers of the Church. Here again, medicine is only one component among various areas of knowledge, and proto-geriatrics is only touched upon very briefly.⁴⁵

Different poets of the High and Late Middle Ages considered the body and the characteristics of older people in a detailed, but stereotypical manner. The old French novel “Roman de la Rose” written by Guillaume de Lorris around 1235 and continued by Jean de Meung some 40 years later considers vices and conditions banned from the “Garden of Delights”. This series includes also a portrait of the personified *Viellece*; the focus here is placed on the external signs of decay (decrease in body size, wrinkles, loss of teeth, and impairment of mobility), and of ugliness (for example hairy ears), which are not typical of medicine.⁴⁶ Also mentioned are childish behaviour and a ‘second childhood’ in old age, a topos treated by Isidore, Juvenal and Plato and that was almost ignored by medieval medicine.⁴⁷

A similar example refers to the highly stylized complaint against old age in “Ich sich und hör“ (“I see and hear”) by the Tyrolean poet Oswald of Wolkenstein (written before 1425): in addition to the usual display of decrepitude, sensory deficiencies, brittle voice, blue lips and trembling, coughing and the loss of easiness (in German: “freier Sinn”) are noteworthy.⁴⁸ Such lists of sensually perceived ailments of the elderly were certainly even more frequent during this time (cf. François Villon);⁴⁹ a popular topos of the *Maeren* poetry is the impotence of old men.⁵⁰ But, apart from personal experience and poetic

45 Vincentius Bellovacensis, *Speculum naturale*, Graz 1964 (reprint of the edition Duaci 1624), cols. 2348–2349, 2360–2365; Shulamith Shahar, *Growing Old in the Middle Ages*. “Winter Clothes Us in Shadow and Pain”, London-New York 1993, pp. 16–17, 56.

46 Metzler, *Social History* (see note 5), p. 115.

47 Aristotle’s (*Rhetoric* II. 14) and Thomas Aquinas’s (on this point sharing the philosopher’s view) theory was that the soul aged more slowly than did the body (Metzler, *Social History* [see note 5], p. 256, note 83); cf. Shahar, *Growing Old* (see note 45), p. 39. Nonetheless, mental decay is a topic in poetry, see below.

48 Modern High German translation and comment in Sieglinde Hartmann, *Altersdichtung und Selbstdarstellung bei Oswald von Wolkenstein*, Göttingen 1980 (*Göppinger Arbeiten zur Germanistik* 288), pp. 153–175.

49 In the ballad “Les regrets de la belle Heaulmiere”; cf. Hartmann, *Altersdichtung* (see note 48), pp. 165–167.

50 Albrecht Classen, *Der alte Mensch in den spätmittelalterlichen Mæren*. Die Komplexität der Alterserfahrung im Spätmittelalter aus mentalitätsgeschichtlicher Sicht, in: Elisabeth Vavra (Ed.), *Alterskulturen des Mittelalters und der frühen Neuzeit*. Internationaler Kongress Krems an der

models which have survived from antiquity, there is no convincing evidence of medical knowledge in them. Even Christine de Pizan's observation in "Le Livre de la Cité des dames" that "there is no worse disease than old age" has to be ascribed to Cicero or to the younger Seneca, but not to Galen or Hippocrates.⁵¹ In general, literary portrayals of the ageing body frequently focus on a few topoi with a clear pejorative bias for dramatic reasons, notably on physical ugliness, decline of the senses, impotence, helplessness, and finally mental deficiency; because in poetry, the intention was not to present a medical, natural-philosophical characterization.

As a result of this very cursory study of non-medical works, it can be concluded that many medieval texts contain lists enumerating the afflictions of old age (mostly found in the Patristics and ancient poetry). However, until the Late Middle Ages, true proto-geriatric knowledge on a larger scale only appears in natural encyclopaedias, especially in Vincent of Beauvais. This is understandable, because Vincent gathers and processes medical knowledge of all kinds.

4 Influence of Humanism

My reflections will conclude with the question of how the humanists influenced the proto-geriatric discourse. I start with a brief discussion of Francesco Petrarch who was a representative of early Humanism and part of a small group of humanists who examined the subject of old age. Petrarch had a bitter literary feud with an anonymous scholastic physician who probably worked at the papal court in Avignon;⁵² but, despite his critical attitude to medicine,⁵³ in various moral-philosophical treatises, and in his letters as well,

Donau, 16.–18. Oktober 2006, Wien 2008 (Österreichische Akademie der Wissenschaften, Phil.-Hist. Klasse 780), pp. 219–241.

