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ON THE EARLY HISTORY OF PSYCHOLOGY

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Abstract: The paper begins with a comparison between the history of the neologisms of ontology and psychology. If from a historical point of view there are many similarities of the diffusion of the two terms, from an epistemological point of view we encounter great differences. Ontology has always been collocated in the field of metaphysics, while psychology, before becoming an independent science, was a discipline divided between physics and metaphysics.

Next, there is a focus on the debate of the status of the science of the soul developed in the centuries since Aristotle (2.1). During the Reformation Era the term was coined and the science of psychology had a great diffusion amongst philosophers and in university disputes (2.2). The paper sustains several new historical findings in regards to the first occurrences of the term. A historical assessment (3) on the early history of psychology concludes the paper.

Key-words: Psychology, Ontology, middle Science, Soul, scholastic Philosophy

Resumo: O artigo começa por uma comparação entre a história dos neologismos "ontologia" e "psicologia". Se de um ponto de vista histórico há muitas similitudes na difusão dos dois vocábulos, de um ponto de vista epistemológico encontram-se grandes diferenças. "Ontologia" foi sempre classificada no campo da metafísica, enquanto "psicologia", antes de se tornar uma ciência independente, era uma disciplina dividida entre a física e a metafísica. De seguida o artigo centra-se no debate sobre o estatuto da ciência da alma que se desenvolveu nos séculos posteriores a Aristóteles (2.1.). O vocábulo foi inventado durante o tempo da Reforma e a ciência da psicologia conheceu uma grande difusão entre os filósofos e nas disputas universitárias (2.2.). O artigo sustenta

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diversas novas descobertas respeitantes às primeiras ocorrências do vocábulo e conclui procedendo a uma avaliação histórica (3.) sobre a história mais antiga da psicologia.

Palavras-chave: Psicologia, ontologia, ciência média, alma, filosofia escolástica.

1. Introduction

The history of the neologism 'psychology', its invention and success in modern times¹, are in many ways analogous to that of the word 'ontology'. On the basis of the latest findings, it can be asserted that: (i) although both terms have a Greek etymon, neither of them appears in the known works of any ancient or medieval philosopher; (ii) both terms appear between the end of the sixteenth century and the beginning of the seventeenth century; (iii) both terms are found in works published in Central Europe and their usage was successfully spread within the early reformed and Protestant culture.

The neologism 'psychology' is first found in a work by the Croatian Humanist Marko Marulič (1450-1524), *Psichiologia de ratione anima humana* (c. 1520), according to Kruno Krstič (1964), a discovery confirmed by Josef M. Brožek (1999). However, the term certainly started to be successfully and widely used only about fifty years later within Central European culture and in the Reformed *Schulphilosophie*. On the contrary, the work of Marulič, probably due to the fact that it was lost, does not seem to have had a great impact on the diffusion and development, throughout the modern era, of the science we call today psychology.

More than 45 years after Krstič's discovery of the term in Marulič's work, no research has been able to report any influence that the work may have had on the context in which the term psychology was used in Central European scholarship. Furthermore, until today, there has been no evidence of a Byzantine origin of the term, as was conjectured in the article of Brožek (1999).

Thanks to the latest findings, this paper aims to provide new elements to contribute to an explanation of the early history of 'psychology'.

¹ The debate on the first occurrence of the term 'psychology' takes place in Krstič (1964), Boring (1966); Lapointe (1970); Lapointe (1972); Brožek (1973); Vande Kemp (1980); Brožek (1999).

The two neologisms of 'psychology' and 'ontology' both appeared in the Early Modern period and together represent an illustrious case of the *translatio studiorum* that had affected the two sciences they have given name to, from both an epistemological and terminological point of view. From the first point of view, the epistemological and disciplinary one, it is known that in the Early Modern period, as well as today, the two terms were used, to denominate two subjects respectively, which had an even more ancient history. The 'science of being' and the 'knowledge of the soul' were known since ancient times, even though they were not called 'ontology' and 'psychology'.

Therefore, the Italian Gian Battista Vico was wrong when, referring to one of those two sciences in his work, *La scienza nuova seconda* (1730), he wrote: "onde Platone con peso di parole chiamò la metafisica Οντολογία, 'scienza dell'ente' [Plato, weighing his words, called Metaphysics Οντολογία, the 'science of being']" (Vico, 1942, pp. 198-199)².

Neither Plato nor any other ancient philosopher uses the words ontology and psychology. In Aristotle's works, expressions like γνῶσις τῆς ψυχῆς (Aristotle, *De anima*, 402a5) and ἐπισθήμη τῶν ὄντων (Aristotle, Met., III, 3, 998b7; and also Met., IV, 1, 1003a20), are used to point out two different sciences, but the Greek philosopher does not assign a definitive name to either of them. Nevertheless, it is Aristotle who finally identifies and poses the problem of the status and the subject of ontology and psychology. Different traditions derived from the interpretation of Aristotle's works, which offered different solutions with regard to both sciences. The translatio studiorum of Aristotle's texts, which was carried out at the School of Edessa and in Arabic, in the ninth century AD at the court of Baghdad with Al-Kindi's contribution and, later on in Hebrew and Latin, became the viaticum of an epistemological and disciplinary translatio studiorum. This has produced, since the age of Theophrastus and Alexander of Aphrodisia, different versions of the science of being and the science of the soul.

From the second point of view, the terminological one, it can be said that the different solutions from an epistemological and disciplinary point of view were followed, throughout the centuries, by different terminological solutions to indicate each one of the two sciences: with regard to ontology, the terms *prima philosophia* (first philosophy), *scientia universalis* (universal science), *metaphysica* (metaphysics), and *ontosophia* were used; and, with regard to psychology, the terms *scientia de anima* and *scientia animastica* (science of the soul).

