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***PSYCHOLOGISMUSSTREIT AND EDMUND HUSSERL:
The Reception of Psychologism in *Prolegomena zur reinen Logik****

São Leopoldo

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To my beloved Ana Clara, from whom I've learnt
there is no fear in love.

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To, of course, Edmund Husserl, role model philosopher, from whom I've learnt that "*in den Tiefen liegen die Dunkelheiten und in den Dunkelheiten die Probleme*".

“Metaphysische Fragen gehen uns hier nicht an”.

Edmund Husserl

ABSTRACT

The present research is concerned with Edmund Husserl's reception of psychologism, one of his main problems, especially in his second volume masterpiece *Logische Untersuchungen: Prolegomena zur reinen Logik*, our thematic focus. The kind of psychologism, therefore, one here approaches to is psychologism as presented and refuted in *Prolegomena*. This sort of psychologism, which one shall later call "logical psychologism", must be understood against a background in which some historical and thematic phenomena matter. In broader terms, these phenomena concerns the development of logic and mathematics and, *ipso facto*, the very philosophical context of which Edmund Husserl and his work are a fraction. In sum, one does not aim at a mere description of the phenomenon of psychologism, but one seeks a real understanding of the problem and why Husserl sees it as such.

Key-words: Edmund Husserl. Psychologism. Logic. Logical Investigations.

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1 INTRODUCTION

Edmund Husserl was a psychologist thinker¹. Such a statement, which might startle an Edmund Husserl's not-so inmost reader, demands a reconstruction of a particular, albeit extended, context that enables it. To reconstruct that context means framing the basic problems Husserl faces, as well as the questions he brings about, whose roots lay down on the then forthcoming (modern) science. One does not aim therewith at a mere historical report, whose epilogue may be a Husserl's triumph against skepticism, but rather a return over the time, a return which allows to jump into the genesis and nature of this research and *Logical Investigations* main problem: psychologism. This work, thus, is about Husserl's reception of psychologism, namely, how he understands it and replies to it. The problem of this research is to frame psychologism within Husserl's *Prolegomena*, which will be articulated upon two major sections: in the second one, Husserl's proper reception, preceded by the reconstruction of the ensuing problem, elaborated both in the first section and even in this introduction. It is this reconstruction, which the introduction also serves, that determines an over-arching comprehension of psychologism.

Within the scope of the historiography of the scientific thinking, although there are, from the analytic standpoint, disagreements on the nature of the modern science's advent, there are, from the factual standpoint, agreements on its temporal, local, and personal aspects. If, on the one hand, Pierre Duhem (DUHEM, 1959) and Paolo Rossi (ROSSI, 2001), for instance, construe respectively the modern science either as "continuity" or as "breakage" with the science inherited from Middle Ages on, both of them, on the other hand, depict the modern scientific undertaking as an essentially European phenomenon that bulks larger and larger mainly as from 17th century on, on behalf of, among others, Kepler, Galileo, Bacon, Vico, Descartes, Leibniz, Pascal, Gassendi, Huygens, and, obviously, Newton.

Both of them converge equally on the sense that the then science, whether a continuity or a breakage, attains a new dimension with the adoption of a new conceptual and instrumental apparatus, which occurs in the framework of intense altercations among the aforementioned authors. Thereof it is an expressive example

¹ Although that statement is provoking and even outrageous, as well as it has rhetorical purposes, it conceals a typical complexity of the psychologism problem, and such a complexity makes that very statement true: Frege (1894, pp. 313-332), Sellars (1949, p. 429), and Dummett (1981, p. 56), for instance, did accuse, at different times, Edmund Husserl of being "psychologist".

the struggle between Cartesian, Leibnizian, and Newtonian physics, from whose clash the latter came out victorious. The Newtonian physics prevail in context of beginnings of circumscription and detachment between philosophy, as pertaining to *Geisteswissenschaften*, and physics, as pertaining to *Naturwissenschaft*, distinction foreign to that time when both are gathered and regarded as “Natural Philosophy”. Newtonian’s triumph (over Cartesians and Leibnizians) lets itself be accounted for by some reasons – from which, ultimately, materialism accrues.

Leibniz’ and Descartes’ physics differ under several and important aspects, chiefly on the explanation, but not on the foundation, of space and time. The Cartesian space consists of the arrangement and relations among bodies, regarded as substances utterly dissimilar to souls. Whereas soul is a purely immaterial and intangible substance, whose main feature is thinking (*res cogitans*), body is a tangible and material substance, whose main feature is filling some space (*res extensa*). Cartesian dualism, through the incommunicability between both substances, represents a diatribe against “hidden forces” and a physical world’s reduction to geometry. If bodies are reduced to extension, then a body, according to Descartes, is reduced to purely geometrical characteristics: not intrinsic and organical qualities, but extrinsic and mechanical quantities determine and make a body different from another one. Physics’ subsumption to geometry, through body’s reduction to mere extension, allowed not only the banishment of the occult and speculation, but also the mathematization and quantification of relations among bodies. This is one of the first steps towards mechanism.² (WESTFALL, 2009)

Cartesian body and soul are substances, as analysis objects, that belong respectively to physics and metaphysics. Physics, now reducible to geometry, deals, given that body is reducible to extension, with space. Bodies, however, interact with each other and through interaction get in movement. The movement brings forth the time and therewith establishes the physics. Whereas the movement makes the time noticeable and whereas Cartesian body is a substance with no predicate but geometrical ones (size, length, shape, figure), the dynamics among Cartesian bodies

² Undeniably there are “mechanistic” expressions before Descartes, of which Thomas Hobbes perhaps is the closest in time. Although he is not the first mechanist, as well as his mechanism is different in comparison to other else’s (Isaac Newton, for instance), Descartes certainly plays a much more significant role than his successors in consolidating mechanism. It was said, by the way, that Descartes’ mechanism is different, which suggests that “mechanism” concept is polysemous – and in fact it is. Here the concept encompasses and it is understood both as the doctrines of these authors above remembered and as the attempts to explain the world as whole on basis of mechanical, actual laws.

is just possible through contact. Cartesian time analysis is another step towards mechanism: Aristotelian causes are now reduced to one single causality, the efficient one.

Leibnizian physics, both its first formulations and its maturer stages, is also mechanist, but space and time do not refer, as in Descartes, to the body only, but, ultimately, to another substance, which he appoints as “monad”. The disposition of these substances, the monads, will grant Leibnizian space, while from their relations the time will derive. The appearance of a new substance in Leibniz's physics does not exclude the presence of bodies; these ones, however, are not limited to geometry, in terms of space, nor to contact and efficient causation, in terms of time. Leibnizian bodies are not something diaphanous and void, since an endogenous element belongs to them: force. A new conception of body entails a new conception of time, whose joint analysis, the dynamics, is followed by a refutation of Cartesian principles. (JOLLEY, 1998, pp. 273-283).

If the body is no longer identified with extension because the quality “force” belongs to it, so, contrary to what Descartes thought, physics should no longer be explained in purely geometric terms. This is because, in the first place, the notion of “extension” is insufficient to define the essence of the body, since the extension, by itself, cannot constitute the essence of something, but only refer casuistically to some quality that is extensive. Second, given that for Cartesians a body can be infinitely divided, so it cannot have the geometric property of form, for form requires extension, so that if you cannot have something extended without form, then extension does not constitute the essence of the body. Third, we are led to what Daniel Garber calls the “aggregate argument”, summarized in the Leibnizian expression according to which “what is not truly one being is not truly one being either”, that is, extended bodies must be constituted of units that do not exhaust into the mere extension. Fourth, since for Descartes the body is nothing more than extension, therefore every body occupies a space, so there can be no empty space, which consists of the Cartesian plenum – the perfect uniformity of matter filling space. Now, if the world is full, and full of uniform corporeal matter, then it is not possible for there to be change and, therefore, time; after all, if “no portion of matter were to differ from equal and congruent portions of matter, and if one momentary state were to differ from another in virtue of the transportation of equal and interchangeable portions of matter alone, portions of matter in every way identical”, then it follows that “in the corporeal world

there can be no way of distinguishing different momentary states from one another”³. (JOLLEY, 1998, pp. 285-286).

It is not the purpose of this introduction to defend Leibniz against Descartes, but to trace chronologically at least one important development in the field of the emerging modern physics, even contemplated in entries of D’Alembert’s Encyclopedia (D’ALEMBERT; DIDEROT, 2015, pp. 94-99; pp. 115-118) pointing to the fact that, although radical, that is, although mechanistic, Descartes and Leibniz were still committed to their metaphysics, upon which their physics lied down and in reason of which the latter ones, although mechanical, differed from each other. Earlier, it was said that the explanation, but not the foundation, of Descartes and Leibniz for space and time was diverse. This is explained by the fact that, despite the differences in the scope of their physics, the latter ones rest on a belief common to both of them that they must be based on metaphysics. This similarity between Descartes and Leibniz, which equally distances them from a more radical author like Newton, derives from other similarities: (1) both Descartes and Leibniz share a conception of science, and move on it, in its classical sense, that is, science is universal and necessary knowledge (or set of knowledge) that presents reasons and grounds, not just descriptions; and (2) the election of the mathematical-deductive method as an epistemological model.

Isaac Newton, therefore, does not commit to any metaphysics, not even his own, and does not commit because he operates on a new concept of (doing) science that does not require a foundation, sought in metaphysics by Descartes and Leibniz, which guarantees universality and necessity. Instead of a foundation, required by necessity and universality, Newton will limit himself to description and verification within the narrow limits of contingency and particularity. In the place of a great metaphysical edifice, therefore, Newton only proposes a humble vow - to raise no

³ The Cartesian principle of constancy and conservation of time, according to which motion is the product of size multiplied by velocity, is also rejected by Leibniz as leading to a paradox. The sum of all sizes multiplied by the sum of all velocities results in a constant generated and maintained by God. This principle of conservation, however, leads to a mathematical problem. For example, if the motion generated by a body to lift itself is conserved, then it is not the product of size multiplied by velocity that is conserved, but the size multiplied by the square of the speed. In other words, neither size nor velocity, nor the resulting product of these quantities, can conceive or foresee the movement of a body in a given future time (t); but since the body conceives of such a movement and therefore moves in a given time (t), then it has some predicate which is not merely geometric, a predicate to which Leibniz gives the name of “force”. (JOLLEY, 1998, p. 286)

hypotheses: *hypotheses non fingo*⁴. The corollary of this general scholium, within the framework of a replacement of “why?” by “how?”, leads to another substitution that concerns the object of science, and this substitution is well translated by his first law, the principle of inertia.

The law of inertia states that any body maintains its state of rest or of uniform rectilinear motion unless external forces act upon it so that it causes a change of state. If this principle is well understood, since uniform rectilinear motion is a natural and original state of the body, so it is no longer necessary to ask, nor explain, the exordial cause of the motion. Here, unlike Aristotle, motion is given and presupposed: what demands explanation is its change - what is the nature and what is the cause of the change in motion? Mechanical, the answer is also twofold: either by force *qua* impact or by force *qua* gravity. If the force explains the change in motion and if the force is manifested by the impact between at least two different bodies, then the relationship among bodies can only be both visualized and determined empirically – only *a posteriori* and joint analysis of bodies/objects, to the detriment of *a priori* and isolated analysis, is possible (CAPALDI, 1975, pp. 54-55).

It is now clear to what extent Newton is a more radical and mechanistic author than Descartes and Leibniz, as well as it is clear that this radicality is a development of the three essential differences between their physics. Since Newton confines himself to describing phenomena rather than giving them a foundation, he does not only adhere to a particular metaphysics, but also, *ipso facto*, introduces a new way of doing science that, in Kantian terminology, moves away from universality and necessity to particularity and contingency. This shift from, so to speak, a “classic” mode of doing science to a “modern” one is accompanied by a new method: no longer the mathematical-deductive one used by Descartes and Leibniz, but the experimental one. There was between these three authors agreement on and

⁴ Precisely because of this conception of science, somewhat distant from Descartes and Leibniz, one can explain why Newton, unlike them, did not ground, but merely presuppose the ideas of absolute time, absolute space, and unrestricted causality in its physics. It will be up, for example, to an author like Kant to attempt to ground such presuppositions and justify them epistemologically upon the knowing subject. This is one of the goals of the *Kritik der reinen Vernunft*, which will also contribute to fertilize the problem of psychologism. By the way, one must note that, although Newton distinguishes between physics and metaphysics, as well as he does not appeal to the latter in order to support the former, it is not denied that Newton also had conceptions at metaphysical level, about which he wrote in parallel to the *Principia*. Howard Stein, for example, states that the word “metaphysics” is somewhat rare in Newton’s writings. Yet, if understood in the Cartesian sense, according to which metaphysics constitutes the principles of all knowledge whose trunk is physics and whose branches are applied, particular sciences, so Newton was not only a physicist but also a “metaphysician”. (COHEN; SMITH, 2002, pp. 256-295)

confidence in mathematics and the role it played in the development of science. There was, however, disagreement as to the approach and applicability of mathematics: if Descartes and Leibniz took it as an epistemological model, whose success would derive from its method of establishing apodictic truths and deriving conclusions from them, Newton takes it as technical tool and reorients its applicability. Newton had realized that mathematics, as it had been received in his time, could not by itself legitimize a theory, that is, it would be possible for several theories, articulated mathematically, to coexist, all of which, starting from certain premises, would conflict with each other. What would make a theory legitimate, therefore, is its success in subjection to tests and rigorous observation. It is this practical dimension, with experimental character, that made possible Newton, from simple mathematizable methods and formulas, to explain a wide range of physical phenomena, apparently diverse, such as falling objects, tidal movement, the interaction of celestial bodies, etc.

From this delineation of the general framework of science, within which Newton's laws are included as milestone of a definitive passage to a new conception of science, it is possible to derive at least six conclusions, the same conclusions reached by successive thinkers, with an increasingly mechanistic and materialistic slant. First, the object of science is no longer substances themselves, but phenomenal relationships among things. Second, there is no longer any need for a first and primal cause of why things exist. A third consequence concerns the fact that, considering that change occurs only through force communicated by an external object, no examination can reveal potency, necessity or essence that are intrinsic to the object, and therefore there is no formal cause. Fourth, also considering that change occurs only through force communicated by an external object, no examination of an isolated object can reveal in it potency to be an "unmoved prime mover" in relation to another, and therefore efficient causation reveals itself only in the relationship among objects and empirically. Given this fourth conclusion, the fifth one deals with the impossibility of assuming that an efficient cause x has the same nature or "essence" of the effect y . Finally, if rest is as much an universally natural state as motion, then there is no end to be reached, and therefore no final cause. (CAPALDI, 1975, p. 55)

The modern project of reforming (or revolutionizing) science, of which the dismantling of Aristotelian metaphysics is both an effect and a presupposition, was

thus taking a decisive step towards its consolidation. The consolidation of the new science, as a result of the success of mechanics, led it, in effect, to an age of optimism. This optimism has an epistemic dimension, because it corresponds to an existential pessimism both later, in the name of Arthur Schopenhauer, and coeval with Descartes, in the name of Pascal, according to whom “*Le silence éternel de ces espaces infinis m’effraie*” (PASCAL, 1977, p. 99). Mechanism, shaped in the conclusions above, can be understood, as Andrew Pyle teaches, as the theory or thesis according to which all natural phenomena can or, more than that, *must* be described based only on fundamental laws or principles of matter and its motion (PYLE, 1997). These principles are not canonically exhausted in the work *Principia*, but are transmitted and then adapted by generations following Newton, of which Leonhard Euler and Josiah Willard Gibbs are just two of a plethora of names, here chosen at random within a chronological scale, that either try to make mechanics an autonomous and axial discipline (Euler) or that introduce into it new quantities, such as thermodynamics ones, or new features, such as vector notation (Gibbs). (PIRES, 2008, pp. 227-228).

Upon the rubble of Aristotelian “metaphysical physics” the new scientific edifice was set up. From the foregoing it follows that the occult and speculation give way to the tangible and observation, so that mechanism presents itself as a philosophical current that proposes that all physical phenomena are reducible to matter and its movement. There is here a clear interchange between mechanism and materialism in the context of this scientific optimism, to which Ernst Cassirer devotes a rigorous analysis to which one can refer the reader⁵. We limit ourselves, given the also limited structure of the text, to affirming that such a relationship (between mechanism, materialism and physics)⁶ made itself felt in history, a

⁵ CASSIRER, Ernest. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. V. IV: *Von Hegels Tod bis zur Gegenwart (1832-1932)*. Stuttgart: Wissenschaftliche Buchgesellschaft, 1957.

⁶ For didactic purposes, both thematic and historical, one quotes here Professor Mario Porta, and the concepts of “mechanics”, “mechanism” and “materialism” are differentiated as follows. Often confused, “mechanics” and “mechanism” are distinguished, although they are correlated: (1) in time (or in history), mechanics precedes mechanism, because, for there to be mechanism, mechanics is necessary; the reverse is not true; and (2), in thematic order, mechanics means a scientific theory, “an ordered set of laws that describes a sphere of phenomena”, whereas mechanism is translated into an “ontology, and such an ontology that it can be characterized as reductionist: it tries to proceed according to the scheme ‘in essence, everything is reduced to (or is no more than) mechanical phenomena’”. Mechanism is a product of mechanics, or, better saying, it is the product of the optimism deposited into mechanics by the fact that it was successful (at least until Maxwell’s onset) in explaining and articulating a wide range of phenomena. For this reason, mechanism, as an ontology,

relationship from whose contacts it was unleashed in Germany what is conventionally called *Materialismustreit*, of which one will speak soon.

That mechanism has failed does not imply, precisely because they are different, that mechanics or science has failed. On the contrary, scientific advancement was a constant, and this constant is explained not only by the advancement of mechanics in conceptual and typological terms, but also by its advancement in terms of inventiveness in creating a tooling apparatus unparalleled in older times. According to Rossi, the creation and reproduction of machines, mobilized for scientific research, have even an etymological meaning, in order to convey a totally new conception of the world, since “machine” derives from the Greek word *mechanel*, namely, a worldview of a world as an apparatus, as a “clock” articulated by and through gears, which are nothing more than matter, motion, and its particles. A world as a machine, for which a Hobbesian automaton can offer the best illustration, entails a world that can be manipulated and manipulated with instruments of selfsame nature, with “machinery”. It results from this artificialized science, and from its corresponding worldview, the creation of new artifices and artifacts that unify the “reality” and can be “applicable to all (its) aspects: not only to the world of nature, but also to the world of life, (...) to the sphere of perceptions and feelings”, that is, “the field of investigation of physiology and psychology”. (ROSSI, 2001, pp. 172-176).

According to an unsuspecting author such as Charles Taylor, such a “scientific revolution”, which sometimes goes “as far as materialism in its account of man and society”, lets itself be explained by a change “in the basic categories in which we understand self”. A new conception of subjectivity, in search of emancipation, and both catalyst and beneficiary of this epistemological revolution, leads to a new conception of objectivity. The toppling of the distinction between sublunary and superlunary spheres, stemming from the success in the unified explanation of various celestial and terrestrial phenomena, is the origin of an objectivity not only desacralized but also homogenizing, in which everything, man included, must be explained as “alternative constructions out of the same basic constituents”: with the same principles and formulas, supported by technological substrate, every single

depends on and differs from mechanics, as a discipline and theory: it is an attempt to reduce the totality of reality, including physics, to mechanics. And this differentiation becomes even more salient due to the fact that the success of this attempt, as Porta recalls, would not imply the triumph of mechanism, but the failure and impossibility of this reduction in the face of Maxwell's equations represented the very impossibility of such an ontology and pointed out “historically the decline of mechanism”, which “ultimately is a variety of materialism”. (PORTA, 2011, pp. 79-80).

phenomenon is explained. The world, the objectivity, is no longer a “Platonic-Pythagorean order of meanings”, but a web of contingent facts and relationships, of which man is just one more object (TAYLOR, 2014, pp. 24-28). It is the world of an epoch baptized by Heidegger as *Die Zeit des Weltbildes*. (HEIDEGGER, 1950, pp. 81-85).

The historical journey so far plotted, with meta-philosophical appearance, enables to fractionate at least two major historical stages that correspond, also according to Charles Taylor, to two worldviews, to which consequently two distinct senses of subjectivity are bounded: (1) a cosmic vision of order of meanings, superseded by (2) a self-defining view. To the first kind belongs the cosmic subject, who understands himself as a fragment of an ordered whole as an anthropomorphic projection. To the second one belongs the self-defining subject, who sees himself not as belonging to an order, from which he strays away in search of true understanding, but as, for that very reason, emancipated from it (TAYLOR, 2014, pp. 26-28). The independence of subject, allied to the absence of original and final causalities, makes him paradoxically dependent on a meaning that he on his own, without reference to a precedent and transcendent order, will then define as inserted into a field of contingencies, whose need for mapping and mastery will be supplied by the scientific-technological apparatus that he now enjoys, responsible both for the homogenization of phenomena and for his ascendancy over the objectivity of which once he was mere part. The soul no longer belongs to theology in the same way consciousness no longer belongs to philosophy: both of them belong to sciences, the empirical and naturalized sciences.