51 Daniel Schäfer, "That senescence itself is an illness ...". Concepts of Age and Ageing in Perspective, in: *Medical History* 46 (2002), pp. 525–548; Daniel Schäfer, 'Cato Maior'-Rezeption in der frühneuzeitlichen Medizin?, in: Anne Eusterschulte / Günter Frank (Eds.), *Cicero in der Frühen Neuzeit*, Stuttgart 2018 (Melanchthon-Schriften der Stadt Bretten 13), pp. 133–147, at p. 144, note 61.

52 For more details cf. Klaus Bergdolt, *Arzt, Krankheit und Therapie bei Petrarca. Die Kritik an Medizin und Naturwissenschaft im italienischen Frühhumanismus*, Weinheim 1992, pp. 33–66.

53 Besides Petrarch, there are further critical comments on medicine and natural sciences expressed by early humanists such as Coluccio Salutati and Leonardo Bruni. However, it can be noted that the antinomy between natural sciences and Humanism signally ebbed away in the subsequent generations; cf. Klaus Bergdolt, *Naturwissenschaften und humanistisches Selbstverständnis*, in: id., *Aufsätze zur Medizin- und Wissenschaftsgeschichte*, Heidelberg 2020, pp. 259–278, at p. 265.

he shares his view on medical topics and old age. Thus, in the dialogue “De remediis utriusque fortunae” (completed in 1366 at the age of 62) there is a lengthy chapter entitled “De Senectute”; in which some unspecific complaints of old age are brought forward: general weakness, wrinkles in the face and white hair with the result that one has problems to recognize oneself, the loss of bodily pleasures, a crooked back and, finally, becoming childish.⁵⁴ According to Seneca and Cicero, a rational acknowledgement of the necessities claimed by nature, the advantages of old age and the expected otherworldly redemption serve as a remedy against these monotonous grievances. In one of his “Epistolae seniles”, written in 1362 to his younger friend Boccaccio, Petrarch again emphasizes the advantages of old age, here following Cicero.⁵⁵ In two other letters from 1370 dealing with the same topic and addressed to his physician-friend Giovanni Dondi,⁵⁶ who was appreciated by him as a scholarly humanist, he goes into issues related to elderly dietetics. Concerning himself, however, he refuses to accept the medical recommendations made by Dondi: in general, Petrarch agrees on the reduction of food for the elderly (because of insufficient digestion), but he is not willing to spread his daily ration over several little meals. Indeed, old people are able to fast⁵⁷ and to eat raw fruits and vegetables as well as drink water instead of wine⁵⁸ (despite the fact that in the contemporary medical dietetics all these provisions were rejected). In contrast, the poet opposes the inflexible dietetic regulations of scholastic medicine, “because everybody ages in his own way, and lifestyles differ”.⁵⁹

Petrarch’s reception of medical knowledge probably resides in his general humanistic interest in the investigation of the various kinds of human nature (*humanitas*) as well as in his reflections on the self. Cicero’s “Cato Maior”, in which he considers the optimal lifestyle, serves him as a literary model here. He shows a certain, but often critical, interest in elderly medicine. However almost nothing of this early critique can be found in two later ample proto-geriatric treatises showing humanist influence. Both of them appeared

54 Francesco Petrarca, *De remediis utriusque fortunae libri II*, Berna 1605, ch. II. 83, pp. 571–581.

55 Francesco Petrarca, *Lettere senili di Francesco Petrarca. Volgarizzate e dichiarate con note*, vol. 1, ed. by Giuseppe Fracassetti, Firenze 1892, Sen. I. 5, pp. 32–49; cf. Bergdolt, *Arzt* (see note 53), pp. 131–132.

56 Petrarca, *Lettere senili*, ed. by Fracassetti (see note 55), vol. 2, sen. XII. 1–2, pp. 207–268.

57 Dondi obviously refers to Galen “De sanitate tuenda”, ch. V. 4 (VI, 332 Kühn), whereby he ignores the Hippocratic aphorism I. 13 (see note 44).