² Our translation.

In the next paragraphs (2.1; 2.2), we will deal with the history of psychology. In the conclusions of the paper the elements common to those two sciences will be discussed.

2.1 Origin and brief History of the Science of the Soul

It is certainly thanks to Aristotle that the two sciences, which would be later called 'ontology' and 'psychology', ceased to be just simple doctrines and their subject and status became an issue of debate from an epistemological point of view. Unlike ontology, which was firmly placed within metaphysics, there was uncertainty about whether to place psychology within sciences even in ancient times.

In his *De anima*, Aristotle's aim is to understand what animal life is in general, i.e. to understand what living beings are. 'Animal' is not first a beast, but a body with a soul, that is living, which lives. Without soul there would be no animal and therefore there would be no animal life. According to Aristotle, the soul is not peculiar to mankind, as some Platonists believed, but it belongs to all living beings.

If the soul is the "principle of animal life" (Aristotle, *De anima*, I, 1, 402a6, engl. transl. p. 9) and "the form of a natural body" (Aristotle, *De anima*, II, 1, 412a20-21, engl. transl. p. 69), therefore the soul is inevitably bound to the body to which it gives life.

Furthermore, many affections of the soul (anger, love, fear, rage) actually derive from their relation with the body. However, according to Aristotle, the subject of physics is the moving body not separated from matter. Precisely for this reason Aristotle has almost no doubt when assigning the study of the soul to physics: "This at once makes it the business of the natural philosopher to inquire into the soul, either generally, or at least in this special aspect" (Aristotle, *De anima*, I, 1, 403a28-29, engl. transl. p. 17).

In the corpus of Aristotle's works, *De Anima* has the task of epistemologically introducing physiological and natural works (*Parva naturalia*, *On breath* etc.). When describing the soul through its functions and faculties, in the third book of *De Anima* Aristotle goes further to explain what that faculty pertaining only to mankind and unknown to animals is, i.e., intellect.

Unlike the vegetative and the sentient souls, which cannot be independent from the body to which they give life, movement and sensibility, the rational soul (intellect) is separate $\chi\omega\rho\iota\sigma\tau$ from the body: according to Aristotle, intellect is separate from any body organ, whereas Plato (*Timaeus*, 71d-e), on the contrary, had set the centre of the rational soul

inside the encephalon. However, according to Aristotle, what is separate $(\chi\omega\rho\iota\sigma\tau\delta\varsigma)$ from the body is not investigated by physics, but by metaphysics (or by mathematics after the abstraction from matter).

Therefore, because psychology has to investigate a type of being separate from matter, according to Aristotle's thought that science is placed at the borderline between physics and metaphysics. Again in *De Anima*, Aristotle stated: "If then any function or affection of the soul is peculiar to it, it can be separated from the body [...]" (Aristotle, *De anima*, I, 1, 403a10-12, engl. transl. p. 15).

Starting from the works of Aristotle a long tradition of debates and interpretations came forth about the disciplinary collocation of psychology. It must also be added that in the physiological work *De partibus animalium*, written after *De Anima*, Aristotle again states: "In view of what we have just said, one may well ask whether it is the business of Natural science to treat of Soul in its entirety or of some part of it only" (Aristotle, *De partibus animalium*, I, 1, 641a34-35, engl. transl. p. 71)

In the book VI of *Metaphysics*, other indications about psychology can be found in the example of the "snub nose", a concave nose. Unlike the essence of concavity, a snub nose is necessarily bound up with sensitive matter, that is, with the flesh that actually makes it concave. Therefore, if mathematics will deal with the essence of concavity, physics will deal with the snub nose, due to its intrinsic belonging to the matter. By analogy, Aristotle asserts that: "[...] it is the province of the physicist to study even some more aspects of the soul, so far as it is not independent of matter" (Aristotle, *Metaphysica*, VI, 1, 1026a5-6, engl. transl. p. 295).

However, if the physicist investigates the souls that depend on matter and are not separate (vegetative, sentient), once again Aristotle does not say who, and which discipline, has the task of investigating the soul separate from matter. Returning to the example of the snub nose in *De anima*, Aristotle concludes that: "Again, among abstract objects "straight" is like "snub-nosed", for it is always combined with extension; but its essence, if "straight" and "straightness" are not the same, is something different; let us call it duality. Therefore we judge it by another faculty, or by the same faculty in a different relation. And speaking generally, as objects are separable from their matter so also are the corresponding faculties of the mind" (Aristotle, *De anima*, III, 4, 429b18-22, engl. transl. p. 167-169).

What seems to be put forward is the hypothesis of an analogy between the essence and separateness of the intellect and that of mathematical beings. Psychology can be placed halfway between physics and metaphysics, therefore, like a third science between the two.

The complexity of the issues found in Aristotle's works has suggested different solutions among commentators throughout the centuries, which can be divided into at least three groups:

- *i*) Those who assign the treatment of the soul partly to physics and partly to metaphysics;
- *ii)* Those who assign the treatment to the soul only to physics or to metaphysics;
- *iii*) Those who assign the knowledge of the soul neither to physics nor to metaphysics, but to a third science, halfway between the two.

When presenting these three groups schematically, with all the risks of vagueness that may result from it, it can be stated that Averroes and Thomas Aquinas fall within the first group; Alexander of Aphrodisia and, many centuries later, Pietro Pomponazzi, who both assign the doctrine of the soul completely to physics, fall within the second group. On the contrary, in the Middle Ages, Plotinus, Augustine and Neo-Platonism contribute to the spreading of a new current which, denying that physics was able to study the soul, assigned the study of the soul entirely to metaphysics. Guillaume d'Auvergne, or Guillaume de Paris (1190-1249)³ consolidated this theory. The third group includes a heterogeneous series of authors who – as Paul J.J.M. Bakker remarkably pointed out⁴ – starting from Themistius and pseudo-Simplicius (or probably Prisciano) to reach Augustino Nifo and Marco Antonio Genua in the Modern Age, regard the soul as *ens medium* and, symmetrically, the *scientia de anima* as *scientia media* between Physics and Metaphysics.