Disjoined the Platonic order in reference to which man signified himself, and now he being exclusively in charge of fulfilling that meaning/significance, the pivotal philosophical problem that has arisen and still arises since then consists of responding to the following questions: what is the nature of subjectivity and what is its relationship with the world, the objectivity? (TAYLOR, 2014, p. 23) In the 19th century, and especially in Germany, these issues are partially contextualized by what is conventionally called *Materialismstreit*. The controversy around materialism led to the question, within this general framework of problems (the subject-object relationship),⁷ of whether modern science necessarily led to materialism, defined by

⁷ The problem that may be called “subject-object relationship” is a problem, as a matter of fact, that manifests in different ways, always returning to the philosophical discussion. The problem of the

Beiser as “the doctrine that only matter exists and that everything in nature obeys only mechanical laws” (BEISER, 2014, p. 53). That is, in sum, a quarrel without which “we understand little of German philosophy in the second half of the nineteenth century”, whose “shock waves reverberated until the end of the century”, what occurs, and it was only possible to occur, in the wake of the homogenization of the phenomena studied by the sciences, whose analysis should be submitted to empirical methods. The materialist controversy is a complex historical event, articulated over different clashes (and therefore authors), but, above all, over the new “ruling paradigm of rationality” - brought about by the relentless development of physics, biology, chemistry, physiology and psychology (BEISER, 2014, pp. 53-55). That is, therefore, the empiricization of sciences with the consequent materialization/naturalization of phenomena, well recapped by Carl Vogt, one of the first exponents of the aforementioned quarrel, according to whom “*die Gedanken in demselben Verhältnis etwa zu dem Gehirn stehen, wie die Galle zu der Leber oder der Urin zu den Nieren*” (VOGT, 1853, p. 323).⁸ It is against this stage of science, reduced to the real and empirical, that Hermann Lotze will initially stand, with whose interpretation of Plato, later, Edmund Husserl will also stand.

The diffuse emergence and growth of modern science, fermented by protean reasons, led to an epoch of optimism in relation to mechanics, which resulted in another epoch, stage of materialism, unified by empiricism. This is both an observation and a conclusion reached by several authors, named here, according to whom the phenomena studied by the empirical sciences were unified through their naturalization. This rapture caused by such a growth culminated even in the

relationship between cause and effect, for example, has the same general nature as the previous one, because it refers to a question even more basic about the relationship between two different things or events (cause and effect; subject and object; or, in the Cartesian case, mind and body). In Husserl, especially in his *Logical Investigations*, this same problem returns and assumes a new facet: to investigate the link between two distinct spheres, the relationship between the subjectivity of knowing and the objectivity of the content of knowledge. In the preface to the first edition of the work, there is a literal reference to this problem: “*Da auf solche Weise meine ganze, von den Überzeugungen der herrschenden Logik getragene Methode - gegebene Wissenschaft durch psychologische Analysen logisch aufzuklären - ins Schwanken geriet, so sah ich mich in immer steigendem Maße zu allgemeinen kritischen Reflexionen über das Wesen der Logik und zumal über das Verhältnis zwischen der Subjektivität des Erkennens und der Objektivität des Erkenntnisinhaltes Gedrängt*” (“Once in this way my whole method, based upon convictions of the ruling logic - to logically elucidate the given science through psychological analyzes -, faltered, I found myself increasingly involved in general critical reflections on the nature of logic and especially on the relationship between the subjectivity of knowing and the objectivity of the content of knowledge”). In: HUSSERL, Edmund. *Logische Untersuchungen*. Erster Band: *Prolegomena zur reinen Logik*. Ed. Elmar Holenstein. Husserliana XVIII. The Hague, Martinus Nijhoff, 1975. p.7.

⁸ “thoughts are in the same relation to the brain as bile to the liver or urine to the kidneys”.

empiricization of sciences that until then operated on the basis of another methodology and other typologies/categories. One will emphasize logic as thematic focus. Logic has moved, to use Kantian terminology, not only from the treatment of analytic propositions to synthetic propositions, but also to be considered as an empirical science branched off out of psychology. If 19th century materialism was a natural and historical unfolding of the rapture of modern science, psychologism will be, albeit diagonal, an unfolding of the former. Giambattista Vico's (1688-1744) statement that "we demonstrate geometric propositions because we make them" (apud ROSSI, 2001, p. 179) makes clear the link among different epochs by making clear some of the problems with which German philosophy to which Husserl belongs deals.

Driven so into the origin of the main problem of this research, the psychologism in touch with Husserl, the historical recoil proposed in this introduction serves the purpose of depicting the wider context from which it emerges and how it is correlated with other issues, such as the subject-object relationship, which is retreaded as long as empirical claims gain more and more strength, and as well as how it presents itself multifaceted, especially in relation to Husserl.⁹

Thus, from the standpoint of the structure of this research, the second chapter, throughout its first section, is devoted precisely to the more immediate historical phenomena with which psychologism will be in touch – the identity crisis of philosophy, the bloom and mastery of nature sciences, and the rise of empirical psychology. Although there is an actually historical temporal line connecting these events (modern science – mechanism – materialism – psychologism)¹⁰, sheer

⁹ The problem of this work, as a matter of fact, cannot be reduced only to the question of what nature or what origin of psychologism is. As it will be seen, since the answer to this question is multifaceted, precisely because it presents different natures and origins, the question will then be about the relationship between psychologism and Husserl's *Prolegomena*: what is Husserl's reception of such a problem? Does his treatment, especially that one presented in the *Logical Investigations*, account for and reach historical and thematic nuances and complexities? It is important to stress that the problem proposed here is focused on *Logical Investigations* first volume, although one will mention other conceptions of "psychologism" in Husserl just to evince both the latitude and the verticality of the problem. For this very reason, although one mentions *Psychologismusstreit* throughout the text, there is not, and there could not be, an in-depth approach to it, because the psychologist dispute is just the background against which, and in the light of which, the kind of psychologism Husserl refutes makes sense. If the main purpose of this dissertation aims to explain Husserl's reception of psychologism in his outstanding work, to advert to the psychologism dispute is important insofar as it contextualizes the problem. What really matters is to see how Edmund Husserl perceives that issue, even though his perception is not comprehensive, and how it takes shape in his specific context, even though it is broader.

¹⁰ Once again, the merely panoramic aspect is emphasized: it is not a deep and detailed approach, but, on the contrary, a general photograph of mediate historical phenomena. For this reason, a

philosophical issues, which invariably concern the reception of the state of science and its development, also conjoin onto psychologism. In this second moment of the second chapter, in the point 2.2, the philosophical/thematic elements will be highlighted, precisely in the historical context of the quarrel concerning materialism and the identity crisis of philosophy, which contributed to the formation and mutation of psychologism, e.g., the principle of immanence, “The Logic Question”, and the assumption of the psychological method. The transition from the second chapter to the third one turns to the first contact between Husserl and the psychologist movements, when he himself makes his philosophy to figure as “descriptive psychology”, an occasion in which not only the inaugural statement of this text, accusing the greatest of anti-psychologists of being “psychologist”, is explained, but also one starts to evince that the psychologism phenomenon shows neither purely logical aspect, nor is it exhausted into *Logical Investigations: Prolegomena to pure Logic*, work to which one will devote almost exclusively the third chapter, sometimes dealing with its reception (3.2), sometimes approaching to its treatment (3.3) of the problem under discussion. In a final and not definitive subchapter, but with a note character (3.4), other conceptions of “psychologism” in Husserl, beyond the focused work, will be inventoried, which will lead, by way of conclusion, to the affirmation that the reception and the corresponding treatment contemplated in the *Investigations/Prolegomena* do not, in turn, contemplate the historical and thematic complexity of psychologism. One will lead, therefore, to the assertion contrary to the initial statement of this text – namely: Edmund Husserl was not a psychologist thinker.

historical movement was chosen, the development of modern science, and then it is tried therewith to demonstrate how philosophical problems are inserted, many times, outside the limits of a *stricto sensu* philosophy. Likewise, it is an attempt to trace back the (modern, historical) origin of basic philosophic problems as closely as possible as Ernst Cassirer, who, by exploring the mind of the Enlightenment, figured the spring and the power of very mind out. (CASSIRER, 2009, pp. 3-36). Worth to say, too, that the kind of psychologism Husserl stands against origins from a “second wave” of *Psychologismusstreit*, there is, about 1870-1880, a couple of years later than the first period of *Materialismusstreit*. In terms of our purpose, it is possible to establish such a connection over the time, but, in broader terms, it certainly would not withstand more rigorous analyses.

2 PSYCHOLOGISM

2.1 Historical-thematic Reconstruction of Psychologism

A good reason in favor of a historical-thematic reconstruction of psychologism provided by the “alternative” historiography does not concern factual-historical or analytical-historical arguments, but the methodology itself. Instead of following the “standard narratives” method (ordered either to thinkers and themes or to chronology),¹ one assumes here the method of ordering the reconstruction of a particular context according to problems. And psychologism as problem, mainly as a problem faced by Edmund Husserl in his most outstanding book, does need to be understood through a historical-thematic reconstruction of the nineteenth century philosophical-scientific context.

2.1.1 Historical Background

All the time-related contours, especially the historical ones, do show a discretionary component. This research will not show a different case: the *Psychologismustreit*, “the quarrel around psychologism”, here understood preliminarily as a protean actual historical process, begins before and develops beyond the artificial temporal milestones that beacon the historical approach proposed here. One might state that the first chapter of such a dispute takes place in 1803; our time-related contour closes to 1840. *Psychologismustreit* develops throughout the first half of twentieth century, whereas 1900 is here a close.²

There are several good reasons, however, that justify these choices. Beyond political-cultural reasons (King Frederick William IV of Prussia seized power in 1840, for example), 1840 is a transition year, in which the dispute of psychologism starts to

¹ One alludes therewith to Frederick Beiser himself. According to him, “the standard narratives”, as well as its ensuing method, are narratives that “not necessarily help us solve philosophical problems in the present”, so that “the history of philosophy tends toward either antiquarianism or anachronism”. Historians such as Karl Löwith, Richard Kroner and Frederick Copleston are examples whose narratives are ordered according to thinkers and themes, but not according to problems and controversies. Indeed, neither names, nor historical characters, but issues and problems, just like how philosophy would survive a crisis, must be stressed out, in order to not fall into anachronism, for example.

² One does not overlook therewith all the period between 1803 and 1840, for example. Names like J. Herbart, J. Fries, and F. Beneke, for example, will be recollected. One just intends to bound the immediate context which the specific kind of psychologism Husserl faces arises from. By the way, these authors are important fraction of the account for the developments from 1830-1840 decades on.

maturate, whereas 1900 is the year of *Logische Untersuchungen* release. That's the period during which, and in the middle of which, Georg Cantor introduced his theory of sets, *condition sine qua non* to comprehend *Logical Investigations*. Further and better reasons, on the other hand, are provided by the second half of nineteenth century historiography. Frederick Beiser, for instance, is here paraphrased: 1840-1900 is the "After Hegel" period, in which 1900 inaugurates a new (philosophical, dramatic) era, and 1840 does not only wind up "the classic phase of Hegelianism", but also opens a new path to German philosophy: that's the year throughout which two authors, Adolf Trendelenburg and Hermann Lotze, released books that influenced not only the name but also the matter of Husserlian work – *Logische Untersuchungen* and *Metaphysik* respectively. That's the period within which, likewise, two phenomena that correlated both to themselves and to psychologism are grasped: the uplift of *Naturwissenschaften* and the identity crisis of philosophy. Here begins the itinerary.³

2.1.1.1. The Identity Crisis of Philosophy

The expression "identity crisis of philosophy", *Identitätskrise der Philosophie*, considerably widespread and found over the historiography about that period, is authored by Herbert Schnädelbach. (SCHNÄDELBACH, 1983, p. 8). Such an expression does not picture a made-up dramaturgy⁴, but rather a mournful epoch due to not only Hegel's death, but also, and especially, due to what that milestone represents to philosophy and its developments.

A non-exhaustive glance at historians who did live post-Hegel period offers a first clue to understand Schnädelbach's expression. Historical theses are pervaded by a shared impression that Hegel's death would jeopardize philosophy's destiny. Friedrich Lange (LANGE, 1866), Eduard Zeller (ZELLER, 1877), and Rudolf Haym (HAYM, 1857) are some of the names who pointed to a "stagnancy", a "dullness", or even to a "decay", as a result of "the end of idealism" and the death of its biggest exponent, Hegel, whose place was took on either by non-original idealists or by

³ Obviously, this is not a definitive choice. There are a lot of authors, such as for instance Schnädelbach, who picked up others temporal milestones.

⁴ That does not mean that there is no sensational element in it. Schnädelbach himself declares that choosing up the 1831 year, Hegel's death year, grasps a "melodramatic weight" (SCHNÄDELBACH, 1983, p. 10).

materialists adverse to “metaphysical problems.” The philosophy, at that time strongly identified to idealism itself, seemed to be on the way down, on the countermarch of progress, led by empirical sciences: “The great creative ‘age of idealism’ had passed away with Hegel’s death, it seemed, only to be succeeded by ‘an age of realism’”. (BEISER, 2014, p. 2).

Not only among historians, but also even among philosophers, this seems to be the diagnosis. Otto Liebmann, in 1865, asserts that his time witnesses a “general distrust” in philosophical investigations. (LIEBMANN, 1865, p. 4). Jürgen Bona Meyer, in 1870, severely affirms philosophy has been agonizing over the years and it is about to perish (MEYER, 1870, p. 1). In 1874, Franz Brentano, Husserl’s master, used to claim that doing philosophy, whose goals are unreachable, does not bring prestige, but so “discouragement”, “disapproval”. (BRENTANO, 1968, p. 86). Also in 1874, but speaking of its tasks instead of its goals, Wilhelm Wundt, against whom the very Husserl stands, will say that philosophy no longer play a relevant role, reason why it must disappear in the face of empirical sciences. (WUNDT, 1874, p. 4). Although Husserl has born in 1859, and therefore did not have witnessed the spring of the identity crisis, he certainly expressed his concern about its effects. *Philosophie als strenge Wissenschaft* [1911 (1987)] and *Die Krisis der europäischen Wissenschaft* [1936 (1976)] are well-known Husserlian works addressing straight this topic.

The basic problems aroused in such a context are: what is philosophy in a post-idealist period and to what extent could it hold its name? (SCHNÄDELBACH, 1983, p. 12). To them one added some questions more: what is the purpose of philosophy? How does, if so, philosophy differ from empirical sciences? Answering these questions is to discover why philosophy went through an identity crisis; it is to discover, too, the “sources of crisis” (BEISER, 2014, p. 15). Kuno Fischer, in 1860, would dare to say that this set of questions constitute a matter of life or death for philosophy, *die Lebensfrage der Philosophie* (FISCHER, 1860, p. 95).

Before Hegel’s death, or yet before 1840s, Beiser declares, these issues were in fact no issues at all. The reason was very simple:

The speculative idealist tradition seemed to have provided clear and convincing answers to them. That tradition, from Reinhold to Hegel, had a very definite conception of the aims and methods of philosophy, and of its relations to the empirical sciences. According to that

conception, the aim of philosophy is to provide a foundation for all the sciences, a basis to secure them against skepticism. Although there were within that tradition different views about the specific method to create that foundation — reasoning from self-evident principles, intellectual intuition, a priori construction, dialectic — it was generally agreed that the method would have to be a priori and deductive. Whatever the method, the philosopher would use it to construct a complete system of the sciences, an encyclopedia, which would assign each science its special place in the general body of knowledge. Philosophy was thus “the guardian of the sciences,” their founder and systematizer. (BEISER, 2014, p. 15).

Given that, one naturally asks why this scenario changed: why was there a breakthrough, why did a paradigm shift impose so readily? By criticizing the view according to which the second half of nineteenth century did not go through a crisis due to Marx and Kierkegaard names, considerably unknown at that time, Léo Freuler’s answer is both complex and simple: it is complex, on the one hand, because Marxism and Existentialism, Marx and Kierkegaard, “*apparaissent finalement comme des articulations particulières d’une configuration beaucoup plus vaste*”,⁵ byproducts of a philosophical revolution that “*ne concerne pas seulement le ‘marxisme’ et ‘l’existentialisme’, mais ensemble des principales orientations philosophiques ultérieures, de la phénoménologie au néopositivisme*”⁶, whence “*une période de transformation radicale des habitudes philosophiques*”.⁷ His answer is simple, on the other hand, because it leads to the same conclusion: we are before a crisis, *Le grand discrédit de la philosophie dans la seconde moitié du XIX siècle*.⁸ If the answer is simple for it may be summed up in one single expression, “*Le grand discredit de la philosophie*”, it is also complex due to the corresponding causes. (FREULER, 1997, p. 8).

The general observation of that time points to an unparalleled crisis, whose complexity encompasses the very civilization. A new way of thinking, one reads in a 1860^s anonymous manifest, undergirds this radical movement: “*il apparaît clairement que l’ancienne façon de penser du genre humain est entièrement erronée*” and “*dans toutes les affaires humaines importantes, il suffit tout simplement de penser le*

⁵ “finally show up as particular articulations of a much wider framework”.

⁶ That “does not only concern Marxism and Existentialism, but also the principal, further philosophical orientations, from phenomenology to neopositivism”.

⁷ “A period of radical transformation of philosophical practices”.

⁸ “The great disrepute of philosophy in the second half of nineteenth century”.

contraire de ce qu'on a pensé auparavant."⁹ (FREULER, 1997, p. 15). An emerging mentality affects the social stability, reflecting a critical time which both philosophy and society cross:

A mesure qu'on fréquente la littérature de l'époque, on constate même que ce climat d'inter règne et d'instabilité n'est pas un phénomène particulier à la philosophie, mais qu'il marque l'ensemble de la civilisation. Ce que Nietzsche écrit au sujet de la philosophie, Dollfus l'écrit en 1863 déjà au sujet de son siècle en général. Notre siècle est un vaste champ d'expérimentation. Dans la seconde moitié du XIX, beaucoup n'ont pas l'impression de vivre une époque de continuité avec le passé, mais une époque de rupture brutale, annonciatrice d'événements inouïs.¹⁰ (FREULER, 1997, p. 14).

Although their causes and effects are specific, as well as they have intern particularities, philosophy and its boundaries are inserted into a wider framework, whose atmosphere absorbs *"une obsession de rupture dans l'ensemble de la civilization"*¹¹. It is about a *"période charnière qui conduit à une transformation sur des bases nouvelles"*¹², into whose scope *"on doit également inscrire la crise de la philosophie"*.¹³ (FREULER, pp. 14-16). In such a context, where everything is uncertain and questionable, it makes much sense to ask what the nature of philosophy is and what its purpose and method are. Part of answers is provided by philosophers themselves:

car ceux qui ont entrepris de réformer la philosophie à ce moment-là, ce ne sont pas des historiens de la philosophie, mais ce sont les philosophes de l'époque elle-même. Ce sont eux qui doivent alors juger l'état de la philosophie, et ce qu'ils doivent juger notamment, ce sont les raisons pour lesquelles la philosophie a pu sombrer dans une situation aussi pitoyable.¹⁴ (FREULER, 1997, p. 16).

⁹ "It clearly seems that the old way of thinking of human kind is totally wrong", "on all important human affairs, it is simply enough to think the opposite of what one has thought before".

¹⁰ "Once one visits the literature of that time, one even observes that this interregnum and atmosphere of instability are not a phenomenon proper to philosophy, but also it marks the entire civilization. What Nietzsche wrote about philosophy Dollfus wrote already in 1863 about his century in general. Our century is a vast field of experimentation. In the second half of the XIX century, many people did not feel the impression of living in a time of continuity with the past, but a time of brutal rupture, heralding unparalleled events."

¹¹ "An obsession with rupture all over the civilization".

¹² "turning point that leads to a transformation on new bases".

¹³ "one equally must insert the crisis of philosophy".

¹⁴ "because those ones who undertook to reform philosophy of that time are not historians of philosophy, but the philosophers of that time themselves. They are those ones, then, who must judge the status of philosophy, and what they must judge especially are the reasons why philosophy was able to sink into such a pitiful situation."

One of the accounts for the crisis of philosophy after Hegel's death is Hegel himself, as well as his legacy, "the tradition of speculative idealism". The Hegelian school had achieved major success in earlier decades, so that Hegel was regarded as the height of the philosophical revolution just as Napoleon Bonaparte, in France, was regarded as the peak of political revolution. (SCHNÄDELBACH, 1983, p. 30; HEINE, 1964, p. 241). The enlarging of Hegelianism was even compared to the framework of the state and the church, of which Hegel would be the Christ and upon which he did impose his dogmas. This enlarging of Hegelian idealism does not only translate into the identification with philosophy and history itself, but also into an intrusive and oppressive structure - it seemed that a new church was founded and had imposed itself upon all institutions. (FREULER, 1997, p. 17).

Since one regards Hegel's German idealism as the philosophy itself, and since one identifies philosophy with idealism, the virulent criticism with which one attacks idealism is the same one with which one attacks philosophy. Drbal will say, for that matter, that "their insolence had the effect of muzzling other philosophies." (DRBAL, 1857, p. 15). Indeed, one of the first critiques against idealism is that it shows a presumptuous attitude, closed to debate and foreign to sciences. A so-conceived philosophy, introvert into a system of the self and enclosed to scientific debates, does become obscure. This obscure character, against which idealism's critics turn, does evince itself by the conflict among systems of selfsame nature, as well as by the high degree of abstraction with which these philosophical doctrines come forward and by a "floating terminology" – traits as such which inspire distrust and scare off important fraction of people uninvolved in philosophical details. All these factors added up, and related to Hegel's death, whose "*L'autel est renversé*"¹⁵, did result in a storm of hatred and contempt for idealism. "*La philosophie est discréditée parce que cet idealism l'a discréditée*", one concludes, "*parce qu'il a exercé une domination insolente sur la foi de systèmes jugée prétentieux et obscurs*".¹⁶ (FREULER, 1997, pp. 18-22). Indeed, whatever presents "philosophical" character – apriorism, first principles, dialectics – turns out to be discredited, disparaged, and identified as "idealism" and

¹⁵ "(the) altar was demolished".