58 Bergdolt, *Arzt* (see note 53), pp. 117, 120–125; cf. also the interpretation by Scynthia Skenazy, *Aging Gracefully in the Renaissance. Stories of Later Life from Petrarch to Montaigne*, Leiden 2013 (*Medieval and Renaissance Authors and Texts* 11), pp. 23–25.

59 Bergdolt, *Arzt* (see note 53), p. 125.

in 1489, and thus in the transitional period to early modern times. Medieval specialist knowledge nevertheless still prevailed, but the rhetoric and style of the two authors allude to the humanist Renaissance. Despite the similarities, each author approaches the subject in a very different way. This is a result of their biographies and their academic environment.

The first of them, Gabriele Zerbi, taught philosophy and medicine, wrote works on Aristotelian metaphysics, anatomy, deontology and pathology; despite his interest in new medical topics, he remained closely connected to the university and its scholasticism throughout his life – unlike Petrarch or his contemporary Marsilio Ficino. The title of Zerbi's "Gerontocomia"⁶⁰ readily resorts to a notion introduced in medicine by Galen in his 5th book of "De sanitate tuenda": the "Gerokomikon". Following Galen, this medical field concerns the care of the elderly. The Greek title already announces the humanist program: going back to the roots of proto-geriatric knowledge. Consequently, Zerbi regularly quotes Galen and Pliny, and occasionally the Islamic authorities, alongside Aristotle and the Roman poets (here exhaustively Juvenal and Maximianus, but also Horace). A novelty is the envisioning of a caregiver or geriatrician (*gerontokomos* in Greek) for the elderly, who is responsible for supervising the treatment of elderly people. This should not be interpreted as a sign of geriatric professionalisation, it is simply a humanist title referring to a personal physician for which the author applied at the papal court. Regarding content, the work takes up the program of the anonymous "Epistola de retardatione accidentum senectutis". Approximately 80 % of its contents concern dietetics, yet similarly to the "Epistola", a distinction is made between a classical conservative and a restoring ("resumptive") therapeutical regime: in the former, treatment concentrates on the cold-dry constitution, while in the latter it is directed against it. A positive impact on the emotions, concurrent with the "Epistola", can be generated by stimulation of the senses through pleasant impressions and conversation – which is also typical for Humanism. Some of the traditional *occulta* such as potable gold, pearls, amber and human blood are mentioned in the concluding medicinal advice. Before going into this comprehensive dietetic-therapeutical part, Zerbi – analogous to the "Epistola" – describes pathophysiology, outlining the causes of ageing and briefly discusses the characteristics of longevity.

60 Zerbi, Gerontocomia (see note 20). – About Zerbi cf. the introduction of Lind in his translation; Gabriele Zerbi, *Gerontocomia. On the Care of the Aged and Maximianus. Elegies on Old age and Love*, transl. by Levi R. Lind, Philadelphia 1988 (Memoirs of the American Philosophical Society 182), pp. 3–16; Levi R. Lind, *Studies in Pre-Vesalian Anatomy. Biography, Translations, Documents*, Philadelphia 1975 (Memoirs of the American Philosophical Society 104), pp. 1–18; Ladislao Münster, *Il primo trattato pratico compiuto sui problemi della vecchiaia. La 'Gerontocomia' di Gabriele Zerbi*, in: *Rivista di Gerontologia e Geriatria* 1 (1951), pp. 38–54.

Astrological aspects appear rather casually, yet the names of the planets and the signs of the Zodiac serve as metaphors. And just as the “Epistola” had originated in the Roman setting 250 years previously, so the “Gerontokomia” was also published in Rome and dedicated to the morbid 57 year old Pope Innocent VIII – the gerontocratic *curia* had not lost its interest in elderly care and longevity. Almost no one beyond this circle of clerics took notice of Zerbi’s exhaustive work that lacked innovative content in spite of its thoroughness, and there was no reprint of it. Only a few copies have survived.