The choice to give the science of the soul a third and autonomous status when compared with physics and metaphysics provides the ground for a series of attempts to assign a new name to the new science. Most of those attempts were carried out in the Early Modern period, starting from the second half of the fifteenth century. As previously said, Agostino Nifo and Marco Antonio Genua did not act just with the aim of emancipating psychology from physics and metaphysics as an independent science, but they also contributed to give it a definitive name by which the new discipline could be called. Unlike Aristotle's generic ' $\gamma\nu\omega\sigma\iota$ $\tau\eta\varsigma$ $\psi\nu\chi\eta\varsigma$ ' and the

³ "Qui scientiam de anima aliis scientiis annumerant, eamque unam de undecim partibus philosophiae naturalis esse dixerunt, atque scripserunt, non arbitror eos idipsum sensisse de ea quae de anima humana specialiter ac per se est scientia: nobiliores namque atque sublimiores dispositiones ipsius [...] supra naturam sunt et supra res omnes naturales". Guillaume d'Auvergne (1674, Prologus. In Tractatus de anima, repr. 1963, p. 65, col. 1).

⁴ Bakker (2007).

Latin term 'scientia de anima'. Nifo, in his first Collectanea de anima (1498), talks about demonstrationes animasticarum, explicitly drawing on Simplicius' position related to the subject and the status of the science, which is defined as scientia media et mathematica. Like mathematics, the scientia de anima studies a "middle substance" between separate and sentient forms. Moreover, like mathematics, the scientia de anima has the highest degree of certainty among the other sciences. Marco Antonio Genua moves a step beyond Nifo. His reflections on the soul are strongly influenced by Pomponazzi's work, although their views are diametrically opposed. Genua is completely against the conclusions Pomponazzi reaches: the latter, in fact, denied the legitimacy of a metaphysical science of the soul as he also denied the immateriality of the soul, assigning its study exclusively to physics. On the contrary, Genua draws on the Averroist theory of the uniqueness of the agent intellect and suggests again to place the intellectus humanus halfway between natural substances and immaterial forms. Therefore, an autonomous and separate science is necessary in order to study the ens medium. Genua overcomes Nifo's uncertainties, although he draws on his lexical choices and coins the name of *scientia animastica* for the middle science of the human soul:

"Cum enim intellectus sit talis, ut partim sit separatus, partim inseparabilis existat, consequenter debet habere unam scientiam quae habeat considerare hoc medium ens. Talis scientia non potest naturalis, non metaphysica, quia, si considerabit metaphysica illa per praedicta abstracta, non poterit eam considerare per praedicta materialia; pariter etiam, si naturalis eam consideret per praedicta materialia, non poterit illam considerare per praedicta abstract. Et ideo, sicut hoc obiectum est medium, ita datur una scientia media hoc medium obiectum considerans. Quare scientia de anima neque est pure naturalis neque pura metaphysica [...] et ideo proprie appellatur "scientia animistica" (Marco Antonio Genua. *Lectiones in primum De anima*, f. 4^{va})⁵.

Nowadays, thanks to the recent studies carried out by Heinrich C. Kuhn (2002, pp. 95-97 and *Appendix C*, p. 118), there is a more detailed knowledge about the presence of the works of Paduan Aristotelians in the German libraries and universities during the sixteenth century. Works on natural philosophy are the most present, with more than 640 copies discovered. With regard to natural philosophy, Kuhn reports on the great popularity enjoyed by the commentaries and treatises on *De anima*, written by Paduan Aristotelians. Among those works, Nifo's were the most widespread in terms of number of copies: 247 copies have been discovered in German archives.

⁵ With regards to this manuscript and this quotation see Bakker (2007, p. 173).

Besides Nifo, another important thing to underline is the reception of the works of Zarabella in the first Reformation philosophy. Sascha Salatowky showed the important role played by Zarabella's commentaries to *De anima* in the works of the Lutheran authors Jakob Martini (1570-1649), Christoph Scheibler (1589-1653), Sigismund Evenius (1585/9-1639), Johann Conrad Dannhauer (1603-1666), and Martin Leuschner (1589-1641), but also in the works of the Calvinist Clemens Timpler (Salatowky, 2006, p. 383-ff.).

Very interesting is the case of the Lutheran Johann Ludwig Havenreuter (1548-1618), a philosopher and physician, who taught in Tübingen and Strasbourg and was famous as the editor of the *Opera logica* of Zabarella in Germany⁶. In 1590, Havenreuter presided over a disputation titled: $\Psi \nu \chi o \lambda o \gamma \iota \alpha$ sive philosophica de animo $\sigma \nu \zeta \eta \tau \eta \sigma \iota \zeta$, ex libro tribus Aristotelis $\pi \varepsilon \rho i \psi \nu \chi \hat{\eta} \zeta$ excerpta. The author of the disputation was his student, Gallus Rhormann Teccensis⁷. This work represents one of the first occurrences of the term 'psychology'.

Another important case is that of the Calvinist Clemens Timpler (1563/4–1624), who during the 1580s studied at the University of Padua, where he probably attended the lessons of Zarabella. In 1604, Timpler published a work entitled *Empsychologia*, and later on several disputes whose subject was the soul. As Joseph S. Freedman (2004) proved, Zarabella played a large influence on the work of Timpler. Therefore, the research carried out by Paduan Aristotelians on the status and the subject of the animastic science had a big impact on the sixteenth- and seventeenth-century German *Schulphilosophie*. Moreover, in early Protestant culture, the epistemological and disciplinary *translatio studiorum* leading to the independence of the science of the soul reaches one of its most important moments of synthesis.