¹⁶ "Philosophy is discredited because idealism has been discredited, because it has exercised an insolent domination over the faith of systems judged pretentious and obscure".

“foundationalism”, casting doubt on what method, for that matter, philosophy should bound to.¹⁷

In addition to criticizing idealism, as associated to philosophy itself and a philosophy of foundationalist flavor, other causes compete for the entrenchment of the crisis of identity. The opposition of the *Hegelsche Linke*, the Hegelian left, especially Feuerbach's criticism against religion and idealism, is another source. Ludwig Feuerbach used to advocate a *Philosophie der Zukunft*¹⁸, a philosophy of the future, according to which “*la philosophie nouvelle commence par la proposition: je sui un être réel, un être sensible; mon corps dans sa totalité est mon moi, mon essence meme*”.¹⁹ (apud FREULER, 1997, p. 36). Feuerbach's "non-philosophical" philosophy (FEUERBACH, 1846, p. 158; BEISER, 2014, p. 18) does not have here so much importance on its own, but rather by its alignment with what one agreed calling "anthropologism". Anthropologism, in turn, refers us to a crucial motif for the establishment of the crisis: the overpowering influence of empirical sciences, *die Naturwissenschaften*.

The emergence of empirical sciences occurs ahead of 1840s, but their prestige begins to expand around that year, the year of the emergence of the *naturwissenschaftliche Weltanschauung*, turning point to the advent of conferences, journals, and periodicals devoted to the popularization of such sciences. One decade further, anon in 1850s, scientific progress and its impact upon daily life were no longer regarded as epiphenomena, but rather, fundamentally, stand “*au coeur meme de l'époque et d'une revolution jugée inouïe, sans precedent*”²⁰. Social analysts of that time will say empirical sciences pierced, overpassed all the domains of life, including familiar and political ones, and transform everything. “*L'emprise croissante*

¹⁷ “(...) this conception of philosophy had become completely discredited. Most intellectuals no longer believed it possible for philosophy to provide a foundation for the sciences through a priori means or rational excogitation alone. There was no confidence in self-evident first principles, intellectual intuitions, a priori construction, or even a dialectic. The foundationalist program had come under heavy criticism from several quarters: from the “physicalists” (Justus Liebig, Emil du Bois Reymond, Hermann Helmholtz); from the early neo-Kantians (Fries, Herbart, Beneke); and from the later idealists (Lotze, Trendelenburg, and Hartmann). All seemed to concur on one central point: that general principles and a priori reasoning cannot by themselves provide concrete results. We cannot derive substantive conclusions from formal principles, determinate results from indeterminate premises. All content, all knowledge of existence, has to derive from experience alone. The foundationalist program of speculative idealism was condemned as a relapse into the bad old ways of pre-Kantian rationalism. This critique of the foundationalist program raised a serious question about the future of philosophy.” (BEISER, 2014, p. 16).

¹⁸ FEUERBACH, Ludwig. *Grundsätze der Philosophie der Zukunft*. Leipzig: Wigand, 1843.

¹⁹ “the new philosophy begins with the proposition: I am a real being, a sensible being; my body in its wholeness is my own self, my essence itself”.

²⁰ “at the very core of that time and of a revolution deemed unheard, unprecedented”.

des sciences de la nature”,²¹ wherefore, did allow the second half of nineteenth century to be considered as “*siècle des sciences de la nature*”.²² (FREULER, 1997, pp. 41-42).

From a daily and practical standpoint, Carl Vogt will assert that empirical sciences are the most trustworthy mirror of the reality and of the spirit of that epoch, reason why they are the peak of civilization and condition of possibility for the material and spiritual progress of folks. (VOGT, 1847, p. 5). Auguste Laugel, in his turn, will claim in his *Science et Philosophie* that empirical sciences, since they consist of the most developed civilizational tool, give us air, fire, light, power, and every single art. But the fundamental issue is that these sciences not only give us such goods, but they give us precisely because they master, map, and discover all the components of nature. Such a mastery over nature is what will lift empirical sciences on the top of the pyramid of knowledge. (LAUGEL, 1863, pp. 10-11). The technical and scientific mastery over nature, never achieved by philosophy, did presuppose the mapping of the world; it did presuppose, ultimately, taking possession of proper method – in that case, observational and experimental one. The outcome of the sum of these factors could just be the banishment of philosophy out of the body of knowledge: whether by lack of method or by lack of proper subject-matter, the growing confidence in empirical sciences was accompanied by an equally growing disbelief in philosophy.²³

In short, the body of empirical sciences “*n’hésite plus à intervenir dans des questions traditionnellement réservées à la philosophie, à la métaphysique ou à la théologie*”.²⁴ Indeed, psychology and physiology, for example, do experience important advancement, now enfolding issues and subject-matters which did erstwhile pertain to philosophy exclusively. Both of disciplines, for instance, had demonstrated and talked into the wider public that the origin and nature of whatever idea stem from cerebral processes of assimilation of sensitive impressions –

²¹ “The increasing influence of empirical sciences”.

²² “Century of empirical sciences”.

²³ “Together, the critique of the foundationalist program and the rise of the empirical sciences made the identity crisis complete and inescapable. That critique meant that philosophy had no characteristic method of its own; and the rise of the empirical sciences meant that it had no distinctive subject matter of its own. Whether in form (method) or in content (subject matter), philosophy did not deserve to exist. Proper method (observation and experiment), and every possible subject matter, seemed the privilege and preserve of the empirical sciences. Philosophy now began to seem obsolete, an antiquated discipline in danger of being replaced by the empirical sciences”. (BEISER, 2014, p. 17).

²⁴ “(it) no longer hesitates to intervene in questions traditionally reserved for philosophy, metaphysics or theology”.

explanation that, all at once, solved the mind-body problem by dissolving it into the sensitive matter and made the contempt for philosophy bulker. Thus, the unsparing breakthrough of empirical sciences, on observable and tangible basis, meant the *thingification*²⁵ of phenomena. Materialists, positivists, and new sciences enthusiastic neophytes heralded and celebrated the death of philosophy, and the truth of this new epoch has no longer philosophical appearance, but scientific one (FREULER, 1997, pp. 47-50). Within this overall background, in which it hovers over philosophy a dense nebula of distrust and uncertainty, and whose space is narrower and narrower, naturally one would ask what philosophy is, what the nature and the method of philosophy are, and what distinguishes it from empirical sciences. The identity crisis of philosophy means, thereby, the very loss of identity. It was necessary to find it; it was necessary, as a matter of fact, to redefine it.

2.1.1.2. The Imperative of Redefining Philosophy

The identity crisis of philosophy represented, as a matter of fact, the very loss of identity, as it has just been shown. Dissolved whether by criticism against idealist project or, especially, by the upgrowth of empirical sciences, the identity of philosophy would need for a primary redefinition, what Freuler will call *l'impératif de la redéfinition*. The redefinition of philosophy, given that empirical sciences influence was larger and larger, entailed to answer not only what would be its new nature, but also what position it would occupy in the general body of knowledge. Now it is no longer about to find, just as Aristotle, the categories engraved on man's soul, nor to endow, just as Kant, time and space with formal nature. It is about, otherwise, to ask whether it is even worthwhile to one's commit to philosophy and whether it must be associated either to physics and chemistry or to art and poetry only. (FREULER, 1997, pp. 87-88).

The loss of identity entailed the loss of prestige, and to redefine philosophy would, therefore, entail to question how to reclaim and regain such a prestige:

²⁵ Dictionaries present "reification" as synonym of recurrent use. "Reification", however, has a narrower, specific meaning, tied to Marxism, according to whose heralds *Verdinglichung* means a particular social relationship in which, and over which, an object is turned into a subject and then takes on a decisive role at the cost of the subject itself, who is turned into a "thing". "Thingification" just means the reduction of relations and phenomena to sensitive, actual, temporal matter; the reduction to the senses and to the experience that unifies them, with no room for ideality or immateriality. It might mean, therefore, "naturalization", in the sense Husserl uses it in his *Philosophie als strenge Wissenschaft*.

Comment pourraient-ils rétablir le prestige de la philosophie, alors que tout le monde ou presque le lui refuse, alors que tout le monde ou Presque préfère étudier les sciences de la nature plutôt que la dialectique hégélienne? Ce qui est certain, on l'a vu, c'est qu'ils ne vont pas tenter de rétablir ce prestige en exauçant le vœu de quelques historiens, en se précipitant sur les textes de Kierkegaard et de Marx. (...) Dans la seconde moitié du XIX siècle, la redéfinition de la Philosophie n'est redevable ni d'un survivant de l'idéalisme speculative, ni d'un disciple russe de la gauche hégélienne, ni d'un danois tourmenté. De quoi ou de qui donc est-elle redevable? ²⁶ (FREULER, 1997, p. 89).

Schnädelbach, by trying to sort possible ways out of the crisis of philosophy, comes to know four paths for the late 19th philosopher: (1) historical and hermeneutical investigations through the elaboration of *Geisteswissenschaften*; (2) if in the first half of that century idealism was regarded as philosophy itself, therefore in the second half one ought to recognize empirical sciences as “the” philosophy, what would perform a “scientism”; (3) the third way out would be a *revision* of philosophy, consisting of a waiver of its traditional model, and thus of replacement by a “critical philosophy”; and, finally, (4) the last way out would not be a mere revision, but an actual *redefinition* as from its tasks and method. These four ways of absorbing the crisis, but chiefly the latter one, will shape the way how philosophers see themselves and how they figure philosophy out. (SCHNÄDELBACH, 1983, pp. 21-24).

If Schnädelbach identifies four ways of circumventing the crisis of philosophy, of which the latter one consisting of an effective redefinition, Freuler, regarding the last one, breaks down also four coordinates, in order to conduct the process which philosophy must undergo. These commands, in turn, respect the position achieved by empirical sciences and portray the underlying worldview. These four commands, the imperative of redefinition itself, may jointly be understood as a positivist principle: the exigency of contenting oneself with the “given world”. The actual, the concrete, and the factual constitute the “given world” and the “single reality”. The imperative of redefinition signalizes a “*mouvement général d'un retour au monde donné de la*

²⁶ “How could they restore the prestige of philosophy, when almost everyone refuses it, when almost everyone prefers to study the natural sciences rather than the Hegelian dialectic? What is certain, as we have seen, is that they will not try to restore this prestige by granting the wish of some historians, by rushing into the texts of Kierkegaard and Marx. (...) In the second half of the 19th century, the redefinition of philosophy is indebted neither to a survivor of speculative idealism, nor to a Russian disciple of the Hegelian left, nor to a tormented Danish. To what or to whom is it indebted?”

*réalité sensible*²⁷, and thus becomes “*le point de départ d’une compréhension adéquate*”²⁸ of second half of nineteenth philosophy and of its transformations. (FREULER, 1997, pp. 92-93). Here are the four commands of the imperative.

Anti-speculation. The first command means to forbid speculating. This is because philosophy “*s’est perdue dans les brumes du concept, des constructions a priori et de l’absolut, parce qu’elle a sacrifié le concret à l’abstrait*”.²⁹ The philosophical crisis is partially accounted for by the speculative dimension with which it came forward. “Speculation”, in that context, may show two senses, both of which rejected by the imperative anyway. In a first and more direct sense, “speculation” means the fundamental theses of Hegelianism - the possession of dialectical method, the identification between being and thinking, between ideality and actuality, the unity between the real and the rational, between logic and metaphysics. In a second and wider sense, “speculation” would just be all that surpasses the boundaries of sensible experience and of the method that accompanies it, the inductive one. (FREULER, 1997, pp. 94-95).

If all of that may and in fact means “speculation”, and if one must conduct philosophy through anti-speculation, one must therefore stand against that identification, that attempt to unify essentially unlike phenomena. One must disrupt the union between real and rational, between being and thinking, between logic and metaphysics; one must, for that very reason, abjure the method, the dialectical one, that enables such misconceptions and then intend for the proper method of sciences, the inductive one. Indeed, from 1840 on philosophy thereof “*va effectivement être convaincue*”³⁰; it will be convinced likewise that, due to their method, empirical sciences did set forth there was a nature when there were no men yet and therefore that there was being when there was no thought yet. All of that, in conclusion, meant that philosophy “*n’est plus travailler contre, mais en accord avec les methods et les résultats des sciences de la nature*”. (FREULER, 1997, pp. 94- 97).³¹

Conversion. Given that philosophy is purged of speculation and given that it must be aligned to the method and results of natural sciences, therefore it must effectively join empirical sciences; it must, as a matter of fact, convert itself:

²⁷ “general movement of a return to the given world of sensible reality”.

²⁸ “the starting point of an adequate understanding”.

²⁹ “(it) has lost itself in the mists of the concept, of a priori constructions and of the absolute, because it sacrificed the concrete to the abstract”.

³⁰ “(it) will effectively be convinced”.

³¹ “no longer work against, but in accordance with the methods and results of the natural sciences”.

philosophy can no longer be identified with speculation and theology, with which it has already broken, but rather identified with experience and positive sciences. That explains, anon in the 70's of 19th, the common opinion of several authors according to which "*La plupart des jeunes forces philosophiques sont occupées à rendre utilisables pour la philosophie les résultats de la science de la nature*"³² (FREULER, 1997, p. 101). Friedrich Lange, for instance, identifies such a conversion with a reformation of philosophy, in which natural sciences stand out. The new philosophy must concern with formal logic rules and groundings of positive sciences. (LANGE, 1866, p. 590).

Anti-system. A derivative of not speculating is not to systematize knowledge in a "building of the absolute". The anti-systemic character of the imperative is indicative of two commitments undertaken at that time: (1) to not outpass the boundaries of sensible experience through a single, unifying principle, and, against that principle, (2) to recognize that knowledge is just valid within specific, limited domains, related to different empirical sciences – beyond which it lies precisely the absolute, the absolute now denied. One denies, thereby, the absolute because it is exclusionary, whereas the particular sciences, all of which reviewable, are for this very reason inclusionary. In the formulation of Bernard, that occurs because systems are in men, not in nature, whereas in nature, and not only in men, are the sciences. (BERNARD, 1966, p. 306). In general, Freuler argues that systems will continue to be created, but no in Hegelian fashion. Now any system turns not to the absolute, but to particularities, fragments of a whole – whence empirical psychology, the folk psychology, philosophy of language, ontologies, fenomenologies, etc. The "great worldviews era" is now replaced by an era of the "small pictures of the world". (FREULER, 1997, p. 107).

Specificity and autonomy. The fourth and last command of redefinition aims to guarantee the autonomy of philosophy, namely, its place between the solid ground of empirical sciences and the rarefied air of speculation. One must, of course, to renounce to speculation and adhere to empirical sciences. On the other hand, this could not mean the dissolution of philosophy into the heart of particular sciences. The main issue faced by philosophy in the context of its redefinition, Dilthey claims, is to plot its limits and limitations. (DILTHEY, 1934, p. 48). Such an issue, the redefinition

³² "Most young philosophical forces are busy making the results of natural science usable for philosophy."

itself, becomes not only constant, but also actually paradigmatic – for example, this explains in large scale, albeit not alone, the diversity of philosophical schools, currents and trends. (FREULER, 1997, p. 109).

If the general conditions of redefinition are the same general conditions that generate a wide range of anew philosophical trends, therefore the unity of philosophy lies now upon its diversity, in order to mirror precisely the richness of natural sciences and not the poorness of a single principle. (FREULER, 1997, p. 110). In course of time, the upgrowth of empirical sciences and the redefinition of philosophy run oftentimes in parallel. This does not mean that they are untouchable, not-connected phenomena. On the contrary, they are interchangeable, dynamic events. And one of the more sensible touches, that at once branches off out of natural sciences and introduces itself as a candidate for the way out of the crisis, is the very psychology.

2.1.1.3. The Empirical Psychology as Way Out of Crisis

Psychology is not a subject appearing only in the nineteenth century in the context of the German-speaking world, but it is in such a temporal-spatial context that one imparts empirical appearance to psychology. Why, after all, to fetch psychology, but this time with empirical appearance? Rightly to carry out the commands of the imperative of redefining philosophy: to not speculate, to respect the position of natural sciences, and to define exact subject-matters – to produce, too, exact, objective knowledge. The importance of the empirical psychology does not only lie upon those factors, but upon “ruling over the geography of knowledge” (FREULER, 1997, p.168) and constituting the basis, chiefly from a historical point of view, of the psychologism³³ as a problem faced by Edmund Husserl.

Indeed, the success of empirical psychology, articulated upon proper method, will further reach the “pinnacle of sciences” and be introduced not as mere surrogate, but rather as an actual ground of all scientific domains, “from logic to ethics, going through mathematics, religion, and esthetics”. (FREULER, 1997, p. 168). Such an influence is fundamental for the understanding of psychologism. Beforehand, however, two are the hands that leverage psychology: the obvious alignment to

³³ Indeed, the very term “psychologism” is contemporaneous of the emergence of the empirical psychology, and, in the context of the German philosophy, it is used for the first time *in Germany* by Erdmann in 1870, precisely regarding another philosopher involved in *Psychologismusstreit*, Beneke, one of the forerunners of the empirical psychology. Hereinafter, one shall return to the topic.

natural sciences, especially the physiology and its exponential upgrowth, and the attempt to offer another way out of the polarization between materialism and spiritualism, realism and idealism – that is, an “intermediate way between those extremes”. (FREULER, 1997, p. 169).

The alignment to natural sciences, mainly the physiology, and the attempt to introduce itself as an alternative to polarization, by making the psychology able to withstand all of demands of the imperative of redefinition in the context of crisis, concern, respectively, the method and the subject-matter pertaining to the new science. Hence, if on the one hand the alignment to natural sciences indicates its method (and thus preserves the elements of conversion, anti-speculation and anti-system), the alternative aspect of psychology will on the other hand suggest its subject-matter (and thus will assure its specificity and autonomy).

In relation to its method, Freuler asks “*qu’est-ce que obtenir des résultats brillants à une époque où tout ce qui est brillant passé par la method des sciences de la nature?*”. And he answers that “*c’est précisément prendre le parti d’appliquer cette method*”. ³⁴ (FREULER, 1997, p. 170). That is, in the case of intending to achieve similar success, whither must psychology, or “science of the mind”, turn to? To natural sciences, physiology³⁵, and especially the empirical method that enables the reduction of all phenomena to causal conditions and relations, and to certain, proper laws. For this reason, the subject-matter of psychology cannot and will not be a sort of “soul”, metaphysical entity, or any immaterial phenomena. Such a banishment of the soul and of any intangible entities, banishment that presupposes the empirical method once assumed, is what makes the new psychology a scientific, avant-garde psychology, not metaphysical, ancient one. If the method is the same

³⁴ “What is it to achieve great results at a time when everything has undergone the method of the natural sciences?”, “It is precisely to take the side of applying this method”.

³⁵ It is worth to stress that physiology, although contributes to the redefinition of philosophy as an empirical psychology, also turns out a major threat both to philosophy and psychology itself, by materially reducing them to physiological discoveries, and, therefore, to the mechanical operation of brain and its functions. It is considered that, for instance, all the physiological discoveries are both revolutionary and definitive, and that laws of thinking depend causally on the brain activity. Carl Vogt, Gustav Spiess and even Charles Darwin are major examples whose works claim that a true psychology bases upon physiology. One historical result therefrom, namely, from the influent action of some materialists, was a flank opened inside the psychology itself: on the one hand, a physiological psychology; on the other, a philosophical psychology – both of them presenting variations and shades, whether discussing the nature of psychology, or discussing its method. One shall return to this topic, given that the complexity of psychologism also concerns the methodological dimension.

one³⁶ of hard sciences, what is its subject-matter, or, better yet, what defines empirical psychology? In a broader sense, Freuler claims:

La psychologie empirique est une science de ce qu'on appelle tantôt les objets, les phénomènes ou les représentations du sens interne et cela par opposition à la physique, à la science des objets du sens externe ou des objets donnés dans l'espace. (...) (*Philosophers*) peuvent rêver de se réfugier sur le continent des objets du sens interne, sur le continent de la psychologie et de la Science de l'esprit, et d'assurer par là une certaine indépendance à l'égard des sciences de la nature ³⁷. (FREULER, 1997, pp. 173-174).

Three aspects can be outstanding from what has been so far said: (1) the method of the empirical psychology is borrowed from the already consecrated empirical sciences; (2) the subject-matter of psychology is not objects of the outer sense, displayed in space, which pertain to physics and other natural sciences; and (3) the soul or any “metaphysical” phenomenon do not correspond to that subject-matter. What are then these objects, phenomena, and relations of the inner sense, namely, what is the subject-matter of empirical psychology? It is possible, however, to assert that the answer to that question – “What are then these objects, phenomena, and relations of the inner sense?” – is also the answer, albeit not the one-off, for both diversity and complexity of the *Psychologismusstreit*.

Leo Freuler's quotation is indicative of the answer, because “representations” (*Vorstellungen*) is one of the most used expressions all over the philosophical literature of that time. The recurrent use of the expression, however, does not explain why this new empirical psychology is a “psychology with no soul” (LANGE, 1866, p. 823). What explains it is the fact that representations do not take refuge in an “ethereal, hidden soul” (FREULER, 1997, p. 183), but in man himself, in his consciousness or perceptions of steady stream. The task of the new psychology, therefore, is to investigate the man as a *bundle of perceptions*, to use David Hume's expression, with the correspondent banishment of the hypothesis of a man framed upon and by an immaterial soul that subsists in independence of him. In the

³⁶ It is worth to say that some philosophers, such as Brentano, do not take it for granted, but discussed the topic in terms of its relation to philosophy. If one considers that a *sui generis* characteristic of philosophy is to discuss its method, it makes much more sense.