In this respect, it clearly differs from the considerably shorter writing “De vita longa” of his older contemporary Marsilio Ficino, that saw 30 editions until the 17th century within the complete work of “De vita libri”. Ficino was the son of a physician; he was trained in the *artes liberales* and medicine but is said to have only occasionally practiced medicine. He was the author of a vernacular plague-guide. In the 1480s, however, his Florentine milieu mainly celebrated him for his translations of, and commentaries on, Plato and Plotinus. According to his own statements, he combined the writing of “De vita longa” with the reading of the treatise “De retardanda senectute” (maybe there is talk here of the anonymous “Epistola” which, already in the days of Ficino, was disseminated under the names of Arnau de Vilanova or Roger Bacon).⁶¹ At any rate, “De vita longa” is clearly reminiscent of the medieval tradition, but independently adds neoplatonic elements to the proto-geriatric theme. After having discussed the physiology of the elderly and dietetics in a rather conventional way, he turns his attention to the speculative means and methods directed to the prolongation of life; unlike Zerbi he is not convinced of the inescapability of ageing. He allows, not only for rhetorical reasons, the advice for a long life to be conveyed by the personified planets: Saturn is both the symbol of macrocosmic power and of microcosmic melancholic constitution and lifestyle, which is typical of scholars. The slowest of all planets induces the inward regression of the vital spirit (“spiritus”); this results in a gradual ageing of the external parts of the body and a suffocation of the vital flame. Venus, in contrast, drives the spirit outward, provoking a rapid inner ageing: by having sexual intercourse the vital flame is virtually blown out.

61 Marsilio Ficino, *Three Books on Life. A Critical Edition and Translation with Introduction and Notes*, ed. by Carol V. Kaske / John R. Clark, Tempe, AR 1998 (*Medieval & Renaissance Texts & Studies* 57), pp. 164–235. According to the “editorial introduction” (*ibid.*, p. 7), “De vita longa” was the last of three books, and not the second as it appears in its first edition. Ficino read the treatise “De retardanda senectute” in August 1489, assuming its author was Arnau de Vilanova.

5 Conclusions

With the following questions I come to the end of my remarks: is the simultaneous publication of two such comprehensive proto-geriatric works at the end of the Middle Ages the harbinger of a new development in proto-geriatrics? What is the role of Humanism in this context?

A differentiated answer to these questions could be that the reviewed texts convey both. On the one hand, the sophisticated medieval knowledge is shown by the inclusion of Islamic and Aristotelian texts (and henceforth also authentic Galenic writings), where previously this knowledge seldom encroached upon non-medical texts. On the other hand (as shown in Petrarch) the humanist interest in the life of the scholar (in other words, reflecting on one's own life) is linked to the thought that it is also important in old age to individually conserve and extend this life. The simultaneous publication of two such differing works may have been triggered by the reception of Cicero's "Cato Maior" and Seneca's "Letters to Lucilius", that drew humanist interest in old age. Both texts also disclose that proto-geriatrics reached a crossroads around 1500: even though Gabriele Zerbi had ample recourse to ancient, also non-medical sources, he rather followed the traditional program of medical care of the aged which learned medicine, by means of individual gerocomies, adhered to until the 17th century. As a result, proto-geriatrics elucidates the process of ageing and principally advocates a dietetic treatment aimed at a small group of affluent clients who strove to retard this process and who wanted to alleviate individual complaints; beyond this no further promises were made.⁶²


From the 13th century onward, one can observe a further development. Around 1350, the proto-geriatric discourse was modified by the reception of the "Parva naturalia" and alchemical works in the direction of a prolongation of life and rejuvenation. Ficino further developed it by resorting to neoplatonic and astrological sources. Around 40 years later, Paracelsus broke with learned proto-geriatrics once and for all. His gerontological works were influenced by Ficino and the quantity of dietetic matter further decreased, while that of alchemical increased.⁶³ From then on, the learned medicine of ageing and the art of extending life 'each went its own way' – an evolution that can be followed up until the 21st century. Humanism only played a minor and temporary role in terms of a further development of proto-geriatrics, and did not promote the unfolding

62 Researched in detail in Schäfer, *Old Age* (see note 20), pp. 41–99.

63 Thomas Willard, *Living the Long Life. Physical and Spiritual Health in Two Early Paracelsian Tracts*, in: Classen (Ed.), *Religion* (see note 37), pp. 347–380.

of a subdiscipline. However, as a mind-set that overcame the narrow medical canon,⁶⁴ Humanism could have been crucial for the genesis of the paramedical gerontology.

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64 On the hardly definable relationship between medicine and the Renaissance, cf. Richard Toellner, *Zum Begriff der Autorität in der Medizin der Renaissance*, in: Rudolf Schmitz / Gundolf Keil (Eds.), *Humanismus und Medizin*, Weinheim 1984 (Mitteilungen der Kommission für Humanismusforschung XI), pp. 159–179, at pp. 159–161.