2.2 A new Name for the Science: 'Psychology' in the Reformation Era

Between 1520 and 1570, in Central-European reformed institutions, there was a considerable reduction in curricular teaching and chairs of

⁶ On the reception of Zabarella's works by Havenreuter see Kusukawa (2002).

 $^{^7}$ Rhormann G. (1590), Ψυχολογια: sive philosophica de animo συζητησις, ex libro tribus Aristotelis περὶ ψυχῆς excerpta, inque Argetoratensium Academia ad disputandum, Sub Praesidio Ioannis Ludovici Havvenreuteri Doct. Medici & Philosophi. Strasbourg: Bertramus.

metaphysics⁸. This was certainly due to the simultaneous action of at least three factors:

- 1. The strongly anti-metaphysical option dominating Lutheran culture throughout the sixteenth century.
- 2. An atmosphere of instability at a theological level due to the spreading of reformed movements and the conflicts among them;
- 3. The spreading, in universities and gymnasiums, of philosophies such as Ramism, which were clearly filled with anti-scholastic and antimetaphysical options.

In such a context the first edition of the *Commentarius De anima* (1540) of Melanchthon is a key moment from a cultural point of view because it helps to rehabilitate the commentary to Aristotle's *De anima* in Protestant academies and to spread a tradition of investigation on the science of the soul, which will later prove to be very rich.

Melanchthon dissociates himself from Luther, who had declared, in his *Heidelbeger Disputation* (1518) and later on in his *Annotationes in Ecclesiam* (1532), that the immortality of the soul was an exclusive article of faith, thus making void the efforts to investigate the nature of the human soul through natural reason and Aristotelian philosophy. According to Luther, Aristotle's philosophy is a philosophy of immanence, and this invalidates the doctrine of the soul. Thinking about the soul as a form of the body means binding soul to matter permanently and driving it to corruption and mortality⁹. Luther's condemnation starts from Aristotle to include the whole Aristotelian and Platonic tradition and the same possibility to know something about the soul and its nature using only reason. From this point of view, Luther creates an irreconcilable fracture between knowledge and faith:

"Philosophi de animae immortalitate disputarunt quidem sed ita frigide, ut meras fabulas egisse videantur, potissimum vero Aristoteles sic de anima disputat, ut diligenter et callide caverit ubique, ne alicubi disseret de eius immortalitate, neque voluit exprimere, quid sentiret. Plato retulit potius audita quam suam sententiam. Neque enim potest ulla ratione humana convinci eius immortalitas, quia res est extra solem credere animam esse immortalem. In

⁸ With regards to the situation of metaphysics during the Reformation area (1520-1650) see Freedman (1985, pp. 120-121); Freedman (1999, V, p. 216); Freedman (1994a, pp. 46-47); Freedman (1994b, pp. 220, 224, 234); Freedman (2009, forthcoming).

⁹ About this problem see Salatowsky (2006, pp. 53-69). According to Salatowsky, Luther's criticisms is focused on *De Anima* II, 1, 412b5-ff..

mundo non videtur nec intelligatur certo animas esse immortales" (Luther 1532, repr. 1898, p. 70, vv. 26-31)¹⁰.

Melanchthon agrees with Luther on the fact that only the Holy Scriptures can give a knowledge *de re* of the soul, but he does not condemn the philosophical tradition, a rational investigation of the soul and the possibility of a true science of the soul:

"Quanquam autem multae absurdae opiniones veterum Philosophorum fuerunt de natura animae, tamen eas cognoscere conducit in tantum, ut cum videamus, quanto desiderio & animorum cruciatu homines alieni quidem a vera agnitione Dei, non insipientes tamen suam originem frustra scrutati fuerunt, eorum miseria moti nos libentius acquiescamus in ea noticia atque doctrina, quam hac de re in sacris literis traditam cognoscimus" (Melanchthon, 1575, p. 3).

And more:

"Quid est anima? Haec quaestio esercuit omnes eruditos omnium aetatum, & non modo dubitatur, quae res sit anima racionalis, sed etiam constitui non satis potest, quae sit natura animae in brutis. Itaque variae sunt disputaciones doctorum, ut in re obscura. Ac in caeteris philosophis laudo studium, qui conati sunt monstrare, quae res sit anima" (Melanchthon, 1540, p. 3).

Thanks to Melanchthon, it is possible to start discussing the soul once more as ἐντελεχεία in the Lutheran context (Melanchthon, 1540, p. 8).

Furthermore, for a long time, a rich historiography actually ascribed to Melanchthon the first use of the Latin neologism 'psychologia'. According to Wilhelm Fridolin Volkmann (1875-1876, I Bd., p. 38), and later Rudolph Eisler (1904, p. 150-162, esp. 152; 1913, pp. 515-520, esp. 515), the term was used by Melanchthon in his *Vorlesungen* rather than in the *Commentarius De anima*. Although for a long time historians debated this attribution, it has never been confirmed by textual evidence.

With regard to the Calvinist context, it has to be pointed out that, at least in the earlier stages of the spread of the Calvinist movement (1560-1590), the work of the Calvinist Pierre de la Ramée had a strong influence on and boosted a period of great cultural fervour in reformed academies and gymnasia, similar to what Melanchthonism had done in the field of Lutheranism. Ramus' followers, the so-called Ramists, promoted several projects to reform disciplines and gymnasium ratio curriculare whose aim would have been to fulfil Ramus' reforming plan, according to some guiding principles:

¹⁰ With regard to this see also Salatowsky (2006, pp. 67-69).