³⁷ “Empirical psychology is a science of what is sometimes called the objects, the phenomena or the representations of the inner sense and that is in opposition to physics, the science of the objects of the outer sense or of objects given in space. (...) (*Philosophers*) can dream of taking refuge on the continent of objects of inner sense, on the continent of psychology and the science of the mind, and thereby ensuring a certain independence with regard to natural sciences.”

formulation of Franz Brentano, the empirical psychology is no longer a science of soul, but rather of “psychical phenomena” (BRENTANO, 1924, p. 16), that is, of everything that presents itself to us as object of knowledge, whether in logic, ethics, aesthetics, philosophy of religion and even in metaphysics, is indeed a product of the human soul, and can therefore only be assessed with supreme clarity and depth if apprehended according to the fundamental laws of the genesis of the human soul. (FREULER, 1997, p. 180).

The amplitude of the subject-matter of the empirical psychology, that reflects the complex constitution of man as both subject and object of such a science, turns the psychology, according to Brentano himself, into a science that “encompasses the roots of aesthetics, logic, ethics, and politics”. (BRENTANO, 1924, p. 30). That is because it was regarded at that time that psychology performs “mediatory function” between natural sciences and human sciences, and therewith it plays an outstanding role once its subject-matter, the man himself, is at the same time both “the ridge of nature and history” and a being in the middle of space, time, and “unfathomable domain of mind”. These factors determine not only the outstanding place and the major prestige which psychology now enjoy, but also attribute to it even superiority in comparison with other sciences: Brentano, Mill, Fortlage, Wundt, Beneke, and many others will lift the empirical psychology on the top of sciences. (FREULER, 1997, pp. 178-181).

Another factor explains why several authors give psychology some superiority: the sort of knowledge introduced by the new science. According to the perspective of the new psychology, subject-matters studied by physics and chemistry, for example, are reduced to a “mediate knowledge of effects” that can unveil either adequate or inadequate, since psychical phenomena do not really correspond to the thing in itself. (FREULER, 1997, p. 176). For this reason, Franz Brentano will claim that the truth of physical phenomena is relative, whereas in the domain of psychology, in the inner sense, phenomena are true for themselves such as they appear in evidence: to be and to be perceived overlap, and in consciousness, in the realm of the inner sense of psychology, the object is indistinguishable from the knowledge that therefrom derives. (BRENTANO, 1924, pp. 28-29). What is given, immediately given, is the consciousness of oneself, and the world, as Arthur Schopenhauer used to argue, is “my representation”.

Wilhelm Wundt, in a book devoted to the study of logic (WUNDT, 1883), champions, based on what has just been referred, the thesis according to which psychology is the very ground of several sciences, to begin with the logic itself, but enclosing history, political sciences, economics, and law. To quote another important author recollected, Eduard Beneke, by speaking of the task of philosophy in 19th, advocates its transformation into psychology, whose analysis must be focused on the human consciousness. The analysis of consciousness, or self-consciousness, brings forth the most secure, reliable knowledge man can achieve. Whether by the reliable knowledge, or by the primal and immediate one, psychology must be not only the ground, but also the core of all of sciences – or, as he put it in poetic language, “the Sun wherefrom all sciences receive their light”. (BENEKE, 1832, p. 89).

This intense historical development leads to the motley arrangement of psychologism:

Les facettes du psychologisme sont donc nombreuses. Être “psychologist”, c’est non seulement croire à une certaine supériorité de la connaissance psychologique par rapport aux sciences de la nature, mais c’est également croire en une fonction médiatrice de la psychologie entre les sciences de la nature et les sciences de l’esprit, ou la mettre au fondement de la philosophie ou des sciences de l’esprit, de la logique ou de la mathématique, voire de tout le savoir humain dans son ensemble. (...) Refusant de se figer dans dans l’héritage de l’idéalisme spéculative et de capituler devant le matérialisme vulgaire, elle ne tente pas seulement d’échapper à ce dilemme en empruntant la troisième voie de l’histoire de la Philosophie ou du criticisme, mais également et précisément celle du psychologisme (...). Entre la Philosophie de l’esprit absolu et la science de la nature extérieure, les philosophes ont flairé la Science du sens interne ³⁸. (FREULER, 1997, p. 181).

In conclusion, psychologism from a historical point of view is both the emergence of empirical psychology and especially the centrality and grounding of all sciences, whether empirical or human, whether descriptive or normative, on it. The primacy of the empirical psychology accrues from the combination of the method of the natural sciences and its subject-matter, man himself in his inner and experiential

³⁸ “The facets of psychologism are therefore numerous. To be ‘psychologist’ is not only to believe in a certain superiority of psychological knowledge in relation to the natural sciences, but it is also to believe in a mediating function of psychology between the natural sciences and the sciences of the mind, or put it at the foundation of philosophy or the sciences of the mind, of logic or mathematics, or even of all human knowledge as a whole. (...) Refusing to become stuck in the legacy of speculative idealism and to capitulate before vulgar materialism, it not only tries to escape this dilemma by taking the third way of the history of philosophy or criticism, but also and precisely that of psychologism (...). Between the philosophy of the absolute spirit and the science of the outer nature, the philosophers have found out the science of the inner sense”.

dimension. If all the knowledge and all the sciences are a product of man, therefore naturally the science that studies and establishes laws and principles of human mind must in fact be the ground of everything else. Psychologism, however, is not summed up in that prominence of psychology. This is its historical-external aspect, so to speak. The comprehension of psychologism is just properly possible as from the analysis of its internal dynamics and its thematic elements in touch with historical developments. It has just been stated that psychologism represented a third way before a dilemma and that the analysis of empirical psychology is focused on the human consciousness, on the self-consciousness, which would consist in general in the inner sense. Both the third way and the analysis of self-consciousness converge towards one single point: a return to Cartesianism, to a doctrine that privileges the observation of self, of the ego. Indeed, the subjectivity turn is a philosophical-historical turning point of which René Descartes is the first name. And he is the first name precisely for introducing what one will henceforth analyze: the principle of immanence.

2.1.2. Thematic Elements

For sure these elements constitute historical processes, reason why they could be approached over the previous section. They are here distinguished and analyzed separately for didactic purposes: it would be quite difficult to insert these elements into the first subchapter for many reasons: different spans of time, more complex correlations, and so on. “Thematic elements”, then, are also historical, but overpass the strict period grasped between the identity crisis and the consolidation of psychology, at the same time they are focused on some particularity (logic, mathematics, method etc.). For these reasons one adopts the split between “historical” and “thematic” elements, of which the principle of immanence will now be approached.

2.1.2.1. Principle of Immanence

The text hitherto broke up from Descartes and returned to him, and rightly so. From a historical perspective, psychology used to pursue a “third way” in the middle of, roughly speaking, human sciences and empirical sciences, made possible

because of an appeal for Cartesianism, for the analysis of the ego. Thus, Descartes outstands whether for his role inside physics and the constitution of modern science disputes, or for his ensuing solutions. Now the point is that these solutions both assume and unfold over the principle of immanence – underlying principle not only of the Cartesian doctrine, but also of modern philosophy as whole and even of modern psychology (SMITH; SMITH, 1995, p. 293).

A good understanding of the principle of immanence demands to answer why René Descartes sensed to be possible and even necessary to doubt the existence of the external world and how such a doubt pervades modern philosophy.³⁹ Not being our purpose to break down this issue, but merely to show off the importance of thematic elements of which psychologism is made up, it suffices to say for now that, quoting Mario Porta, the principle of immanence consists of the “Cartesian-Lockean principle that the only immediate and direct objects of my knowledge are immanent

³⁹ The principle of immanence is at the roots of philosophical-scientific revolution of XVII and XVIII, whose trepidation shook the structure of Aristotelian hylomorphism as well. According to Aristotle's theory of perception, the perceiving mind assimilates the forms of objects perceived, so that the perception amounts to a formal identity between perceiving and perceived. There being an identity so, there is no room for doubting. Nevertheless, the identity of Aristotelian theory of perception was eroded. Kepler's geometric optics evinced that three-dimensional properties of an object perceived do not fit two-dimensional properties of the image of the object projected onto the retina (and vice-versa), theory that did not take into account explanations but those anatomic and physiological ones. The requirement for a new theory of perception, which did not explain the phenomena on the assumption of the identity between vision and object seen, was updated by the outcomes of mechanics (CROMBIE, 1991, pp. 89-115). The introduction briefly highlighted the success of mechanics in explaining a wide range of phenomena. Would it not be possible, hence, to generalize its results into a theory or even a universal science with ontological appearance as well? Such a possibility entailed the necessity of explaining every single phenomenon, including those not apparently mechanical (colors, sounds, light etc.), in mechanical terms, as consisting of mechanical microstructures. The operation of these microstructures (the so-called “corpuscula”) would explain all the phenomena as macroscopic effects, so that the nature as whole would be composed of small corpuscles that obey mechanical laws. This “corpuscular ontology”, to quote Herman Philipse's parlance, removes the Aristotelian identity away and gives way to a more-and-more detachment between to see and to be seen, between the perceiving mind and the object perceived. Physical reality no longer matches perceptual appearance. Now, once all phenomena are to be considered mechanical, there cannot be secondary qualities – all the qualities are mechanical, too. If there are no secondary qualities or phenomena, by the way of the reducibility to mechanical behavior of matter, what is the ontological status of them? Kept out from physical reality, these qualities turned out to be associated to sensations such as pain and thought of as existing only in consciousness. This process of “mentalization of qualities” was called “qualia”, the immanent elements of one's mind. In short, physical relations cause sensations in consciousness, which construes them (SMITH; SMITH, 1995, pp. 293-297). The principle of immanence is nothing but the digest of this all process: the secondary qualities “in nature” are in fact the primary qualities of one's perception, which in turn are immanent of one's consciousness. The possibility of Cartesian doubt, articulated over the principle of immanence, is nothing more than an attempt to solve the problem of first principles, in light of the new scientific discoveries, through the argument that mind is better known than matter, argument reclaimed by 19th psychology. The digression proposed in this footnote, in addition to stressing Descartes' and sciences' importance, serves the higher purpose of framing the problem of the principle of immanence and how it relates to the problem of realism, for example, whose result as yet resounds as basic problems (mind/outer world; immanence/transcendence; subject/object etc.) both for Husserl and for many others.

content of my consciousness”, grasping both the *Idee* and *Vorstellungen* (PORTA, 2020, p. 11) – grasping therefore what was regarded as subject-matter of empirical psychology. Ultimately, the principle of immanence is both a starting point and one of the main derivations of modern philosophy. (PORTA, 2020, p. 18). In the view of Cassirer, in subchapter devoted to the interchange between psychology and epistemology, it is the “nature of human knowledge (that) can be only explained in terms of the ideas which the mind finds within itself”. (CASSIRER, 2009, p. 94).

Frequently opposed to a straight realism, the principle of immanence has a specific lineament in 18th and 19th German-speaking world. Kant, for instance, radicalizes such a principle into a “phenomenalism that develops from the inner world into the outer one, culminating in the thesis according to which the knowing subject knows himself as phenomenon, not as thing in itself”. Reinhold, involved in psychologism dispute, places the principle of immanence on the “ultimate basis of critical philosophy”, popularized by Schopenhauer’s world as will and representation. (PORTA, 2020, p. 19). Although this lineament befits Germany scene, unequivocally it originates from the subjective turn by Descartes and the correspondent empirical reading of it by Locke – authors who, at the heart of scientific revolution, pursued to grasp above all the structure of the knowing subject and how he thinks. “The immediate data of consciousness”, as Bergson put it (BERGSON, 2001), are found at the source of human knowledge and appoint what Locke calls “ideas” – “whatsoever is the object of the understanding, (...) to express whatever is meant by phantasm, notion, species, or whatever it is which the mind can be employed about in thinking” (LOCKE, 1999, pp. 26-27). As one can see, the principle of immanence is on the basis of a critical project of knowledge in which Kant also partakes.

Kant, by the way, also leads to the problem of intuition, as access to the direct and immediate objects of knowledge, and therefore to the principle of immanence. Kant carried on the process commenced by Leibniz by virtue of which rationality bifurcates: on the one hand, an “intuitionist” model whose relation to epistemological subject is necessary; and on the other a “logicist” model whose relation to such a subject is instead not. The necessity or not of this relation of the rationality and the knowledge to the subjectivity is explained by the fact that in the former case it begins with the so-called evidence, whereas in the latter it begins with objective principles like as identity and contradiction. Kant updates this duality, opposing understanding

to sensibility, the latter one grasping now the intuition. The Kantian intuition, even though associated to the realm of sensibility of the subject, does not lack an a priori dimension: space and time are original and necessary intuitions that warrant the form of experience, in which both geometry (in case of space) and arithmetic (in case of time), and even physics (in case of both), take roots⁴⁰.

2.1.2.2. Mathematics and *die logische Frage*

The principle of immanence is closely related to the problem of intuition, and the problem of intuition is related in its turn to mathematics. Different conceptions of intuition are bound to different conceptions of mathematics. Kant, for instance, conceives of mathematics on the basis of the intuition of time, whereas he grounds (Euclidean) geometry upon the intuition of space. Both mathematics and geometry, however, mutate throughout 19th century. If the intuitionist conception is inseparable from the epistemological subject by dint of evidence, and if the logicist conception on the other hand is not necessarily bound to the knowing subject by dint of objective independent principles, these different conceptions of rationality will reflect therefore different conceptions of inference: in the former case, a sequence of intuitions; in the latter, the idea of algorithm. These contrasts will be maximized in 19th century “with the arithmetization of analysis, and later with the emergence of non-euclidean geometries and their derivations”. (PORTA, 2020, pp. 28-29).

Euclidean geometry, even though accepted and recognized by Kant (KANT, 2013, p. 17), was always talking point. It is impossible to tell the whole history within quite narrow space, but it is necessary to single out that Euclid's *Elements*, especially the parallel postulate, was severely objected – criticism strengthened in 19th. By way of example, János Bolyai' postulates (*Appendix scientiam spatii absolute veram exhibens*) and Nicolai Lobachevsky' (*Neue Anfangsgründe der Geometrie, Geometrische Untersuchungen*) were confirmed by the mapping of a pseudosphere by Eugenio Beltrami (*Saggio di Interpretazione*). These contributions, in which Bernhard Riemann partook, compelled him to believe that

⁴⁰ It does not matter, here at least, to polemicize the transcendental ideality of space and time and how it relates to its empirical, actual dimension. Neither does it matter to reclaim a correct answer to this problem. The purpose of this subchapter is as everything else much more unassuming: to detach some, from several ones, elements that set up the psychologism such as presented in *Logical Investigations*.

Mathematicians should no longer need to abstract some fundamental intuitions from what they believe about physical space, such as the nature and properties of straight lines or circles and seek to build a true geometry on the basis of some axiomatic expression of those intuitions. Rather, the direction of thought should go in the opposite direction: mathematicians were free to consider infinitely many geometries. (GRAY; FERREIRÓS, 2021).

The conception of imaginary, complex numbers, and the set theory, that vest mathematics much more in law-giving nature than mere quantities, both of which associated with the process of arithmetization of analysis, contributed to the problematization of possibility and groundings of mathematics and to its constant improvement as well (HEIDEGGER, 2010, p. 27). These new discoveries made the foundation of mathematics upon intuitions obsolete. If Kant had for a while prevailed over Leibniz, now, in the face of such discoveries, Leibniz returns – not in order to formulate a new conception of intuition, but to rule it off and to make way for what was previously called “logician rationality”.⁴¹ Such a “logicism”, through the elimination of intuition (mainly the Kantian one) as mathematical-foundation, “starts a movement of logicizing mathematics, and (...) turns to the postulation of abstract objects, key factor for the emergence of platonism in logic, bound to logicism of mathematics from Bolzano to Frege, Husserl”. (PORTA, 2020, p. 29).

The so to speak “crisis” of intuitionism not only made room for the logicist conception of rationality, but also for other attempts of founding mathematics. The psychology-related endeavors derive from that context of the intuition crisis on the threshold of non-euclidean geometries. As it will be seen, this is an important stratum of the psychologism refuted by Edmund Husserl, comrade-in-arms of the Platonism mentioned above. Such a Platonism, both in logic and mathematics, presupposes the implications of the logicism: (1) a rationality detached from the knowing subject, but close to objective principles; and (2) for this very reason the postulation of ideal, abstract objects. This originated the logicizing of mathematics. And the Leibnizian

⁴¹ If according to Leibniz mathematics is articulated over logic, chiefly over the principle of identity, according to Kant, on the other hand, Euclidean geometry sets the standard for mathematics, reason why he believed mathematics bears a work/act of abstracting which is not exhausted into a purely rational, logical knowledge. One can therefrom make room for introducing intuition, and upon it grounding both geometry and mathematics. Leibniz’s logicist conception, notwithstanding, based on objective principles that transcend the knowing subject and on whom they for this very reason do not depend, is fetched in 19th century in order, if perhaps not to overcome intuition and the subject who encompasses it, to at least present an alternative proposal for grounding mathematics. The recognition of these objective principles, associated with conceiving of ideal/abstract objects, results in a later Platonism and in its reception by Husserl.

rapprochement between mathematics and logic is contemporaneous precisely of *die logische Frage*.

The logic question is after Hegel's death one of the most widespread slogans in debates on the topic across Germany. The expression shows two meanings: one broader, another narrower. In a broader sense, *die logische Frage* is synonymous with "reform of logic" and generally means not only endeavors of reforming it properly, but ultimately the setting of the problem concerning its possibility and justification. Questions about whether logic is an organon of sciences, or philosophical science, or even a critique of sciences are components of the repertoire of doubts about the status and nature of logic. (HAAPARANTA, 2009, p. 204). Herman Ulrici, in an almost-namesake book (*Zur logischen Frage*), claims that the logic question is nothing but "the question about the place, the context, and the working of logic". (ULRICI, 1869, p. 1). In a narrower sense, *die logische Frage* is both the expression used for the first time by Adolf Trendelenburg and the dispute initiated by him against two different conceptions of logic, namely, against Johann Herbart and his formalism, and Hegel and his metaphysical-related logic. Although the expression is used in a narrow sense, it refers to a context amplified precisely by such a dispute and consists of "the milestone of everything that was written years later on logic in Germany, and in particular over 1880, 1890". (PORTA, 2020, p. 27).

Herbart's formal logic is characterized by a detachment from both metaphysics and psychology. And both on the task and subject-matter of his logic such a detachment impacts: if logic deals only with representations and the represented, removing away the actual activity of representing, its subject-matter is nothing but concepts, and its task is the development of formal consequences from given premises, namely, clarifying, combining, sorting, and analyzing concepts. According to the very Herbart, logic comes down to a single theory of structures of the thought. (HERBART, 1808, pp. 217-222). Logic deals not with contents of thoughts, but just with its form: "it is actually sheer formalism", Moritz Drobisch will claim. (DROBISCH, 1836, p. VI).

There is nothing further away than Hegelian logic. If form and content of a single science must overlap, coincide, Hegel states, logic – realm of truth and system of reason – deals not only with the form of propositions, but ultimately with categories and aspects of reality. If logic was merely formalism as Herbart had suggested, it would deal with the form of knowledge, but on no occasion with truths. Reduced so,

logic would neither grasps truths, nor would it be a path towards them, because the core of a truth is its content, which by its very nature is outside pure forms of a so-conceived logic. Accordingly, logic is supposed to synthesize and unify two aspects – the objective one, the being, and the subjective one, the thinking. (HAAPARANTA, 2009, pp. 209-210).

Adolf Trendelenburg's conception of logic, called upon to rend his verdict about the status of philosophy within the context of its crisis, moves away from both of them, even though he endeavors to account for the same general problem – the relationship between the outer reality of being and the inner reality of thinking. Trusting in that this is the fundamental task of philosophy, the Berliner professor could not accept Herbartian formalism, because it does not account precisely for the contents of thought. Herbartians, although they neglect the content of propositions, presuppose not only that there is a distinction between content and form and hence between object and thought (ultimately, between being and thinking), but also that truth means the correspondence between each other, without notwithstanding to explain how this correspondence is possible, and without therefore to respond to the fundamental problem of philosophy. (HAAPARANTA, 2009, pp. 211-213). Trendelenburg's critique of Hegel is in its turn quite broader, but it is singled out by its Aristotelian aspect, especially by its articulation over the pair *Kontradiktion* and *Kontrarietät*, and the rejection of a would-be presuppositionless logic. Against the latter Trendelenburg argues that a logic that presupposes nothing, but that at the same time starts from the "pure idea", presupposes in fact the real concept of motion. (TRENDELENBURG, 1840, pp. 24-29). Against the former he objects that dialectical negation bumps into a quandary, because its nature

can have a twofold character. Either it is understood in a pure logical way, so that it simply denies what the first concept affirms without replacing it with something new, or it can be understood in a real way, so that the affirmative concept is denied by a new affirmative concept, in what way both of the two must be replaced with each other. We call the first instance logical negation, and the second one real opposition. (TRENDELENBURG, 1840, p. 31).

There is no doubt that Adolf Trendelenburg holds a central position in the nineteenth German philosophy. He is responsible for not only definitely burying Hegelian idealism, which is acknowledged even by a Hegelian like as Karl Rosenkranz (BEISER, 2013, p. 60), but also, in addition to representing an end, for

initiating the transition to contemporary philosophy. The fact that his *Logische Untersuchungen* inspired those ones by Edmund Husserl is not an episodic influence: that derives from the problematization of relationships between logic, language, and psychology, as well as from the germination of the third realm theory. Ultimately, *die logische Frage*, of which *Herr Professor* was key player, led to an epoch when “logics depart from a similar status quaestionis, seeking to stay away both from the Herbartian formalism and Hegelian metaphysicist logic (Sigwart, Erdmann, Wundt e Lipps)”. Reactions unleashed against Hegelian logic potentialized the principle of immanence role, now centered in the scope of logic, discipline that turns out to be “marked by an immanentist trend that restricts logic into the domain of thinking (*denken*)”, and then brightens “the logical laws aspect as laws of thinking (*Denkgesetze*)”, whose emphasis on the reduction of logic into thinking “will provoke not only a tendency to idealism, but also a tendency to relativism” (PORTA, 2020, pp. 19-27). Indeed, all these reasons compelled Volker Peckhaus to assert about *die logische Frage* that

the reform endeavors that were released through this discussion scarcely considered the formal logic itself, but rather its psychological foundations and its use in theories of science that strove to seize the positive and formal sciences of that time. (PECKHAUS, 1997, p. 12).

If psychologism, *Psychologismusstreit*, and *die logische Frage* are not to be identified, they are closely related instead. “A new wave of psychologism, the psychologism of German logic over 1880 and 1890, with its anthropological relativism” is the outcome of the logic question, but the outcome of the logic question in relation to developments of psychological method. (PORTA, 2020, pp. 28-29).

2.1.2.3. Psychological Method

Psychologism and psychological method are not to be identified as well, but the latter is *condition sine qua non* of how to comprehend the former and even the very philosophy of that period. Indeed, the emergence of psychological method – and what means, too – is closely related to revisions of Kantian critique in the aftermath of the Hegelianism falling-off. What is more, psychological method underlies major attempts of refounding philosophy and of withdrawing it from the crisis.

Psychological method, just like the logic question, possesses two meanings, too. In the 20th and 21th centuries, when psychology is already settled up as an autonomous scientific discipline, it merely means to establish the method that goes along with the entire psychology. Whether this method is the introspectionist, or the psychoanalytic one (or other else), it does not matter here. It matters, nevertheless, the meaning of “psychological method” such as understood in the 19th. And this meaning can be come down to the endeavors of reducing into or grounding upon psychology the entire philosophy – or even to turn psychology into fundamental philosophical discipline or into “the” philosophy itself. This latter meaning has therefore a reductionist sense.

Considering what was in the previous subchapter said, Leo Freuler claims that psychologism can, from a historical point of view, be regarded both as the reduction of philosophy into psychology and as the attempt of founding the former upon the latter. From a strictly philosophical point of view, one of the senses of “psychological method” does correspond to this reduction. There are, notwithstanding, particularities pertaining to psychological method that permit and justify the initial statement of this topic – that both of the psychological method and psychologism are not identical. And one of these particularities is precisely revisions of the critical project of Kant.⁴²

The beginnings and the development of *Psychologismusstreit* are good indication of the relationship between the revisionism of Kant and psychological method. Johann Herbart, whose logic was briefly recollected, and his arguing with F. E. Beneke constitute “one of the first chapters of *Psychologismusstreit* (...) by resuming a general logic set free from psychological elements”. Beneke, in his turn, is key element of the development of psychological method, which is worked out just within the background of this revision of the Kantian project and in directly opposition to Jakob Fries and K. L. Reinhold. If Reinhold, revisiting Kant, meant to make his criticism an “aprioristic rationalism”, Fries, cross-checking Kant and the results of the *Naturwissenschaften*, used to emphasize the empirical aspect of it in opposition to “an absolute knowledge”. Now, if Fries recognizes the success of empirical sciences, he also tries to recognize the place of the in-crisis philosophy, to which appertain both

⁴² Based precisely on these differentiations, it is possible to take on both a Kantian position and a psychological reading on Kant, and whence to be psychologist and to accept the psychological method, such as Beneke. Nevertheless, philosophers like Brentano, for instance, accept both the psychological method and the psychological reading on Kant, but are opponents of psychologism. Other arrangements are possible, but that is enough to distinguish between psychological method and psychologism. (PORTA, 2020, p. 25).

the discussion over and the account for the *a priori*, astray in an empiricist domain. And the method for the attainment of this goal is just the psychological method, “a structural approach to psychism, that operates not through induction, but through ‘abstraction’, analyzing knowledge and making its presuppositions explicit”⁴³. (PORTA, 2020, pp. 20-21).

Eduard Beneke’s role at the beginning of *Psychologismusstreit* consists of the radicalization of psychological method: such a method is “the method of dissolving the *a priori*”, which is identified with “innate”. Beneke’s radical empiricism, which is also linked to sensations as the single origin of knowledge, entailed a purely genetic psychology and “a radical reductionism”: psychology in accordance with Beneke is not just the foundation of philosophy, but it is the philosophy itself. (PORTA, 2020, p. 20). After Beneke, psychological method evolves on the inside of controversies with externalist variations, especially in the context of consolidation of physiology, whose discussion is not up to here. It is due to highlight, however, that Beneke essentially ties perspectives on Kantianism to psychological method and thereby to psychologism:

O método psicológico surgiu vinculado a uma interpretação de Kant e se mantém, de uma forma ou de outra, ligado ao kantismo até a década de 1870, quando a aparição do neokantismo será decisiva para contestar tal interpretação de Kant e propor uma interpretação alternativa. A partir de então, ser kantiano e ser defensor do método psicológico já não eram mais sinônimos. Entretanto o neokantismo não apenas contribuiu para desassociar o método psicológico de Kant, senão também de toda forma de idealismo, consolidando, assim, indiretamente, uma tendência que já se anunciava desde Beneke. Beneke é uma figura decisiva não apenas para entender o método psicológico, mas também para entender o *Psychologismusstreit*, e isso porque ele representa tanto a forma mais radical de psicologismo, por um lado, quanto, por outro, abre um caminho para conciliar método psicológico e realismo. Como todos os defensores do método psicológico, Beneke pressupõe a validade irrestrita do princípio de imanência⁴⁴. (PORTA, 2020, p. 24).

⁴³ Professor Porta (2020, p. 21) claims that principle of immanence increases its importance in such a context because, according to Fries, knowledge is an activity of human spirit, whose inner experience, mapped up by the psychological method, will grant the access to it. That results in a bifurcation on the understanding of the “knowledge” concept, whether it is about *Erkennen* (the actual, psychic activity of knowing) or about *Erkenntnis* (the objective, logical content of that), duality to which the very Husserl will betake in his refutation of psychologism.

⁴⁴ “The psychological method emerged linked to an interpretation of Kant and remained, in one way or another, linked to Kantianism until the 1870s, when the appearance of neo-Kantianism was decisive in contesting this interpretation of Kant and proposing an alternative interpretation. From then on, being Kantian and being a defender of the psychological method were no longer synonymous. However, neo-Kantianism not only contributed to disassociating the psychological method from Kant, but also from every form of idealism, thus indirectly consolidating a trend that had already been announced since Beneke. Beneke is a decisive figure not only for understanding the psychological method, but also for understanding the *Psychologismusstreit*, and that’s because he represents both the most

In sum, if psychological method, the logic question, and the principle of immanence are not to be identified and confused with psychologism and *Psychologismusstreit*, they are nevertheless to be grasped as essential components of the due understanding of both, whether in a historical perspective, or in a thematic one. They are actually pieces of a jigsaw puzzle whose assembly one dares in the following section to assay.

2.2 Psychologism as a Floating Problem

The concept of “psychologism” is both polysemous and ambiguous. Even among scholars, and considering the wide range of ensuing bibliography, there seems to not be clarity and even less consensus about the concept (PORTA, 2020, p. 49). For the sake of examples, we could agree on Skorupski (1989, p. 164), according to whom “psychologism is a far from clear notion”, because it can be referred either to a hazy, obscure doctrine (SCARRE, 1989, p. 111; NOTTURNO, 1985, p. 9), or to a mere no philosophical consistency epithet (RICHARDS, 1980, p. 19). That’s because over the years the expression was gotten hold by many authors in order to designate several, sometimes without (co)relation, state(s) of affairs.⁴⁵ Martin Kusch, in a book devoted to investigating sociological aspects of *Psychologismusstreit*, claims nevertheless that one uses to tell “the same old story” (KUSCH, 1995, pp. 2-3), whose epilogue depicts psychologism’s demise by the hands of Frege and Husserl, tale in which psychologism figures as a demon to be

radical form of psychologism, on the one hand, and, on the other hand, he opens a way to reconcile psychological method and realism. Like all advocates of the psychological method, Beneke assumes the unrestricted validity of the principle of immanence.”

⁴⁵ “To be guilty of (psychologism) is to suppose that the term ‘means’ in such sentences as ‘A’ means ‘B’ stands for a psychological fact involving the symbol ‘A’ and the item B, whether the psychological fact be analyzed in terms of *Schau*, acquaintance or just plain experience.” (SELLARS, 1949, p. 430). “The (logical) relations are objective, not subjective, in this sense: whether one of these relations does or does not hold in a concrete case is not dependent upon whether or what any person may happen to imagine, think, believe, or know about these sentences (...). A discrepancy of this kind, where the problems themselves are of an objective nature but the descriptions by which the author intends to give a general characterization of the problems are framed in subjectivist, psychological terms (like ‘thinking’), is often called psychologism.” (CARNAP, 1950, pp. 39-40). “Psychologism is the doctrine that the empirical sciences are reducible to sense-perceptions.” (POPPER, 1968, p. 93). “While psychology may be defined as the theory of mind, psychologism is the theory of a ‘healthy’, ‘normal’, ‘clear’, ‘ideal’, ‘empty’, ‘purged’, ‘unbiased’, ‘objective’, ‘rational’, or ‘scientific’ mind.” (LAKATOS, 1978, p. 208). “Epistemological Psychologism: The best way for the knowledge process to produce truth requires that all producers share the same attitude toward the process, namely, they should all intend to produce truth.” (FULLER, 1988, p. 23).

pulled down from the philosophical paradise, of whose boundaries Frege and Husserl themselves are the major guardians. Although there is terminological huddle involving the concept of “psychologism”, “the same old story” evokes an imagery that came true: psychologism, generally speaking, and precisely by influence of the agonistic couple, turned out to be associated with insult, indictment, perhaps with anathema, by virtue of which the philosopher believer is unchurched from the congregation. That was not always the case. The condemnatory aspect of the expression, underlying this so-called standard narrative, is not ultimate, but just a fraction of the whole meaning. It is possible to identify in time and space not-pejorative use-related senses of psychologism expression. The following paragraphs then serve the purpose of tracking origins and circumstances of the expression in time, only after dealing with the state(s) of affairs to which this expression refers.⁴⁶

If what was advocated in the first section of this chapter is true, if therefore the European countries – but mainly Germany – experience in the 19th century an unprecedented revolution in the domain of sciences, and all these associated with the inner dynamics of philosophy (the connection established between the thematic elements are a portion of the whole history), therefore the “psychologism” expression would naturally tense and outstretch. The incommensurability, in Thomas Kuhn’s parlance, attains our object: the refinement, or development, of such an expression obeys not a linear progress, but a detachment from some conceptions. The comprehension of the expression in France, for instance, rather differs from that one in Germany.

France is not remembered by chance. The expression is coined there for the first time in 1828: *psychologisme* is the expression used by Auguste Comte as meaning “introspection” and as opposing to “physiologism”. On the threshold of 19th century in France there was, as from antimaterialist motivations, a revival of “psychology” expression to replace “ideology”, which used to restrict to a science of ideas of empirical flavor in continuity with Locke’s way of ideas. *Psicologiste* would be, in a mere descriptive sense, those one who proposes a psychology, understood

⁴⁶ Therefrom it follows that “expression” and “concept” are not the same. “Expression” concerns, as it were, a public record, reified as a single word (or words). “Concept”, or “shared thought”, is quite broader, because, besides its formal-linguistic aspect, it includes “content” – a state of affairs, a singular object, a subject-matter, and more. The “psychologism” expression was used over the times to indicate different state of affairs. One seeks here a delimitation of the concept, expressed in the “psychologism” word, which concerns both Husserl and his immediate background. One will not suggest a new concept, but merely show an adequate concept already found in the specialized bibliography. The first step towards it is to localize the expression in time and space.

as science of the soul. The expression in France attains pejorative sense on the lips of critics like as Auguste Comte himself, because they used to suspect that psychology was not a science properly, once it showed metaphysical residues. The reasons why *psychologisme* gradually becomes negative-sense expression in France are not the same ones why it becomes depreciatory in Germany. It is possible to anticipate that, whilst in France *psychologist* is criticized because of the detachment from empirical sciences, the opposite will occur in later generations in Germany (PORTA, 2020, pp. 56-57).

This movement in France, of revival of psychology in detriment of ideology, has Victor Cousin as exponent, to whom the criticism of being *psychologist*, by way of being *spiritualist*, is opposed. Cousin is also important for another reason: he precipitates into the concept of psychological method⁴⁷, described above, according to which psychological method is the process of reorienting philosophy, of establishing what is to be its method – if perhaps not identical with the empirical sciences one, at least drawn on it, so that philosophy lies upon the selfsame empirical basis, but turned to the “inner experience”. Ultimately, already in France, and even before Hegel’s death, the concept of psychological method as the proper method of philosophy was opposed to speculative, dialectical method. Once more one has to stress that from the point of view of Cousin the reorientation of philosophy on empirical basis is gainful, and the criticism against him was based on the belief that his system was not empirical *enough*, since it had a metaphysical bottom – the soul. (PORTA, 2020, pp. 57-61). It is possible to connect this movement with Beneke and later uses in Germany.⁴⁸

One believes that the correspondent expression in Germany, *Psychologismus*, was introduced by Erdmann precisely in reference to Beneke, in order to characterize – but not to belittle – his philosophy as based on empirical psychology. This characterization, synonymous of psychological method, concerns Beneke only, in no way encompassing other authors else (and their philosophical projects) – “the introduction of the term does not establish a philosophical-historical category, which

⁴⁷ See 2.1.2.3 section.

⁴⁸ In 1840 Italy, on the behalf of Gioberti, the expression is also found. “Psychologism”, in that context, means what Gioberti used to describe and criticize as inner sensations, ultimate basis of philosophy. The matter had religious background, because God, according to Gioberti, was replaced by the man himself as the core both of epistemology and ontology. Gioberti believed that this “psychologism” is traced back to Lutero, and that philosophical psychologism was just an echo of religious psychologism. (PORTA, 2020, pp. 62-64).

unequivocally bounds this term to what will be later understood as such". (PORTA, 2020, p. 61). The purely descriptive sense of the expression remains until at least 1880, period during which changes of circumstances emerged, making the relations more complex in Germany – basically a new episode of *Psychologismusstreit*.

Leo Freuler also claims that “psychologism” expression used to designate, at the beginning, F. E. Beneke’s position inside the intellectual panorama. But he goes further: the expression, over the later generations, comes to mean the desideratum of “psychological explanation” of foundations of some sciences, but chiefly of logic. The change of meaning went through, just like the entire philosophy, a process of transformation, of which atheism, relativism, historicism, and the “return to Kant” were chains of an intricate web of relations and confrontations. And this new meaning came to be forged by the Neokantian criticism. (FREULER, 1997, pp. 197-199). One knows that one of the most pivotal problems of Kant was to discover whether principles of formal and transcendental logic were *a priori*, therefore independent from psychological and empirical elements, or not. One also knows that Kant himself opposed psychology and logic by opposing, for instance, contingent and necessary:

or si la doctrine kantienne porte ainsi en elle le conflit entre la psychologie et la logique, entre le psychologique, le formel et le transcendantal; entre l'a priori et l'a posteriori, il n'y a rien d'étonnant au fait qu'il soit régulièrement à l'ordre du jour dans la première moitié du XIX, ni au fait qu'il resurgisse au moment où une partie de la philosophie, après sa chevauchée dans l'idéalisme, décide de renouer avec le criticism, alors qu'une autre choisit de se tourner vers le psychologisme. Il n'y a donc rien d'étonnant à ce qu'un auteur comme Fischer puisse le raviver en 1862 en distinguant ce qu'il appelle les deux écoles kantienne.⁴⁹ (FREULER, 1997, p. 200).

Now, if Kuno Fischer in 1862 kicks off a controversy against Beneke on Kant, that is because Beneke read Kant psychologically, namely, his psychological reading on Kant serves the purpose of grounding the *a priori* in psychological terms. “Anthropological thinker” according to Fischer, Beneke claimed that Kant’s error was to try to prove pure principles of understanding by appealing to a reciprocal action of intellectual and sensory faculties, i.e., by assuming a “impure” principle of sensibility.

⁴⁹ “now, if the Kantian doctrine thus carries within itself the conflict between psychology and logic, between the psychological, the formal and the transcendental; between a priori and a posteriori, there is nothing surprising in the fact that it was constantly on the agenda in the first half of the XIX century, nor in the fact that it resurfaced when one part of philosophy, after its flow into idealism, decides to reconnect with criticism, while another chooses to turn to psychologism. There is therefore nothing astonishing that an author like Fischer could revive it in 1862 by distinguishing what he calls the two Kantian schools”.

In sum, by mixing principles, Kant, according to Beneke, was not able to recognize that *a priori* did not mean “transcendental”, but “psychological” – he mistook transcendental knowledge, that describes the nature and origin of *a priori* knowledge, and the *a priori* knowledge itself. (FREULER, 1997, pp. 200-201). For Kuno Fischer, however, this interpretation was completely wrong: if the pure critique of reason is simply psychological, whence empiricist, how could it be *a priori* and what remains of the pure critique of reason? Nothing, Fischer will answer, because *a priori* and psychological are contradictory. (FREULER, 1997, p. 201). The dispute goes further in 1870 when Jürgen Bona Meyer presents his *Kants Psychologie*, work with which he criticizes Kuno Fischer⁵⁰ and introduces the expression “psychological method” in Germany in the same sense as Cousin in France: psychological method is to be the method of philosophy, both in reference to empirical sciences and in opposition to idealism. (PORTA, 2020, p. 67).

Neo-Kantianism’s involvement in controversies about the psychological method, just as presented briefly, is important for the development of *Psychologismustreit*. Here for now, however, it is important for the new coinage of the meaning of “psychologism” expression. From 1880 on, the term comes to take on a pejorative meaning. For that purpose Wilhelm Windelband of Baden School plays crucial role: his History of Philosophy linked not only Fries and Beneke, but both of them to psychological method, to which he assigns the term “psychologism”, association which turns out definitive in his 1884 *Kritische oder genetische Methode?*. Some editions of histories of philosophy by *Überweg* agglutinate into “psychologism” Fries, Beneke, and even Lipps and Brentano, all of them associated with psychological method in the same sense as above. Perhaps the 1897 *Überweg* edition is the more relevant in such a context, because the Brentano School, aware of this new categorization, responds to it in two senses: (1) that the expression of “psychologism” as descriptive one, as describing the psychological method, is not problematic; but (2) that the pejorative-sense use of it on the other hand would not be accepted. In the framework of this Brentanian reaction it seems to consolidate the pejorative sense, as well as to delineate the differences among the meanings of

⁵⁰ “The way in which Kant discovers the *a priori* is also a purely psychological analysis of the inner experience, and his transcendental deduction a legitimation of this analysis which belongs to psychology. In both cases, it is a question of knowledge of our spirit, of an investigation of its effective essence and of the laws of its activity.” (MEYER, 1870, p. 168).

psychological method and of psychological method in relation to “psychologism” expression:

(...) para a identificação de psicologismo e método psicológico é decisivo o influente texto de Windelband de 1884 (...). A combinação da identificação entre psicologismo e método psicológico com o primado do sentido crítico-negativo do termo ‘psicologismo’ tornará necessário que ou se distinga entre psicologismo e método psicológico ou se estabeleça uma distinção entre dois sentidos de ‘psicologismo’, um neutro-descritivo e sinônimo de método psicológico, e outro crítico-depreciativo, conotando reducionismo e relativismo. A 8.^a edição da história da filosofia de Überweg e a escola de Brentano escreverão um capítulo interessante a respeito.⁵¹ (PORTA, 2020, p. 69).

Edmund Husserl’s reception and treatment of psychologism as problem will hereinafter be discussed. For now it is possible to assert that from the formal-linguistic point of view his *Logische Untersuchungen* will definitely enshrine the pejorative use of the expression, whether by its very influence, or by the increasing use of the term in equally increasing disputes about it. The renewal of the debate led to a complexity of relations and confrontations in the continuity of *Psychologismusstreit* and to a terminological refinement:

Husserl é decisivo para a centralidade que assume o *Psychologismusstreit* a partir de 1900, marcando um antes e um depois (...). A imposição do psicologismo como central na agenda filosófica leva ao aprofundamento de conceitos, o qual exige uma terminologia mais diferenciada, algo que se põe em evidência na aparição de numerosos termos compostos. Por exemplo, o próprio Husserl, ao passar da fenomenologia como psicologia descritiva à fenomenologia eidética e então à fenomenologia transcendental, acunha conceitos tais como psicologismo transcendental ou psicologismo epistemológico. Husserl promove não somente novas terminologias senão inclusive mudanças de significado ao despertar as mais diversas reações ao seu antipsicologismo, de forma que o termo ‘psicologismo’ termina por aplicar-se ao próprio Husserl, acusado agora de não superar ou voltar a incorrer em algum tipo de deslize psicologista⁵². (PORTA, 2020, pp. 71-72).