- 1. a comprehensive redefinition of disciplinary subjects and fields;
- 2. a use of diagrammatic tables in order to facilitate the learning and teaching of the contents;
- 3. a reintroduction of logic as a general and architectonic science, to the detriment of metaphysics.

It is no accident that the term *psychologia* appears in *Schulphilosophie* for the first time in some works of a Ramus' follower, Johannes Thomas Freig (lat. Freigius, 1543-1583). Freig was a Calvinist and Ramus' biographer, as well as professor of logic and rhetoric at Freiburg i.Br and Basel. In his 1568 work, *Trium artium logicarum* (1568), Freig proposes a disciplinary division according to which the *scientia de anima* was included in the field of natural philosophy together with medicine and the history of animals.

(see Table A)

Six years later, in the first edition of his work *Questiones* $E\omega\tau\nu\alpha\lambda$ $\kappa\alpha\lambda$ $\Delta\varepsilon\iota\lambda\nu\alpha\lambda$ (1574), Freig gives a new, interesting disciplinary partition, confirming the science of the soul among physical sciences, in particular among those dealing with the qualities of compound bodies. In his work, he calls the science of the soul 'psychologia'.

The use of the term *psychologia* in this work of 1574, which I discovered in September 2009, is therefore the first occurrence of the term in German philosophy and backdates by one year the use of the neologism by Freig. Hitherto, the first occurrence of the term was ascribed by William Hamilton (1882, vol. I, p. 136, note alpha) and Lapointe (1972, p. 332-333) to the work *Catalogus locorum communium* (1575).

In his work of 1574, Freig wonders about how many and which are the subjects belonging to the field of physics. His answer is: if physics is the science that studies qualities, therefore all the subjects whose object of study is different species of quality will be physical disciplines. Qualities can belong to either senses or bodies: for example, the *ars* of *sensus audiendi* is music, while the *ars* of *sensus videndi* is optics.

The qualities of the bodies provide subjects for several other physical disciplines. Astrology deals with the quality of simple bodies when those bodies are the stars; when they are elements, such as hot, cold, humid, dry, it is Physiology that deals with them. Meteorology is the discipline that deals with the qualities of the compound bodies (*corpora composita*) when those bodies are imperfect; Psychology and the history of animals deal with the compound bodies that are perfect¹¹.

^{11 &}quot;Quot sunt Physices artes? Plures sunt. Nam qualitates sunt vel Sensuum, vel

Following such a classification of the physical disciplines, Freig proposes an interesting outline, as follows¹².

(see Table B)

Nevertheless, Freig takes a step forward here, compared with his previous works.

The term is actually a paleonymy, which is in line with the sixteenthand seventeenth-century trend to coin Graecisms in order to name and rename some disciplinary fields. In Freig's work, the paleonymy appears as a lexical translatio through the transliteration of the Greek semanteme into the Latin. In his later work *Quaestiones physicae* (1579), Freig dedicates an entire book (no. XXVII) to psychologia and confirms the Latin denomination of *psychologia* to indicate the science that studies the soul of living beings. The soul, in its turn, was defined as "principium vitae in corpore naturali"13. Furthermore, Freig adds the description of the three species of the soul (natural, sentient and intelligent) and their respective faculties, functions and anatomical locations. The psychologia Freig talks about in his Quaestiones physicae deals with the various species of the soul present in the bodies of the living beings. It follows that separate intelligences, as incorporeal beings, are excluded from the field of science. Since Freig includes psychology in his work Quaestiones physicae, he therefore confirms that its disciplinary field falls within physics.

A step forward towards the success and the disciplinary autonomy of psychology as a term and as a science was made about ten years after the publication of Freig's work, in the context of Calvinism. In 1590 Rudolph Göckel (lat. Goclenius), a professor at Marburg University who was considered a semi-Ramist, published a work entitled \(\Psi\)YXO\(\Lambda\)O\(\Gamma\)IA, hocest de hominis perfectione, animo et in primis ortu hujus. The work, which was published in two further editions (1594 and 1597), is a collected volume of contributions and parts of the works of some authors –

Coporum. Circa quialitates sensus audiendi, est Musica, videndi Optica. Corpora autem sunt vel simplicia, ut Astra, cvirca quae Astrologia: & Elementa, circa quae Physiologia. Vel Composita: eaque tum imperfecta, circa quae Meteorologia: tum Perfecta, circa quae Psychologia & Historia animalium. Ad Astrologiam referuntur Sphaera, meqewroskopikh\ gnwmonikh\. Ad Physiologiam, Agricultura & Medicicina". See Freigius (1574, De philosophia et artibus, pp. 6-7. In Quaestiones EΩΘΙΝΑΙ ΚΑΙ ΔΕΙΛΙΝΑΙ seu Logicae & Ethicae).

 $^{^{12}}$ Freigius, (1574, Typus philosophiae, p. 8. In Quaestiones $E\Omega\ThetaINAI$ KAI $\Delta EI\Lambda INAI$ seu Logicae & Ethicae).

¹³ Freig (1579, 1. XXVII, p. 761).

theologians, philosophers, jurists and doctors – who principally belonged to the reformed area. Goclenius edited the whole work, adding his contribution and writing a dedicatory epistle. The contributions included in the book have as their subject the issue regarding the origin of the human soul, its creation – or, if necessary, its generation from matter – and its relations with the body. Among the contributions, there are those of Hermann Vultejus (1555-1634), professor of law at the University of Marburg since 1581; Johann Ludwig Havenreuter is another author included in the book.