⁵¹ “for the identification of psychologism and psychological method 1884 Windelband’s influential text is decisive (...). The combination of the identification between psychologism and psychological method with the primacy of the critical-negative sense of the term ‘psychologism’ will make necessary either to distinguish between psychologism and psychological method or to establish a distinction between two senses of ‘psychologism’, one neutral-descriptive and synonymous with psychological method, and the other critical-deprecating, connoting reductionism and relativism. The 8th edition of the Überweg’s history of philosophy and the Brentano school will write an interesting chapter about it”.

⁵² “Husserl is decisive for the centrality that *Psychologismusstreit* assumes from 1900 onwards, being a ‘then and now’ (...). The imposition of psychologism as central to the philosophical agenda leads to the deepening of concepts, which requires a more differentiated terminology, something that becomes evident in the appearance of numerous compound terms. For example, Husserl himself, by going from phenomenology as descriptive psychology to eidetic phenomenology and then to transcendental phenomenology, coined concepts such as transcendental psychologism or epistemological psychologism. Husserl promotes not only new terminologies but also changes in meaning by provoking the most diverse reactions to his anti-psychologism, so that the term ‘psychologism’ ends up

One of the *Überweg* editions records down *Logical Investigations*, mainly the *Prolegomena* to phenomenology, as being the most influential philosophical work of twentieth century (ÜBERWEG, 1951, p. 512). The prodigality of the use of the expression after this work, leading to debates in several other disciplines, is symptomatic: “psychologism” is applied to and discussed in, for example, aesthetics (FIZER, 1981), linguistics (ANTAL, 1976), and sociology (RUYSEN, 1908). Even Wittgenstein related the expression to “mentalism” in his criticism of private language. (PORTA, 2020, pp. 73-74). In view of the above, it is possible to anticipate partially the conclusion: “psychologism” does not just concern the perspective of Husserl in *Logical Investigations*. It expresses much more meanings, because it is (co)related to different states of affairs in different times. That is the reason why “psychologism” can be defined as a “floating” problem. The task, now, is to reckon shared elements that allow to get to a single concept and then to analyze it in a Husserlian perspective.

The “floating”, perhaps changeable, nature of psychologism did not go unnoticed in the eyes of Cassirer. In the 1920 decade, and in spite of Husserl’s massive criticism, he pointed out that psychologism still appeared in disguise in different garbs (CASSIRER, 1993, p. 78). Ernst Cassirer’s statement, delivered in context of dissemination of naturalism, humanism, and *Denkpsychologie*, enables to draw two conclusions: (1) psychologism has both regular and irregular features, and (2) one kind of psychologism was harshly criticized by Husserl. The latter is a compound of all thematic and historical elements just sorted. Let us see.

One asserts that contemporary philosophy to which Edmund Husserl belongs originated from the falling-off of Hegelian idealism. To put it differently, that means a rescue of the finitude with a consequent abandonment of “absolute” perspectives, or sourced from “speculations”, or based on an idea of “system”. One also asserts that in this context Adolf Trendelenburg, whether in his criticism of Hegelian dialectics, or in the emergence of *die logische Frage* (or even for several reasons else), plays a crucial role by very well expressing the philosophical awareness of that time. (PORTA, 2011, pp. 16-19). This short and seeming digression aims to resume the historical scenario one has just explored: critical and revolutionary, the 19th century witnesses efforts of answering and effective answers concerning the role and the

being applied to Husserl himself, now accused of not overcoming or falling back into some kind of psychological slip”.

place of philosophy before the whacking growth of the *Naturwissenschaften*. The “identity crisis”, as a result of the sum of factors above distinguished, is no more than a crisis of its possibility, justification, and nature – or, one could abbreviate, of its very existence. Philosophy’s existence could not be conceived of in opposition to sciences, but in deference to them. In fact, the imperative of redefinition of philosophy compelled to that the exigency of its specificity would respect the exigency of accepting the outcomes and position of natural sciences. These ones would be the beacons with which the new philosophy should situate both in relation to itself and to the unveiling of scientific scene. This is the general backdrop of which, and upon which, empirical psychology arises. This “anew”, but at the same time “old”, discipline seemed to withstand the exigencies of redefinition, positioning itself between idealism and the typical 19th materialism. Such a positioning, or taking the course towards a third way, showed up as “new” precisely by paving the third path, but was still “old” by turning to a certain “Cartesianism”.

This return to Cartesianism, Freuler says, will consist of “one of the multiple faces of psychologism.⁵³ “One”, because it precisely concerns a perspective on Descartes: this scientific-empirical psychology of 19th century will in broader sense mean the science of objects, phenomena and representations of the inner sense, that enables and guarantees primal, immediate evidence and knowledge. (FREULER, 1997, p. 179). Put it differently, it means an empirical radicalization of the principle of immanence. A good and unsuspecting evidence thereof is no one “rationalist”, but the first “psychologist” nominee: Beneke argues that nature and the thing-in-itself are incognizable by virtue of the mismatch between “factors”, elements in and of nature, and “products”, effects of the former perceived by the senses. This mismatch does not exist in the domain of psychology: the perceptions and representations are immediate, and, by being so, they suppress the disconnection between factors and products, between causes and effects. (BENEKE, 1850, pp. 8-13). The passing remembrance of Arthur Schopenhauer (see p. 35), associating him with the radicalization of the principle of immanence, is justified by what has been just said, by the postulation after all that the immediate given is my representation –

⁵³ The “multiple faces” of psychologism confirm the “floating” character of the issue by referring to the also multiple conceptions of “psychology”. Auguste Comte, for instance, would doom psychologies constituted in a non-physiological way as being “inutile”, materialist view shared by physiologists as Vogt, Spiess and perhaps Helmholtz.

the representation as pertaining to the domain of the inner sense or consciousness, to the exact extent of consciousness as pertaining to the domain of psychology.

The comprehension that psychology upholds the domain of the first, primal given, and therefore eliminates distortions attended to the relations to nature, fact to which one obviously adds the successful outcomes from empirical sciences such as physiology, results in an optimism on the privileged position of psychology, which is shared by many thinkers of that day. Not only Beneke and Schopenhauer, but also Franz Brentano and Theodor Waitz, e.g., would invest psychology with certain superiority in the comparison to other sciences else. (FREULER, 1997, pp. 176-179). Theodor Waitz, by the way, is a good expression in whose work are summed up all these elements. In the middle of 19th century he publishes his *Lehrbuch der Psychologie als Naturwissenschaft* (1849), in which he advocates the thesis according to which empirical psychology could “regenerate” philosophy because it constitutes an “intermediate science”, connecting particular empirical sciences with an “ethical worldview”: philosophy wherefore could only be this science, the empirical psychology, whose method is none other than that one of natural sciences and whose object is not but the very man, “the bearer of knowledge”. (FREULER, 1997, p. 169).

Likewise, in the middle of 19th, Karl Fortlage reverberates in his *System der Psychologie* Waitz’s thesis and deems empirical psychology as “mediatorial science”, because the man, its study object, is placed on the middle, as a matter of fact on the center, of space and time, therefore of nature and history, at the same as he, man himself, constitutes a “unfathomable realm of spirit”. (FORTLAGE, 1855, pp. 2-3). A science of such a latitude could not be less than the core of the new philosophy – or, once Franz Brentano regarded it as containing the roots of esthetics, ethics, politics, and logic, it could even be the foundation itself. Now, if empirical psychology becomes both the core and the foundation of philosophy, could it not be, as Brentano looks forward, the core and the foundation of other philosophical disciplines like as logic, too? The answer, and logic answer, could only be “yes”. If everything that is object of knowledge is nothing but ultimately product of the human spirit, in the science of the human spirit are therefore all the other sciences to take roots, including logic. (BENEKE, 1850, p. 17).

John Stuart Mill published his *System of Logic* in 1840, whose translation and reception in Germany took place about 1849. (FREULER, 1997, p. 168). The British

thinker did not make secret of his desire to provide an explanation of logic on the basis of psychology and by the rejection of what he called “metaphysical German school”. In one of the most famous passages of this book, not by chance quoted by Husserl (Hua, XVIII, p. 64), Mill states that “So far as it is a science at all, (logic) is a part, or branch, of Psychology, differing from it on the one hand as the part differs from the whole, and on the other, as an Art differs from a Science”, this psychology being the science from which “its theoretical grounds are wholly borrowed and include as much of that science as is required to justify its rules of art”. (MILL, 1865, p. 359). Stuart Mill’s interpretation of logic principles is likewise empiricist-like: “inherent necessities of thought”, “original part of our mental constitution”, “laws of our thoughts by the native structure of the mind”, etc. (Hua, XVIII, p. 89).

Beiser holds British materialists and naturalists were welcomed in Germany. *Materialismusstreit* having originated from and developed in Germany over that epoch is thereof an eloquent example. (BEISER, 2014, pp. 4-5; 53-88). Charles Darwin is one of these names, but the already remembered Stuart Mill, although less known, is not irrelevant. The reception of Mill’s system of logic in Germany coincides precisely with the development of *die logische Frage*, which, also in the countermarch of Hegelianism, would beget immanent-fashion accounts for logic. As anticipated, from this crossover arises a tendency in the scope of logic of identifying logic laws with laws of thought. In addition to this identification, other two general arguments seem to support a psychology underlying logic: (1) all the knowledge takes roots in evidence, which is ultimately products of psychological-nature experience (*Erleben*); and (2) it is not possible to overpass the psychologically given. These are the arguments that support theses such as “the meaning of terms and statements are psychological entities”, “Logical laws are a part of psychological laws”, and “There is no absolute objectivity, but the truth of knowledge is restricted to the species (e.g. homo sapiens)”. (PORTA, 2020).

So far this positively-depicted scenario still leaves unanswered two questions raised: (1) what is the general concept of “psychologism”, with which at the beginning one committed, but even not established; and (2) what is the “problematic”, case against such a background so portrayed – or, to put it in simpler terms, why, if so, psychologism is a problem (and indeed it is according to Husserl, for example)? One can essay the answer to the former question as follows: psychologism is a “tendency”, “program”, or “doctrine”, that “reduz no aspecto epistemológico uma

determinada disciplina à psicologia ou no aspecto ontológico um certo conjunto de entidades ou fenômenos a entidades ou fenômenos psicológicos”⁵⁴, therefore it is about some philosophical theory that characterizes “um tipo peculiar de reducionismo”⁵⁵. (PORTA, 2020, p. 16). The answer to the latter one is rather more complex, although clues enough were scattered throughout the text, and it makes complete sense here only from the perspective of Husserl. If the identity crisis of philosophy raises (and in fact both still does and did) the problem of possibility and justification of philosophy, and if the empirical psychology presents itself as “the” candidate to both justify and habilitate it, another problem naturally is raised – that one of knowing whether psychology is indeed the best justification and possibility or not. In this case one is before the problem of the possibility of possibility and of the justification of justification. These are in fact problems, but secondary and tangential ones. That would perhaps be nothing but a modality of *regressus ad infinitum*. Nevertheless, the basic problem is at the same time broader and narrower. *Broader*, say, because it matures and perfectly interflows into trends antipathetic to “absolutes” – psychologism is impregnated with relativism, cluster of ideas at that time in vogue as much as materialism, positivism, atheism, and historicism (FREULER, 1997, p. 115), all of which mobilized to explore different aspects and dimensions of the finitude, whence mobilized to explore other concepts of “science”, “knowledge” and “truth”, whose necessity and universality have been radically and in an empiricist fashion arguing since David Hume. That leads to the relationship between psychology and philosophy, especially a philosophy in transcendental garb as proposed by Husserl, and how to conciliate descriptive and transcendental disciplines. These issues were addressed by the very Husserl over his entire career and interpreted, for instance, by Drue (1963), Merleau-Ponty (1964), Kocklemans (1967), and Davidson (2021). Yet the problem is also *narrower*, say, because not only is focused on *Prolegomena to Pure Logic* and its logical-epistemological character is singled out. It is *narrower* fundamentally for being the basic problem to which all the participants of *Psychologismusstreit* sought to reply. “The battle lines between psychologism and antipsychologism” were drawn around the question of “whether and in what sense logic, mathematics, philosophical semantics, epistemology, and

⁵⁴ “reduces in the epistemological field a certain discipline to psychology or in the ontological field a certain set of entities or phenomena to psychological entities or phenomena”.

⁵⁵ “A peculiar kind of reductionism”.

metaphysics are explanatorily related to psychology”⁵⁶. (JACQUETTE, 2003, p. xi). Ultimately, it is the problem on how and the best way philosophy can become a scientific enterprise.

⁵⁶ “There are two conflicting desiderata of science that provide a basis for the opposition between psychologism and antipsychologism. Science wants both to be objective and dependent on empirical facts. In physics, chemistry, biology, astronomy, and the other hard sciences, there is no collision of these values. It is peculiarly in the case of psychology, where the empirical facts of psychological experience have at least traditionally been regarded as essentially subjective, that a division has emerged between two opposed ways of trying to make logic and other philosophical subdisciplines (broadly, according to one ideology or another) ‘scientific’”. (JACQUETTE, 2003, p. x).

3 PROLEGOMENA ZUR REINEN LOGIK

The *Prolegomena to Pure Logic* consist of the first volume of Edmund Husserl's *Magnum opus*, his *Logical Investigations*. The work is well-known by the refutation it contains (of which we will later speak). This text came out from the press in 1900 (although Husserl acknowledges that its content is a reworking of lectures delivered in 1896), as consisting of the “breakthrough” into the phenomenology and, in addition to denying psychologism, of the introduction to his philosophy. The basic problems Husserl there faces may be seen as unfolding from his previous book, criticized by Frege. This is our starting point.

3.1 Edmund Husserl's *Philosophie der Arithmetik*: His Own Psychologism

To open up the chapter devoted to *Prolegomena zur reinen Logik* departing from a previous book, *Philosophie der Arithmetik*, seems to make no sense at first sight. But it does. *Logical Investigations* themselves are set about an allusion – and one could say a “negative” allusion – to the 1891 book. Such an allusion, which drives us to the critical review by Gottlob Frege, contributes for the explanation of the initial sentence of this dissertation, namely, why and at which extent Edmund Husserl was also considered a “psychologist thinker”. Events such as these ones, occurred over the 1890^s, explain Husserl's statement, prefaced in the second edition of *Logical Investigations*, that the 1900's work consists of a “breakthrough”, videlicet, a new beginning, not the continuity of a then-abandoned project of a philosophy of arithmetic. This change of comprehension on the nature and status of logic, mathematics, and philosophy sheds light on the comprehension, in turn, of why psychologism turns out to be a problem (in addition to, of course, stressing once again its “floating” nature).

The preface to the first edition of *Logical Investigations* is pervaded by a complaint. Husserl faults himself with respect to his own philosophy of arithmetic for having shared that time conviction that psychology could serve as the enlightener of logic and theory of knowledge. In spite of acknowledging his “psychological

investigations” have somehow clarified the origin of mathematical presentations¹, they were not able to account for both logical, objective content of these presentations and the relations between each other. Therefrom arises the problem of, in Husserl’s words, *die Objektivität der Mathematik und aller Wissenschaft überhaupt mit einer psychologischen Begründung des Logischen Vertrage*.² (Hua, XVIII, 6-7). If psychology, with whose grounds he was admittedly dissatisfied, was not able to account for these issues, a new foundation of pure logic and theory of knowledge was supposed to be carry out. One might ask why a new foundation was urged – and one might reply that the answer lies both in Frege’s criticism and consequently in Husserl’s admission of “his own psychologism” in *Philosophie der Arithmetik*. Let’s see.

Dallas Willard claims that there are three general questions Husserl intends to answer along his *Philosophy of Arithmetic*: (1) what is number itself; (2) in which cognitive act(s) is number itself actually present to our minds; and (3) how do symbolic systems used in arithmetical thought enable us both to represent and to arrive at knowledge of numbers that are not intuitively (“authentically”) given. From a structural point of view, the answer to the former questions is attempted in the first volume, “psychological investigations”, while in the second one, “logical investigations”, he seeks to answer the latter (WILLARD, 2003, p. xiv). Mario Porta asserts that “Philosophy of Arithmetic’s main goal is to show, in opposition to the ruling nominalism of Helmholtz and Kronecker, that numbers are not mere signs, but that we properly possess concepts”, which Husserl tries to achieve based on a “foundation of mathematics that has as central point to clarify its basic concepts and its symbolic method”. (PORTA, 2013, p. 30). Robert Hopkins adds that “*Philosophy of Arithmetic* is an attempt to establish the foundation of arithmetic by means of a psychological account of what he refers to as ‘cardinal number’”, views taken from both Karl Weierstrass (the cardinal number as the foundation of arithmetic) and Franz Brentano (the employ of psychological analysis). (HOPKINS, 2011, pp. 105-106). In the view of Cohen and Moran, this work has as aim to figure out both the origin and the essence of mathematical concepts, whose method is based on the Brentanian

¹ Generally, *Philosophy of Arithmetic* are divided into two main parts or investigations, “psychological investigations”, devoted to acts or types of acts in which the number is presented, and “logical investigations”, devoted to investigate the symbolic system of arithmetic and its relations.

² “the objectivity of mathematics and all science in general with a psychological foundation of the logical domain”.

psychological tenet that “no concept can be thought without a foundation in an intuition”. (COHEN; MORAN, 2012, p. 255).

It is not out of purpose here to render the right interpretation of Husserl's *Philosophie der Arithmetik*, but simply to assume that Frege's criticism – which is championed by Dagfinn Føllesdal, for instance – was difference-making in compelling Husserl to embrace another conception of philosophy. Either way, some further comments on such a work are noteworthy. In the first place, to figure out what the number is to analyze the concept of number, understanding “concept” as an “universal of a type belonging exclusively to mental states” (WILLARD, 2003, p. xv). This analysis, in turn, entails to trace back the origin of the concept, performed through the reconstruction of the course of correspondent experiences – this course of experiences gives us their content, i.e., essential properties that fall under the concept. Concepts, however, are divided into two subgroups – the authentic ones, immediately captured because they present also immediately to mind, and the inauthentic ones, given not immediately, but, say, indirectly, through symbols such as those of arithmetic. That said, the general concept of number, there identified to the concept of “multiplicity”, sources from a particular experience/intuition, an “intuitive enumeration”, by virtue of which “I serially consider certain objects from among those present to me on the occasion, with that distinct type of ordered noticing essential to the counting objects. (...) a new and distinctive type of whole is intuitively present to me”, whence the concept of multiplicity or totality, and therefore the very concept of number, shows up in the field of consciousness. Those totalities constitute what one used to call “objects of higher order”, obtainable in acts of consciousness that consist of the ultimate intuition of enumerating and abstracting. Let us suppose, for example, that there are 10 pencils upon a desk. In this case, the mere consciousness of the presence of these objects does not define nor determine the concept of number; the possession of such a concept manifests itself in case of an intentional consciousness of unifying them as “something and something and something...”. Indeed, that particular act of consciousness, expressed through counting, grasps the two essential elements of the concept of number, “something” and “collective combination” – the two instants, dimensions, or elements of the concept of number, the former concerning the contents apprehended, and the latter consisting of an agglutinative act, represented in ordinary language by the conjunction “and”. (WILLARD, 2003, p. xxiv). Finally, if the psychological investigations that make up the

first part of his *Philosophy of Arithmetic* were supposed to find out in which kind of cognitive act numbers are presented to mind, do they for this very reason reduce or identify numbers themselves (in)to mental states? The answer is no. Totalities and “being a number” are not confined in mental acts, as if they were thereof components. To put it in simpler terms, mental acts do not create numbers and totalities. In contrast, concepts such as numbers are made merely presented to mind, now directly, now indirectly by means of symbols. What Husserl was doing, Willard adds, was to outline what would later be called “categorical intuition”, without forgoing the objective character that numbers and concepts alike may adopt. As the quoted scholar rhetorically questions, do the act of enumeration and the reflection thereupon make the totality and its specific number or only make them present? (WILLARD, 2003, p. xviii).