As I mentioned above, in November 1590, some months after the publication of $\Psi YXO\Lambda O\Gamma IA$ by Goclenius, a pupil of Havenreuter 14 presented a disputation in Strasbourg, whose title included the Greek neologism $\psi \nu \chi o\lambda o \gamma i\alpha$. Havenreuter probably agreed with Goclenius' choice to name the science of the soul using the Greek neologism and encouraged the spread of the term among his pupils.

With regard to the $\Psi YXO\Lambda O\Gamma IA$ of Goclenius, he also added to the 1597 edition some passages from Exoterices exercitationes de subtilitate (1557) of Giulio Cesare Scaligero, others of Girolamo Savonarola about the anima intellectiva as a created reality, and an extract – entitled De origine animorum – from De natura Dei (1577) of the reformed Lombard theologian Girolamo Zanchi (1516-1590)¹⁵. According to Goclenius, the work was intended to promote a sort of status quaestionis on the science of the human soul, with special attention on the results reached in the Protestant culture. Goclenius gives the name 'Ψυχολογία' to the science of the soul by transliterating into Greek the Latin word used by Freig.

Unlike Freig, who called *psychologia* the science of the soul and its functions, according to Goclenius, the term *psychologia* was the science investigating only the human soul. However, even though Goclenius narrows the field of the subject of psychology, he does not assume another disciplinary position for it. In the same as Freig, Goclenius includes psychology in the field of investigation of physics.

¹⁴ See footnote 7.

¹⁵ See Kusukawa (1999, p. 128). With regard to Zanchi and his psychology see Burchill (1984, p. 22, n.101).

¹⁶ Before the term was discovered in Freig's work, for a long time critics ascribed to Goclenius as well as Melancthon, the authorship of the term 'psychology'. However, unlike Melancthon, there has always been textual evidence of the use of the term by Goclenius.

Goclenius' commitment to psychology was not limited to the publication of his 1590 work or to the mere use of the neologism¹⁶. Recent research shows that the philosopher from Marburg, who was the author of the two famous philosophical lexica (1613 and 1615), started to carry out important research on the science of the soul in 1590s. There are twelve magisterial disputations 17 – i.e., valid to be awarded the title of magister artium - dating from the period between 1590 and 1600 conducted in Marburg in the presence of Goclenius that contain the word psychologia, either in the title or in the text, and deal with psychological topics. Otto Casmann (1562-1607), a Calvinist and successful pupil of Goclenius in Marburg, published a work entitled *Psychologia Anthropologica* in 1594: thanks to Casmann, psychology became, together with somatologia, one of the two species of anthropology, which is a physical science. In 1596, Goclenius wrote a preface to Rudolph Snellius' (1546-1613) work¹⁸ that includes a chapter entitled 'Psychologia'. Therefore, the school of Goclenius turns out to be a key moment in the spread of the term and the science we call psychology. In Marburg, between the end of the sixteenth century and the beginning of the seventeenth century, the science of the soul carried great academic weight, also thanks to the specific name it was given, which was precisely 'psychology'. The term psychology soon

¹⁷ Hirstenius, J. (1591). Theses Psychologicae in Ad subjects theses philosophicas. Marburg: Paul Egenolph 1591; Stollius, C. (1591). Disputatio psychologica completens tres animae humanae facultates. Marburg: Paul Egenolph; Mollerus, M. (1594). Themata psychologica, de ratione Suprema animae humanae facultate, more fere geometrico, ubi consectaria ex propositionibus deducuntur. Marburg: Paul Egenolph; Appelius, J. (1595). Συνοψις psychologicae, ex Aristotele, aliisque philosophis concinnata. Marburg: Paul Egenolph; Luncker, K. (1596). Disputatio psychologica, tres animae humanae facultates complectens. Marburg: Paul Egenolph; Vietor, L. (1596). Disputatio philosophica quadripartita. Prima Logica; Secunda Psychologica; Tertia Ethica; Quarta Historica et Physica. Marburg: Paul Egenolph; Fulhunius, H. (1596). Thesis Psychologica & exicogr., in Theses de quibus ad ornamenta Magisterii Philosophici consequenda ex pube Scholastica delecti XXV docti & honesti juvenes [...] respondebunt. Marburg: Paul Egenolph; Fulhnius H. (1597), Psichologia & Dig., exicogr., Marburg, Paul Egenolph; Faber J.j. (1598). Sequentia Themata. Marburg: Paul Egenolph; Wagenerus, E. (1598). Propositiones has de anima cum caeteris appendicibus. Marburg: Paul Egenolph; Ursinus, H. (1599). Theses Philosophicae. Lich: Erbenius.

¹⁸ Snelius, R. (1596). Snellio-Rameum philosophiae syntagma, tomis aliquot separatis distinctum [...]: 1. Generales [...] informationes, 2. Dialectica, 3. Rethorica,
4. Arithmetica, 5. Geometria, 6. Sphaera, seu Astronomia, 7. Physica, 8. Psychologia,
9. Ethica, Frankfurt: Fischer.

became widespread even among Lutherans, even though Jakob Martini preferred to use the Greek neologism

Quemadmodum duae sunt partes hominis essentiales, Corpus & Anima: ita etiam Anthropologia, quae hominis naturam & essentiam scrutatur, duobus absolvitur tractantibus: quorum prior Corporis Θεορίαν proponit, & Ανατομική; posterior Animae humanae essentiam venatur, & ψυχολογιχή dicta est. De illa agimus in decem nostris exercitationibus Anthropologicis [...]¹⁹.

Christoph Scheibler used the Latin term to title a collection of 30 disputations conducted under his presidency at the University of Giessen: the work is entitled *Collegium Psychologicum* (1608-1609)²⁰. Scheibler taught in Giessen, where a Lutheran university had been established in 1607 to firmly oppose the Philipps-Universität of Marburg, after Marburg had become a Calvinist town in 1605, at the will of Prince Moritz von Hessen. When the university was founded, many professors in Giessen

¹⁹ Martini, J. (1606). Exercitationes nobiles de anima in genere, Wittenberg: Helwingij, ex. I, p. A2^r.

²⁰ Here following it is provided a list of the titles and the respondents of the disputes. About the soul in general and the vegetative soul: De defintione animae (Iohannaes Georgius, 1608); De quibusdam generalibus quaestionibus de anima (Godofredus Stephanus, 1608); De gradibus et facultatibus animae in genere (Iohannes Bruderus, 1608); De anima vegetante et ejus facultatibus in genere (Christophorus Müller, 1608); De nutritione (Christophoro Leuslerus, 1608); De accretione (Iohannes Vincentius Stammius, 1608); De generatione (Daniel Stahlius, 1608); De vita (Iohannes Burger, 1608); De morte (Gerhardo Zuihlius, 1608); De longitudine & brevitate vitae (Iohannes Ulnero, 1608); De Aetatibus (Wolfangus Ludovicus, 1608). About the sentient soul: De anima sentiente in genere (Ludovicus Betulius, 1608); De sensu e sensibili (Valentinus Zentgraff, 1608); De sensibus exterioribus in genere (Solomon Cadomannus, 1608); De visu (Gerhardo Tideman, 1608); De auditu (Henricus Nicolai, 1609); De olfactu (Johannes Wilhelmus Lansidelius, 1609); De odoribus (Philippus Dippelius, 1609); De gustu (Christophorus Witzelius, 1609); De tactu (Petrus Wolffius, 1609); De sensibus interioribus (Jacobus Weddenius, 1609); De somno vigilia & somnis (Johannes Ludovicus Birchner, 1609); De facultate Appetitiva (Petro Regius, 1609); De facultate locomotiva (Guilelmo Geilfusio, 1609). Sull'anima razionale: De animae rationalis definitione (Iohannes Georgius, 1609); De animae humanae productione (Iohannes Roslerus, 1609); De animae humanae immortalitate, ejus statu post hanc vitam (Christophorus Vicelius, 1609); De intellectu & ejus obiecto (Petrus Fischlerus, 1609); De distintionibus intellectus & intellectionis sive cognitionis (Iohannes Wagnerus, 1609); De voluntate (Adamo Leuthius, 1609). All the works in Scheibler, C. (1608-1609). Collegium psychologicum, Giessen: Chemlinus.

aroused bitter controversy against the Calvinists of Marburg, in the field of theology, like Johannes Winckelmann (1551-1626) and Balthasar Mentzer (1565-1627), and philosophy, like Caspar Fink (1578-1631).

Beyond confessional oppositions, 10 years after the attempt of Goclenius in Marburg, Christoph Scheibler carried out a similar attempt in Giessen as he tried to investigate psychology and its subject in more depth in collaboration with his students.

3. Conclusions

Ontology, like psychology, is the name of a science whose origins date back to the Early Modern period and are related to Reformed *Schulphilosophie*. The term is a palaeonymy coined in Latin in 1606 by the Calvinist Jakob Lorhard, rector of the gymnasium of St. Gallen, in his work, *Ogdoas Scholastica*. The idea of giving metaphysics, or a part of it, the name ontology most probably came to Marburg and Goclenius through Lorhard, as the latter was called to teach theology at the Philipps-Universität of Marburg in May 1607²¹.

Nevertheless, if, according to Lorhard, the word "ontology" was synonymous with "metaphysics", Goclenius used it to indicate a specific part of metaphysics, which is its transcendental or general part. In his 1613 Lexicon philosophicum, Goclenius transliterates the Latin neologism used by Lorhard into the Greek, οντολογία, and uses it to indicate exclusively the "scientia de ente seu transcendentibus", excluding from it the study of all the species of being or of particular beings, i.e., God, angels, numbers and geometric figures.

After a period in which the interest in metaphysics markedly decreased in the Lutheran context, the Calvinists resumed its study, in particular through the works of Jesuit authors such as Perera, Fonseca and Suárez. As happened for the term *psychologia*, it is inside the Calvinist culture that the need was first felt to use a neologism to name the universal science of being: the aim was to avoid traditional terms such as first philosophy (*philosophia prima*) or metaphysics, which were considered too ambiguous. Once again, Goclenius is a key author for the success of the neologism.

Unlike psychology, ontology experienced minor problems with its disciplinary collocation and status. Ontology could only be collocated within metaphysics, as its general part. On the contrary, the disciplinary collocation of psychology was an unsolved matter for many years, even

²¹ This hypothesis was formulated in Ørstrøm, Andersen, Schärfe (2005, pp. 428-429).

after Goclenius and his school. Goclenius himself, in a work of 1604, appears inclined to reconsider the hypothesis of including psychology within the field of physics, since it deals with some species of *corpus mobile* that is the subject of natural philosophy.

Physica est νοητῶν seu immaterialium vel αἰσθητῶν. Illa divinorum potest dici & πνευματολογία: estque Physica naturarum spiritualium²².

On the contrary, in the Lutheran context, Johannes Micraelius (1597-1658) includes the science of the human soul among the special sciences of metaphysics, and consequently as a part of it.

Metaphysica dividitur in generalem, qua ens in abstractissima ratione & omnimoda indifferentia consideratur, cum quoad naturam, tum quoad affectiones, tam conjunctas quam dissolutas; & in specialem, qua ens consideratur in istis speciebus substantiarum, quae ab omni materia sunt absolutae, ceu sunt Deus, angeli & anima separata: quanquam aliqui theologiam, angelographiam & psychologiam, in quibus agitur de Deo, angelis & anima separata non habent pro partibus metaphysicae, sed illas censent peculiares esse disciplinas²³.