Now, if Husserl never championed the thesis that numbers are mental constructs, nor did he reduce mathematical laws into laws of thinking, what can be seen as his own version of psychologism? Gottlob Frege’s criticism against psychologism is not identical to Edmund Husserl’s one. There are as much differences as similarities. The easiest way of answering is to say Husserl established a psychological basis upon which he justified arithmetical symbolic system³. The thorough way is to explain Frege’s position. Frege’s criticism is initiated by the disagreement in relation to the concept of number, i.e., by denying that number is synonymous of “totality”, “multiplicity”, “set”, “aggregated” etc. Indeed, one of the most quoted excerpts of his review is the question “how many moons does the Earth have?”, to which, he assumes, Husserl would respond negatively by disregarding “one” (1) as a number. What matters here is not this specific rebuke, but what substantiates it. Frege notices that the confusion between number and totalities arises from the act Husserl calls “collective combination”. It is the act, the specific nature of this act, that underlies Husserl’s misconception. Frege imputes to Husserl the stance that number is a property of aggregates, an object depurated out of its particularities “in the psychological washtub”. Ultimately Frege’s review is focused on

³ Husserl’s terminology, nonetheless, can somehow explain the charge of having been psychologist thinker. For example, “psychical” and “psychological”, Willard says, do not mean in the Husserlian text what they commonly and ordinarily mean; they do not mean, therefore, “part of the mind”. What these terms mean in the context of *Philosophie der Arithmetik* could be better expressed by “formal”, “categorical” words, so that “totality” and “unity” are not exactly grasped as mental frames, but rather correspond to “one aspect of the categorial form of all that is, of the world”. Likewise, the concept of number cannot be understood as a part of one’s mind, nor as mental construction, but rather as a “property of class of classes”. (WILLARD, 2003, pp. xxiv-xxix).

the “mixture of psychology and logic”, by virtue of which everything is turned into presentation, “*Vorstellung*”, including concepts and numerical concepts. If everything fades into presentation, one then blurs the boundaries of both objective and subjective, of concept and presentation; what is subjective has the appearance of the objective, and what is objective turns into subjective. (FREGE, 1977, pp. 6-21)

What is, after all, the kind of psychologism for which Husserl was blamed? One may say that Frege’s criticism against psychologism, although has changed over the time, is divided into two major groups, whether against its results, or against its presuppositions. The misleading presupposition of psychologism accrues from a misleading conception of subjectivity. And this misleading conception of subjectivity, upon which psychologism is sustained, is nothing but the principle of immanence. (PORTA, 2013, pp. 141-143). Even though Frege’s review may be regarded reductionist and even unfair as to some aspects, Edmund Husserl, in the Fregean perspective, may be deemed “psychologist” not only by not retorting the anti-psychologism of Frege’s works, but also, and mainly, by assuming in his arithmetical philosophy the presupposition underlying every psychologist work – the principle of immanence. In other words, “psychologism” is to turn the objective into the subjective. Ultimately, psychologism is a twofold phenomenon that is revealed, on the one hand, through the reduction of all objects into actual (either psychological, or physical) objects, disregarding the possibility of existence of “ideal” objects, and, on the other, through an equally reductionist conception of subjectivity, able only to grasp immanent objects and “presentations” – a subjectivity to which what is objective cannot establish a relation. If one regards numbers and ideal objects just as mere excogitations from presentations, it is due to the fact that one conceives of subjectivity only on the basis of the principle of immanence, now denying the ideality, now denying the possibility of relationship between such a subjectivity and what is not mere presentation. (PORTA, 2020, pp. 153-155).

In fact, *Philosophy of Arithmetic*’s author, young Husserl does not evade these problems: (1) the physical/psychological duality depletes the categorization of objects (the “third realm” of the ideality is there absent), and (2) all of that derives from his miscomprehension of subjectivity, later replaced by a phenomenological-made conception of subjectivity (PORTA, 2013, pp. 46-49). Dagfinn Føllesdal, with whom we agree, asserts that Frege’s review, by exposing psychologist inconsistencies in Husserl’s first book, affected decisively Husserl’s conception concerning the nature

and grounding of logic and mathematics: “Frege played a significant role in the change of Husserl’s development and on Husserl’s conception of a series of central philosophical problems”. (FOLLESDAL, 1994, p. 36). Psychologism is precisely one of these problems.

3.2 Edmund Husserl’s Reception of Psychologism Problem in *Prolegomena zur reinen Logik*

Let us set about a dictionary entry on (the relation between Frege, *Prolegomena zur reinen Logik* and) *Psychologismus*:

Psychologism is the doctrine that the laws of mathematics and logic can be reduced to or depend on the laws governing thinking. The term “psychologism” was introduced by the Hegelian Johan Eduard Erdmann to characterize a position according to which all philosophical knowledge must be grounded in psychology. For Husserl, psychologism presents a genuine intellectual challenge. His *Prolegomena to Pure Logic* is dedicated to a critical assessment of the so-called *Psychologismusstreit*. Husserl’s *Prolegomena* is perhaps the most influential anti-psychologistic text within German-speaking philosophy. (...) The basic mistake of psychologism is a reduction of logical laws to psychological laws. Husserl further argues that by failing to recognize the ideal or non-factual character of logical laws psychologism is bound to end up in a self-refuting relativism. (...) According to Frege, Husserl treated numbers naively as properties of aggregates rather than as the extensions of concepts. (...) in identifying the objective numbers with subjective acts of counting, Husserl was guilty of psychologism, the error of tracing the laws of logic to empirical psychological laws. (COHEN; MORAN, 2012, pp. 266-269)

The above definition, although recaps the historical path so far drafted, is incomplete. It neglects particularities one may only find by looking deep into *Logical Investigations* – here, in particular, *Prolegomena*. It occurs that, even though one leafs through and peruses the prolegomena, a thorough definition of psychologism will not be found there. And it will not be found because Husserl did not provide it. Yet, a rereading of this epistemological masterpiece allows us to make his presuppositions explicit and to frame his reception of psychologism. There are thereon three more basic sub-definitions to be clarified in light of Husserl’s thinking, “logic”, “psychology”, and “science”. The comprehension of psychologism as problem, therefore, accrues from the Husserlian comprehension of logic, psychology, science, and the relation between them.

Logic, especially what Husserl calls “pure logic”, is not the traditional logic, understood merely as propositional logic. The Husserl’s conception is as a matter of fact wider: one may aver that it is about a reorientation of the conception of Leibniz’s *mathesis universalis*. These are, by the way, the words of Husserl himself in commented introduction to the *Logical Investigations*: “Pure logic characterizes itself as ‘mathesis universalis.’ It develops through that particular concept of formal logic as a residue of pure ideal doctrines dealing with propositions and validity”. (FINK, 1975, p. 28). For a better understanding, Husserlian logic is the domain and the unity of all analytic-related laws and doctrines, including all the mathematical sphere (algebra, arithmetic, theory of set, etc.), whose totality Husserl calls *Mannigfaltigkeitslehre* (theory of manifolds). It is in this sense that Husserlian logic is wider: his logic is not about a mere set of laws of deduction, articulated upon the subject/predicate relationship, but rather about an autonomous science, encompassing the sum of this formal *a priori*. It copes with, Husserl claims, categories of meaning (*Bedeutungskategorien*) and the formal categories for objects correlated to them, and *a priori* laws based upon them. (FINK, 1975, pp. 28-29).

On the other hand, the concept of psychology is narrower in Husserl’s view. He defines “psychology” in the fourth chapter of *Prolegomena* as “*Wissenschaft von den psychischen Phänomenen*”, “*Wissenschaft von den Tatsachen des Bewußtseins*”, “*Wissenschaft von den Tatsachen der inneren Erfahrung*”, or “*Wissenschaft von den Erlebnissen in ihrer Abhängigkeit von erlebenden Individuen*”. The psychology to which Husserl refers, wherefore, is the *empirical* psychology, “*eine Tatsachenwissenschaft (ist) und somit eine Wissenschaft als Erfahrung*”⁴. (Hua, XVIII, p. 72). It is this specific psychology, whose construction took place over the nineteenth century, that might raise the problem as to the constitution of science. Indeed, even though he has corrected his own conception, Husserl introduced his first edition of *Logical Investigations* as a eidetic-descriptive psychology. However, the type of psychologism at issue is understood on the assumption of empirical psychology. (PORTA, 2013, p. 56).

Generally speaking, “science” is according to Husserl every cognitive enterprise whose goal is the truth. In a wider sense, Husserl includes in “science”

⁴ “Science of psychical phenomena”, “Science of the objects of consciousness”, “Science of the objects of the inner consciousness”, “Science of experiences in their dependence on experiencing persons”, “an empirical science and therefore a science of experience”.

every systematic form of knowing (*Erkennen*) and knowledge (*Erkenntnis*), enfolding even natural sciences, such as psychology, and human sciences, such as history. In a narrower sense, Husserl considers “science” as a theoretical enterprise that possesses the truth in a systematic, closely-knit way – namely, it is a ground-laying enterprise of knowledge, the evidence (the experiential insight whose objective correlate is the truth) being the keystone of this building. (COHEN; MORAN, 2012, p. 288).

Edmund Husserl’s treatment of psychologism problem – to be seen in the next section – is bound to his reception of the state of affairs so understood. Now, to the fact that Husserlian logic is an all-encompassing doctrine of *a priori* one is to add that his logic is deemed as an autonomous discipline. Likewise, to the fact that psychology is an empirical science one is to attach that psychology has causal-explanatory approach as method. Besides, the ultimate expression of science, the science of science, is for Husserl the very logic, which affords the necessary formal structure for the constitution and organization of all sciences else. The concepts of “logic”, “psychology”, and “science” being so understood, one may now put them in perspective and correlation, whose ensuing tension makes the problem of psychologism explicit. Indeed, in the end of the previous chapter one said that one of the problems psychologism left open was the relationship between philosophy, logic, and psychology. And in the beginning of the third chapter of *Prolegomena* Husserl precisely raises the question about such a relationship:

Welche theoretischen Wissenschaften liefern die wesentlichen Fundamente der Wissenschaftslehre? Und daran fügen wir sogleich die weitere Frage: Ist es richtig, daß die theoretischen Wahrheiten, die wir im Rahmen der traditionellen und neueren Logik behandelt finden, und vor allem die zu ihrem wesentlichen Fundament gehörigen, ihre theoretische Stelle innerhalb der bereits abgegrenzten und selbständig entwickelten Wissenschaften besitzen? Hier stoßen wir auf die Streitfrage nach dem Verhältnis zwischen Psychologie und Logik; denn auf die angeregten Fragen hat eine, gerade in unserer Zeit herrschende Richtung die Antwort fertig zur Hand: Die wesentlichen theoretischen Fundamente liegen in der Psychologie; in deren Gebiet gehören ihrem theoretischen Gehalt nach die Sätze, die der Logik ihr charakteristisches Gepräge geben⁵. (Hua, XVIII, p. 63).

⁵ “Which theoretical sciences provide the essential foundations for the doctrine of science? And to this we immediately add the further question: is it correct that the theoretical truths which we deal with within the scope of traditional and modern logic, and above all those belonging to its essential foundation, have their theoretical place within those already delimited and independent developed sciences? Here we face the problem of the relationship between psychology and logic; according to a trend that is dominant in our time, it has the answer ready at hand to the questions raised: the essential theoretical foundations lie in psychology; in its domain, according to their theoretical content, belong the propositions that give logic its distinctive character.”

These questions raised by Husserl, inasmuch as they frame the problem of the relationship between logic and psychology, make sense in the light of opening chapters of *Prolegomena*. Then let us be guided by Husserl's steps, in order to look deep into the construction of the problem in his own perspective. The introduction is set about a John Stuart Mill's quotation on *die logische Frage*, in which 3 major schools are involved – the metaphysical trend, the formal one, and the psychologistic logic, the latter of which acknowledged by Husserl as the ruling logic at that day. According to him, such a controversy mainly concerns the definition of and the essential content of logic, whether a theoretical and formal-related science, or practical and normative-related – ultimately the delimitation of its domains and the sphere of objects proper to the discipline. Kant, by virtue of his statement that “*Es ist nicht Vermehrung, sondern Verunstaltung der Wissenschaften, wenn man ihre Grenzen ineinanderlaufen läßt*”,⁶ is at this point recollected and therewith Husserl means to aim at the harms of the psychological logic. (Hua, XVIII, p. 23).

Regardless of its nature, whether theoretical or practical, and regardless of its delimitation, whether it grasps only actual objects or not, logic, like as any science else, lacks completeness. By “incompleteness” Husserl means, on the threshold of the first chapter, the deficiency from which all the sciences suffer, that is, a theoretical lack concerning the clarification of grounds and principles, including method and essential concepts of any science. The “theoretical incompleteness” of sciences has to do with inner clarity and rationality, aspects proper to true sciences. In an elusive reference to the upgrowth of empirical sciences, as well as to the philosophical context of crisis, Husserl argues that practical accomplishments and the dominance over nature reached by natural sciences did not entail theoretical improvement and accuracy: “*Sie sind nicht kristallklare Theorien, in denen die Funktion aller Begriffe und Sätze völlig begreiflich, alle Voraussetzungen genau analysiert*”⁷. (Hua, XVIII, p. 26). Once metaphysics, regarded by Husserl as the first philosophy of Aristotle, just account for actual-like presuppositions (such as the external world, temporality, causality etc.), a new science is urged to accomplish the theoretical aim of completeness of all sciences, here included those ones, like as mathematics, whose ideal objects are thought of as being independent of actuality (*Wirklichkeit*). These

⁶ “There is not advance, but disfigurement of sciences, if one allows their boundaries to run into one another”.

⁷ “They are not crystal-clear theories in which the function of all concepts and propositions is fully comprehensible, all assumptions are precisely analyzed”.

inquiries into principles, which wrap sciences in completeness, unveil a new realm of researches in charge of which is the science of sciences, the doctrine of science. At this point one goes back to the narrower concept of science as Husserl understands it: strictly-made sciences are not a heap of informations, data, and propositions, but rather a systematic unity in theoretical sense, based on ultimate grounds: “*Offenbar ist mehr erfordert, systematischer Zusammenhang im theoretischen Sinne, und darin liegt Begründung des Wissens und gehörige Verknüpfung und Ordnung in der Folge der Begründungen.*”⁸ (Hua, XVIII, p. 30). At this point, likewise, one goes back to the narrower concept of logic – it is up to logic to investigate the connections of grounds that constitute the completeness of all sciences. It is this logic, therefore, that will be the doctrine of science.

In the second chapter, Husserl hypothetically attends the controversy *die logische Frage* and assumes as right the position of those who regard logic as a practical (whether as normative, or as technique) discipline. Although the prolegomena are well-known because of the criticism against the psychologist logic, there is in such a chapter something like a “forgotten criticism” by Husserl, opposed precisely to conceptions of logic as technique and normative-related discipline. By assuming the propriety of this conception of logic, Husserl is as a matter of fact both showing off its inconsistencies and refusing its demonstrations. Husserl’s criticism, briefly, is as follows: normative laws grasp concepts that, albeit occasionally normative, are essentially theoretical. In a proposition, for instance, in which necessary and sufficient conditions connect an ought and an evaluative predicate – in Husserl’s own example, “if a warrior is brave, therefore he is a good warrior” –, the law that determines the pattern (whence the normativity) and the applicability to singular cases (whence the technique) encompasses a theoretical substratum out of which it extracts its normative meaning. In regard to the case above, the proposition tantamounts to “an A ought to be B if A possesses the quality C” or to “only an A possessing the predicate C ought to be B”, in which the condition “to possess the predicate C” is just theoretical because it contains nothing of the *ought sort*. In other words, the normativity presupposes theoretical background that supports it and, at this extent, that is not normative. What is more, practical, normative disciplines are based on purely theoretical disciplines.

⁸ “Clearly much more is required, systematic connection in the theoretical sense, and therein lies justification of knowledge and proper connection and order in the sequence of justifications.”

Against this backdrop, it gets easier to understand the set of questions Husserl raises concerning the relationship between, hypothetically, certain sciences, such as logic, and their possible grounds, such as psychology. By assuming logic as a normative, practical science, wherefore, Husserl is not only showing off the pleas of that trend in logic and rejecting them, but is also, and mainly, laying the ground in order to, by hypothesizing that logic is a particular science, verify the outcomes if psychology plays the role of being its theoretical grounding. If one recaps the assembly of the parts of this context, one may notice that *Prolegomena* are opened in reference to *die logische Frage*, controversy concerning the boundaries, content, and grounds of logic. Husserl then assumes hypothetically that the prevailing logic is the psychologist one and that such a logic, regarded as particular science, has psychology as its theoretical grounds – therefrom derives the general problem of the relationship between logic and psychology, brought about by Husserl in the beginning of the third chapter. Now, if Husserl assumes hypothetically a logic as being a particular science in order to examine the results in case of the relation between it and psychology as its ground-laying theoretical science, this drives him to realize the real problems of psychologism, of which the relationship between logic and psychology is just a fraction, a “underproblem”. The outcomes from this relationship, negatively seen by Husserl in such a way that they will condition his well-known rebuttal, overlay the true problem – the problem of the right delimitation of logic, of its proper content and objects, and, fundamentally, the problem of the constitution of a scientific philosophy in a historical, scientific context running out of philosophy.

Well, if one now recaps all the concepts and frames them in the historical-thematic context of prolegomena, and if one adds some elements, one therefore meets what follows. Knowledge (and knowing) is characterized by evidence, whose objective correlate is the truth, deemed to be the correspondence to the state of affairs asserted in a judgment. The truth may be divided either into a *a priori* type, whose validity (*Geltung*) is intuited upon ideal objects and that it is similar to Leibniz’s *vérité de raison*, or into a *a posteriori* type, similar to Hume’s *matters of fact* and bound to circumstances and probabilities without apodicticity. The nature of these truths, whether apodictic and supratemporal or probable and circumstantial, is determined by the nature of the objects to which it refers. Here one returns to the problem of the boundaries of logic and the allusion to Kant. The right delimitation of any science, Husserl holds, is drawn by the right apprehension of its own objects and truths. The

empirical truths of the latter kind are reflected on actual objects examined by sciences of facts, whereas the apodictic truths are mirrored on ideal objects whose study is not up to some type of science of facts, but rather to sciences of essences. (BERNET, 2002, p. 21). In both cases, in both types of science, one finds a theoretical core which is expressed in a “unity of foundational connection” of formal-logical aspect. This theoretical core, underlying any kind of object and science, has not empirical nature, and its research is due to an autonomous, equally theoretical science – his pure logic, the doctrine of science.

What Husserl means by all of that is that there is in the core of any science, apart from its particular objects, method, and gathered data, certain conditions, further in the *Prolegomena* named “(objective/logical; subjective/noetic) ideal conditions of possibility”, that bestow the hallmark of “science” on an enterprise. All particular sciences, albeit empirical and developed they may be, are structured upon concepts, meanings, laws, and formal categories of foundation that are not reducible to or explainable by these very particular sciences. The distinguishing mark of a particular science, the something else that precisely turns it into a science, does not lie in the specificity and particularity of such a given science, but in the generality and universality that underlie all of them. The fundamental characteristic of knowledge, especially knowledge systematized in a science, is therefore justification and foundation. This distinctive trait is what Heidegger, dealing precisely with controversies into logic and in reference to Husserl, will call “essential relation to ground”. (HEIDEGGER, pp. 123-135). True science and knowledge are justified and grounded science and knowledge.

The asking for the relationship between psychology and logic is one aspect of the general problem of psychologism because the fundamental problem it arouses, such as received and perceived by Husserl, concerns, verily, whether psychology is the *best* justification and foundation for logic and, finally, for all knowledge and sciences. Furthermore, to ask whether psychology is the best foundation for logic is to ask whether psychology afford the sufficient and necessary theoretical framework to justify and ground a given knowledge – that is, to make it “scientific”. And, inasmuch as the answer is negative according to Husserl, psychologism is manifested as problem. In other words, psychology does not afford the aforementioned theoretical framework and therefore it is not this the ultimate

theoretical ground to make a discipline like as logic, for example, a science. Edmund Husserl's explanation compels us to go back to the close of the former chapter.

Back there one saw that "psychologism" may be defined as a "reductionist" doctrine, tendency or program, as well as that such a "reduction" is either epistemological (the subsumption of some discipline into psychology) or ontological (the reduction of objects and phenomena into psychological objects and phenomena). In light of what has been hitherto adduced, one might state this twofold reduction is performed by the kind of psychologism Husserl faces. One might still state that the ontological-like reduction, the subsumption of any object into psychological objects, was what made the reduction into psychology possible. If the truths dealt with in the scope of psychology are truths relating to matters of fact, and if this type of truth is correlated to objects of the actuality (*Wirklichkeit*) subject to change of circumstances, therefore, as anticipated, psychology is a particular, empirical science. The opposite happens to in logic: its truths are apodictic and they are not subject to modifications in space and time because its objects are not actual, but ideal ones. The categories of meanings and objectivities of logic are not merged with the actuality. By way of example, the subjective perception, lived-experience of the truth of the law of identity keeps the consciousness in touch with something radically alien to it, in the sense that the law of identity is not a dimension or real component of one's consciousness, nor may it be reduced into consciousness. As Rudolf Bernet warns, the actual, subjective givenness of the validity of some ideal object, once it is about a subjective act of self-transcendence, is not identified with the object itself. (BERNET, 2002, pp. 21-22). Therefrom results that "logical psychologism" is nothing other than an attempt of overcoming the duality that moves being-consciousness and being-ideal-object away from each other, an attempt of justly putting them together by means of a subjectivation of the transcendence of the being-ideal through an appropriation by consciousness⁹. In a nutshell, psychology

⁹ The scholar goes further in saying that "The propositions and laws of pure logic refer exclusively to ideal objects that are either forms of meanings or forms of objects. The validity of a logical law, however, can be consciously given in a subjective act of evidence. Conditions of validity of ideal objects are thus eo ipso conditions of evidence, and logical laws are thus 'equivalent' to propositions regarding possible evidence. According to Husserl, though, one has to pay heed to two points: 1) 'equivalence' does not mean 'identity'; 2) the equivalent transformation of logical laws exclusively concerns acts of evidence according to their 'ideal possibility'. Hence, the validity of a logical law implies the 'ideal' possibility of the 'real' performance of a conscious act, in which either the (analytic) necessity of the law itself is grasped or in which this law is instantiated." (see BERNET, 2002, pp. 22-30).

cannot be the ground of knowledge because the domain of theoretical groundings is alien to it. And now it makes much sense the allusion to Kant, because the confusion of objects (ontological reduction) brings about the confusion of boundaries (epistemological reduction), and the confusion of boundaries hinders the development of science – hinders its justifications and foundation. It hinders, in some cases, its very possibility.