This would be the way followed by most of the *Schulmetaphysik* in the eighteenth century, when Christian Wolff put cosmology in the place and the role of *angelographia*, thus turning such a disciplinary division into something standard.

On the contrary, Johann Ludwig Havenreuter proposed a subdivision of psychological objects between physics and metaphysics:

Deinde a subjecto horum librorum [of *De anima*] quod partim sub Physici, partim sub Metaphysici & primi Philosophi contemplationem cadit: quatenus mens corpus informat, & suas corpore operationes exercet, a Physico consideratur, quatenus autem separata, & a corpore seiuncta est, essentiam eam Metaphysicus perpendit²⁴.

Johann Heinrich Alsted, one of Goclenius' students in Marburg in 1606²⁵, tried to give a new collocation to *psychologia*: in his *Encyclopaedia*, he considers psychology as a special science within the field of *pneumatica*,

²² Göckel (1604, l. I, c. I, [theorema], p. 14).

²³ See the entry 'Metaphysica' in Micraelius (1661, pp. 770-771).

²⁴ Havenreuter (1605, pp. 3-4).

²⁵ Hotson (2000, pp. 11-12).

which is the 'scientia de natura spiritus'. In contrast to Goclenius, Alsted did not regard *pneumatica* as a part of physics. At the same time, he opposed those who, like Micraelius, included the general being, as well as God, angels and the separate soul, as a matter of investigation of one unique science, i.e., metaphysics, thus turning psychology into a special part of metaphysics.

Disciplinae secari debent ut res in natura positae. Haec quippe sunt mensura & regula cognitionis nostrae [...]. Non itaque facere possumus cum Scribonio, qui de spiritu tum infinito tum finito praecipit in Physicis; quod etiam facit Goclenius in *Speculo Physicae completae*. Sed neque illorum adstipulari possumus sententiae, qui de spiritu tractant in Metaphysicis. Nam quia Metaphysica est disciplina generalis de ente, non potest tractare de tali ente, puta de Deo, angelo, & anima separata. Fieri enim non potest, ut unius specie disciplinae duo sint objecta specie distincta, unum generalissimum, ens nempe in latitudine, alterum singularissimum, ut est Deus, cui subjecto accedent duo specialia, puta angelus & anima separata²⁶.

From this Alsted concludes that *pneumatica*, which includes *psychologia*, is a science separate from metaphysics and physics.

Ex his relinquitur, peculiarem disciplinam sibi vendicare considerationem spiritus²⁷.

However, it is not clear what is the real disciplinary collocation of the new science in Alsted: for example, God is one of the three subjects of pneumatics and is at the same time, according to Alsted, a partial subject of metaphysics. It is no accident that Christian Wolff would consider it more natural to place the three sciences that compose the *pneumatica* of Alsted once again inside metaphysics, in the special part of it that is separate from ontology:

Psychologia & Theologia naturalis nonnuquam *Pneumaticae* nomine communi insigniuntur, & *Pneumatica* per spirituum scientiam definiri solet. Ontologia vero, Cosmologia generalis & Pneumatica communi *Metaphysicae* nomine compellantur. Est igitur *Metaphysica* scientia entis, mundi in genere atque spirituum²⁸.

In conclusion: during the Reformation Era and in the context of the German *Schulphilosophie*, the debate on the status and subject of psychology has a great success.

²⁶ Alsted (1630, repr. 1989, Bd. 2, t. III, 1. XII, c. I, p. 631, coll. a-b).

²⁷ Alsted (1630, repr. 1989, Bd. 2, t. III, 1. XII, c. I, p. 631, col. b).

²⁸ Wolff (1740, chapter II, § 79).

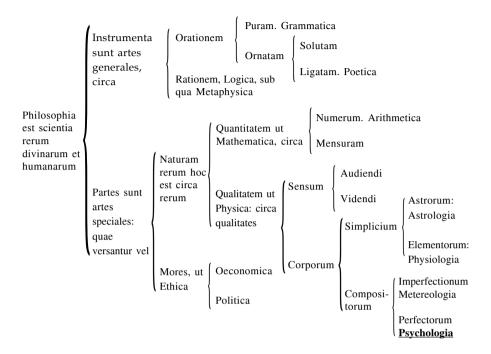
However, with the exception of the widespread and the success of the term, this debate seems to confirm the same positions found throughout the centuries.

The psychological science will probably have to wait until the end of the nineteenth century to see its final emancipation from physics and metaphysics and to be transformed into an experimental and less speculative science. However, perhaps Aristotle's perplexities about it were well-founded as, when considering its own subject, the science of the soul and its collocation are still an open issue.

(Table A)²⁹ Lexica. Grammatica ad Dictionaria quam pertinent Servius Una de differendo Donatus λογική cuius 3 Et his annumeranda Enarratores Acron Dialectica partes historia et poesis Porphyrius Rhetorica Eustathius Moralem ήθικὴν Singulorum dispensativam Altera de vita et οικονομικήν Unde quasi Philophiae morib. ἡθική quae Familiae trigeminus ratio index mores expendit vel Civilem Ars militaris partius protulit Venatio πολιτικήν Civitatis Iurisprudentia cui subijcitur Metaphysica Historia animalium Φυσιολογίαν Libri de anima ad quam referuntur Medicina ιαθρική Tertia de natura Agricultura et Pastio et rebus occultis φυσική quae 2 Geodesia Arithmetica partes habet Catoptria Optica Architectonica Geometria sub qua Plaeraeque Mechanicae Geographia Genethliologia Astronomia sub qua Astrolabia Horoscopia

²⁹ Freig (1568).

(Table B)³⁰



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³⁰ Freig (1574, Typus philosophiae, p. 8. In Quaestiones $E\Omega\ThetaINAI$).

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