Lastly, therefore, one may summarize Husserl's reception of psychologism problem as "logical psychologism"¹⁰ and "epistemological psychologism". It is mainly "logical" by disconsidering, on the assumption of the given reasons, the possibility of ideal objects proper to logic. As Husserl himself alludes to epistemology in the introduction of *Prolegomena* (Hua, XVIII, p. 7), however, it may be considered to be "epistemological" as long as it psychologizes such objects and, generally, the very knowledge, what is done by means of an empirical conception of the knowing subject. Although the latter criticism against this conception is especially articulated in the *Logical Investigations'* second volume, which evidences the inner unity of the work, one highlighted just his reception in *Prolegomena*, and therewith one also highlighted the "logical psychologism", whose origin lies on the disregard of ideal objects, on the fact that they cannot be empirically perceived. If psychologism melts all these objects into the sensuous actuality, it circumvents another already raised problem: that one of the possibility of grasping, or not, such objects, the possibility for the ideal and universal to enter actual and contingent acts of knowing. (PORTA, 2013, pp. 56-59).

Thus, psychologism is presented as problem for many reasons. It is a problem not only by keeping in connection psychology and logic, that is to say, by subjecting logic to psychology. Psychologism is also a problem, for this very reason, both by not accounting for problems, such as the right relationship between the objectivity of knowledge and the subjectivity of knowing, and by arousing many others, such as the confusion of scientific domains. This latter problem originated by psychologism drives us finally to the fundamental problem and, hence, to the conclusion of the previous chapter. One claimed at that time there that psychologism was a problem, ultimately, for it concerns how and the best way to constitute philosophy as science exactly in

¹⁰ The expression "logical psychologism" is found all over the literature, and that's why one here resorts it, without refusing, however, some terminological suggestion else. For sake of example, one might use expressions such as "ontological psychologism", "psychologism in logic", "psychologism of ideal objects" etc.

the context of crisis. The context of crisis is the same context from which Husserl and his work arose. If psychology established itself as the workaround for the identity crisis and therefore was considered by several thinkers at that time as the condition of possibility of giving philosophy scientific character or even for psychology to become “the” scientific philosophy, Edmund Husserl’s work, mainly the *Prolegomena*, may be regarded as an objection to that workaround. And the prolegomena may be regarded as objection precisely because Husserl understood that psychology is not how and the best way of making philosophy to be what he will later in another work call *Philosophie als strenge Wissenschaft*¹¹.

3.3 Edmund Husserl’s Treatment of Psychologism Problem in *Prolegomena zur reinen Logik*

Edmund Husserl’s reception of psychologism, as previously seen, concerns, roughly speaking, logic inside psychology – or, to put it differently, a conception of logic articulated upon empirical psychology. This version of psychologism is the most widespread, and that’s because *Logical Investigations* influenced and impacted the entire German-speaking culture. The way and how Husserl sees that (negatively, say) determines his treatment. The reception of psychologism, however, is accompanied by another reception in Husserl – that one of Platonism (PORTA, 2020, pp. 80-89). Husserl’s Platonism, in deference to, *inter alia*, Lotze, Bolzano, and Frege himself, is condition of possibility of his objection against psychologism in logic. Before analyzing in some detail Husserl’s refutation in the *Prolegomena*, one must realize that by “Platonism” one generally means the recognition of the existence of ideal objects, on the basis of which Husserl’s argumentation is carried out. It is not in our interest to address in detail the problem of Platonism in German epistemology, nor even to explain in detail how in Husserl’s case it is correlated to the concept of “validity” (*Geltung*), but to draw attention to the fact that Husserl’s treatment of

¹¹ “Philosophy as rigorous science”. It is worth to say, over and above the fact that psychologism is able to distort the scientific boundaries and therewith to hamper the advance of a rigorous scientific philosophy, that it is, too, an outcome, a byproduct of the identity crisis. By identifying philosophy and psychology as a way out of the crisis, this type of psychologism may not only constitute no scientific philosophy, but also be no real way out. The reason is very simple: to not meet the imperatives of redefinition. Psychology does not afford the room for philosophy: simply monopolizes it. After the correct delimitation of both disciplines and the reconsideration of their objects, Husserl reorients the interchange between psychology and philosophy, earmarking a field for philosophy and locating psychology onto another ontological region.

psychologism in the prolegomena is specific due to the fact that he is facing an equally specific psychologism. In fact, Husserl himself will later acknowledge that the arguments mobilized against the psychologism treated there are limited and one-sided. (PORTA, 2013, pp. 56-58).

One knows that a considerable fraction of Husserlian oeuvre, there included *Prolegomena*, consists of an appraisal of two historical phenomena interchanging each other, the identity crisis of philosophy and *Psychologismusstreit*, whose developments are coeval with himself. One knows, too, that such an appraisal is sectioned into, among others, two moments: (1) a search for the scientificity of philosophy, without sacrificing its specificity and thus its identity, and (2) the diagnosis that this search unsucceeded by means of psychology. Edmund Husserl's search for scientific rigor is the search for the conditions of possibility of knowledge, namely, for universal foundation and justification, whose central point is a reappraisal and clarification of logic. On the other hand, Husserl verifies that psychology does not present itself as the best foundation of knowledge, not being able thereby to turn philosophy into a real science. If Husserl was searching for a new ground, that's because, previously, he was able to realize that the psychologist workaround met no satisfaction, that is, it did not properly respond to the problem of the possibility of scientific knowledge. Thereafter, one of the goals of *Prolegomena* is exactly to prove the very impossibility of psychologist enterprise.

The clarification of logic and what Husserl names "*Erörterung der Prinzipienfragen*"¹² serve the purpose of, in addition to drawing its exact boundaries, outstanding the type of objects pertaining to its domain. One initially saw that the recognition of ideal-like objects supports a "wave" of Platonism in Germany. This is the pivot on which Husserl's criticism is articulated. Generally speaking, psychologism identifies knowing to an activity of soul, of "psyche", whose framework is to be studied precisely by psychology, where one comprehends logical laws and principles as psychological laws and principles, as mere probabilities touching the empirical-genetic constitution of the knowing subject. Psychologism basic error is to misunderstand the pure, ideal nature of objects pertaining to formal disciplines, taking on them as real, sensuous, and immanently locating them in consciousness. It results therefrom that exact, universal laws are turned into probabilities. Although the

¹² "Discussion of questions of principles". (Hua, XVIII, pp. 20-22).

distinction between “act”, “meaning” and “object” is thoroughly performed in the second volume of *Logical Investigations*, anon in *Prolegomena* this argument is anticipated in order to evince that psychologism does not – for it cannot – distinguish the act of knowing from the object of knowledge, which are utterly different, albeit ever in touch. The problem of the relation between these different *relata* can be solved if, and only if, one initially recognizes its utter difference, if one recognizes both that the act of knowing is indeed a psychological process that elapses over the time and that not always its objects, such as for example numbers and the *modus barbara*, are made up of the selfsame nature. (ZAHAVI, 2003, pp. 9-13). As recorded by Husserl: “*die Wahrheit selbst ist über alle Zeitlichkeit erhaben, d.h. es hat keinen Sinn, ihr zeitliches Sein, Entstehen oder Vergehen zuzuschreiben*”.¹³ (Hua, XVIII, p; 87).

This character of irreducibility of some objects takes roots in their ideal nature, in their ideality. If, on the one hand, this Platonism refers to an ideal, objective sphere of objects, it is, on the other, wired to Husserl’s complex conception of subjectivity, constructed in order to account for the problem deriving from that relation. The focus on subjectivity, on the intentionality, and other structures of consciousness occupies Husserl not only along *Logical Investigations*, but over his entire work. This inner development will rebound into his treatment of psychologism over the years. Since our focus is the first part of *Logical Investigations*, however, let us see a little further into the prolegomena. Many are the arguments mobilized by Husserl.

In the first place, if one presupposes that psychology laws are the ultimate theoretical foundation for logic, therefore one is to recognize at least two empirical consequences, which Husserl refutes as follows. (1) If psychological laws mirror the empirical aspect of psychology, therefore they are not endowed with certainty, exactness, and universality, but they are probable, vague, and particular like any other empirical law. Now, if these are the theoretical foundations of logic, therefore only vague and merely probable laws may thereupon be made of. As Husserl reasons, upon vague theoretical grounds one may just establish equally vague laws; if psychological laws lack exactness, so do the logical laws that rest on them. If one regards that laws and objects of mathematics are of the selfsame nature of those ones of logic, therefore mathematics itself is bound to vagueness and uncertainty,

¹³ “The truth itself is beyond all temporality, i.e., it makes no sense to ascribe temporal being to it, nor to say it emerges or perishes”.

since it is bound to, once empirically regarded, change of circumstances. All of this would alter hopelessly the nature and the signification both of mathematics and logic. (2) Even though one endeavors to give psychological laws both exactness and certainty, one might reply that psychological laws, once they are laws of the actuality, are also laws of nature and they as such are not knowable in a priori way or justified by demonstration – i.e., the laws of psychology are not justified and grounded through deductive reasoning, but rather through induction. If laws of logic were laws of psychology as such, therefore, e.g., *modus Barbara* would not have the following form “if all A are B, and if all B are C, therefore all A are C”, but would “if all A are B, and if all B are C, therefore one may assume, given the circumstances of X and Y, that all A are also C”. Husserl concludes that, if the consequences originating from this kind of foundation are preposterous, the very foundation (of logical laws on psychological laws) is therefore preposterous. (Hua, XVIII, pp. 72-76).

These two empiricist consequences lead to a third one – to the recognition that laws of thinking are thought-causing laws. To the case of laws originating thoughts Husserl oppose the following arguments. If all laws of logic were natural laws of thinking, the former would be therefore merely probable laws; if all laws are reducible into probability, they would lose their grade of exactness; all validity and all assertion of knowledge would just *probably* be true. The probability itself would have its validity reduced to the possible. This confusion between laws of logic and laws of thinking, Husserl argues, stems from another confusion above mentioned: to consider laws of logic as being assertions, in the sense that laws of logic are identified with the acts of asserting themselves. One confounds the law with the very act of judging. Further, one confounds causal-real regulation with normative one, causal-real necessity with logical one. An example provided by Husserl to make this difference explicit and clearer is the calculating machine: although the ordination and combination of numerals obey mathematical laws, the mechanical operation of the machine is not explained by the same mathematical laws, but by natural mechanical laws utterly different. If logical laws were really psychological ones, the content of the former would so be consisted of psychical facts in a twofold sense: they would be laws for the psychical realm and at the same time they would presuppose the actual existence of the psychical realm. Notwithstanding, for instance, the objects “number 2” and “number 4”, as well as mathematical combinations between them, such as $2 + 2 = 4$, do encompass nothing psychological. Although these objects may refer and

correlate to physical objects figured in one's mind ("two books plus two books equal four books"), they are not something real, nor do they depend on psychical presentations to be. (Hua, XVIII, pp. 76-85).

After mobilizing similar arguments over the following paragraphs against psychologist interpretations of laws and principles of logic, such as the law of contradiction, Husserl goes into the VII chapter – and fundamental chapter. Porta claims that Husserl's argumentation in the prolegomena may be panoramically viewed as unfolding onto two moves: that psychologism, an empirical and skeptical doctrine, is driven to relativism; and that, thereafter, relativism entails nonsense (*Widersinn*). (PORTA, 2013, p. 56). These two steps are taken from chapter VII on.

Husserl opens it saying that the major objection against a certain theory is the one that it violates and eliminates the conditions of possibility for knowledge, that is, a theory whose propositions deny the very possibility for a theory to be a theory. According to him, there are two ideal conditions of possibility for a theory – the objective and logical conditions, and the subjective and noetic ones. As to the latter ones, Husserl does not mean by them "psychic-genetic conditions" or "cerebral constitution" of some individual, but general, aprioristic conditions of the form of subjectivity to which one already alluded earlier. It was explained that evidence means subjective perception into truth, and this lived-experience exhibits the clearest example of subjective-noetic conditions. If one denies the possibility of evidence or of capturing, perceiving the truth, or even if one flattens evidence into a blind judgment, therefore one shall not speak of theory and of theory of knowledge on the aspect of subjective-noetic conditions, for knowledge and vague assertion are thereby equivalent, for evident assertions are come near to baseless assertions. As to the former conditions (the objective and logical ones), on the other hand, Husserl alludes to truths and propositions in themselves, to purely concept-based laws, namely, laws that encompass concepts and meanings of, for instance, "truth", "assertion", "object", "relation" etc. To reject those laws and concepts amounts to reject the objective, rational meaning of the very theory – e.g., "there is no truth", "there is no knowledge". (Hua, XVIII, pp. 118-120).

Both of examples were not provided haphazardly. They correspond to what Husserl understands as "epistemological skepticism": theories denying partially or totally the noetic and logical conditions of possibility for theories and knowledge in general. To this concept two concepts else are linked: (1) relativism in strict sense,

and (2) anthropologist relativism. The former type, also known as “subjectivism”, is the type of relativism according to which all truth is relative to the particular subject who acts and judges. The latter type, “anthropologism”, is that one that regards not a singular man, but rather the human species as the measure of truth: the truth takes roots deep in the human nature and in laws out of which we mankind are made. It is this second kind of relativism, Husserl holds, that undergirds good fraction of theories of his epoch and that bears the whole psychologism, mainly on behalf of Mill, Lipps, Wundt, Sigwart, and Erdmann, constantly recollected and with whom Husserl engaged in dispute (Hua, XVIII, pp. 120-123). One will not pay attention to these peculiarities, but one will focus on Husserl’s general arguments in order to demonstrate that psychologism, as being skeptical, is a kind of relativism and accordingly a nonsense. The analysis of this treatment ultimately explains Husserl’s negative reception of psychologism.

Anthropologism, a modality of relativism of which psychologism is an example, consists of a contradiction between what its theories express and what cannot expressly be removed from a theory as such. Husserl’s arguments are as follows. First of all, if the truth is just truth as long as it is valid as such for a species of beings and according to their constitution, therefore the same assertion may be regarded as true and false at the same time, for it depends precisely on the constitution of this or that sort of individuals, on this or that species. Even though one considers only the *homo* species of humans, the truth would be demoted into factuality, being prone to changes whether the human constitution also changes. If an assertion is just true as long as it is valid *for* a species, it is not therefore true in itself, leaving room for the possibility for the same assertion to be true and false, in accordance with the nature of whom is asserting and judging. In the second place, if the species constitution is a fact, and if from fact(s) one can only derive other fact(s), any mathematical or logical demonstration and even the truth are *ipso facto* facts. A fact, a matter, however, is confined to space and time, it does not hover far beyond the reality, and it is not valid by itself. E.g., (the act of) asserting that $2 + 2 = 4$ is not confounded with the relation $2 + 2 = 4$ itself, as if the correct asserting has determined the correctness and the truth of the relation – the opposite occurs: the truth is the measure of the correctness of the act of asserting. In the third place, if all truth takes roots in the universality of the constitution of mankind, and if there was no constitution at all, therefore there would be no truth, which, therefore, entails to assert the nonsense that “there is the

truth that there is no truth". Fourth, if the truth is grounded on the actuality of the constitution of some species, e.g., *homo*, one leaves opened the possibility that it exists the truth according to which the constitution where it lies does not exist. The nonsense of this hypothesis is in other words so expressed: the thesis of the non-existence of a certain constitution has its grounds on the same constitution it denies; the existence of the constitution of the species that grounds any truth is the same existence that grounds the "truth" of its own non-existence. Finally – and we can settle for what has been addressed –, if the truth is relative, the existence of the external world we believe to populate is therefore merely relative, too. That's because the world consists of the "all-encompassing objective unity corresponding to the system of all the truths of matter", and only may be accepted as existing – and therefore as true – if one accepts the truth exists: it is not possible to relativize the truth without relativizing its object, the world. In this extreme case of skepticism and relativism, even the clearest and the most acquainted perception, like as the reading of these text lines, would be doubted and relativized, and the so-called all-grounding constitution would be *unconstituted*. Husserl ends his rebuttal saying that, in view of the above, relativism is in contradiction with the most pellucid evidence of the intuitive existence. (Hua, XVIII, pp. 123-131).

Relativism, whatever may be the type, is so regarded because of the relativization of the truth, in the sense of degrading its universal, necessary nature into particular, contingent one. In particular, it is about downgrading logical laws, objects, understood as those ones purely grounded on the meaning of truth etc. and that are not able to not be, into facts, whether they are more general, like as "human nature", or more specific, like as "laws of mind". If absolute logical laws are reduced into facts, they are no longer absolute, but contingent, and correspond to facts – new facts correspond to new truths, logical laws. In sum, it is about assaulting the meaning of truth in general. From a more sophisticated perspective, it is about a contradiction, a nonsense, the denial of universal categories of meaning without which the very denial is not possible. An assertion whose particular content collides with these universal laws and principles fulminates itself. This is not only false, but mainly preposterous. Psychologism, as being relativist, is therefore a problem not only for being false, but also for being preposterous. Not only it does not account for

and establishes the conditions of possibility for scientific knowledge, but does ultimately deny and obliterate them.¹⁴

3.4 Beyond *Prolegomena zur reinen Logik*: Some Distinctive Concepts of Psychologism in Edmund Husserl.

*Metaphysische Fragen gehen uns hier nicht an*¹⁵. (Hua, XVIII, p. 122). By this epigraph, with which one opened the present thesis and now approaches to the close, Husserl means not the contempt for, but rather the detachment from, the disengagement with matters concerning traditional ontology. He alludes to Aristotle's first philosophy and therewith aims at what he comprehends as "metaphysics", i.e., matters touching the actuality – the external world, spatiality, causality etc. In sum, real objects and how to relate to them, how to attain knowledge from there, whether the *ding an sich* exists or not. These are metaphysical questions. Questions in the field of epistemology, however, are concerned with ideal conditions of possibility for knowledge, and, as observed, deal with ideal, formal objects. Well, the treatment of psychologism is worked out on the assumption of ideal objects in *Prolegomena*. This suggests that, the focus being specific, the criticism is also specific. But the Husserlian focus used to continually change and thereby his treatment was several times reviewed. Let us see some concepts elsewhere beyond *Logische Untersuchungen*. They result from the change of conceptions along Husserl's career. The concept of "psychologism" in the prolegomena is not ultimate. One can find at least six other conceptions of psychologism throughout his career: 1894-1898, 1901-1902, 1903, 1906-1907, 1927 and 1936.

One also knows that Husserl's understanding of phenomenology is modified throughout his career. Therefrom it derives that the understanding on what psychology is changed, too. If the conception of psychologism origins, as explained, from the relationship between philosophy and psychology, which occurs for one is

¹⁴ Edmund Husserl's critical treatment is exhaustive and thorough. Not meaning to annoy the reader, one opts for outstanding some of his objections. The choice is due to the fact that, although lengthy, Husserlian criticism in the prolegomena may be divided into two major sections. One of them, devoted to the presuppositions and what Husserl calls "prejudices" (*Vorurteile*) of psychologism (Hua, XVIII, pp. 159-196), was not, and will not be examined here, for it occupies nearly one quarter of the entire work. The other, devoted to the consequences of psychologism, was largely analyzed over this subchapter, for it finishes both the logical and temporal path delineated since the start for one to achieve the goal of understanding the real reception of psychologism in the first volume of *Logical Investigations*.

¹⁵ "Metaphysical issues are not our concern here".

searching for a specific place for philosophy in the context of its crisis, what is understood by “psychologism” therefore goes through alterations in Husserl’s view. By way of example, phenomenology, over the time, was regarded as descriptive psychology, eidetic psychology, and finally as transcendental philosophy. (PORTA, 2013, pp. 66-67). One will not approach these matters. What matters is to understand that, even according to Husserl and in his work, “psychologism” may be seen as what we called “floating problem”. Thereto one already alluded in the previous sections: in his *Philosophie der Arithmetik*, Husserl was judged “psychologist” for he assumed the principle of immanence in those investigations. In his *Logische Untersuchungen*, mainly in our focus, the first volume *Prolegomena zur reinen Logik*, one might sum up his position into a “logical psychologism” that reduces ideal objects to actual ones. Let us superficially see other conceptions of psychologism.

Right after the publication of *Logical Investigations*, around the years 1901 and 1902, Husserl proposed to investigate the general nature of his phenomenology, which was being presented as a new epistemology. In those reflections, his focus is carried from logic in particular to epistemology in general, and therewith psychologism is more of “epistemological” than “logical”. Following this reflection, soon in 1903, Husserl comes to regard his phenomenology as “eidetic psychology”, in order to differentiate, in sight of some misunderstandings of his reviewers, his kind of psychology from the empirical psychology. In this case, one can understand psychologism as being able both to intermeddle in phenomenology and jeopardize it – scenario that demands an analysis of this problem, including a critique of phenomenology itself. (PORTA, 2013, pp. 61-62).

An even more meaningful, radical turn took place around 1906, 1907, epoch when the reappraisal of phenomenology led it from a psychology to transcendental philosophy. In this new dimension, also psychologism will take on a “transcendental” version. Husserl realizes that the problem of the relationship between the objectivity and subjectivity is not the problem of an *actual* relation, but rather an *essential* relation. Psychologism is seen as problem for it misaddressed the problem of this kind of relationship, that it, for it takes one of the *relata*, the subjectivity of the knowing subject, as being an actual, and therefore psychological, entity – although psychologism, justice be done, correctly perceives that all the objectivity presents itself into consciousness. (PORTA, 2013, p. 69).

About ten years later, around 1927, another conception may be identified, whose treatment does not follow a refutation, but aims at a real overcoming. Such an overcoming is carried out through a realization of a “pure psychology”, which was not totally developed ten years earlier, and through the acknowledgment that there is a parallel between psychological subjectivity and transcendental subjectivity, which psychologism insists to confound. One of the main problems here lies in showing off the difference between them and, at the same time, the path one can draw from the former to the latter. (PORTA, 2013, pp. 82-86). Finally, a last conception may be seen in his final work, the 1936 *Die Krisis der europäischen Wissenschaften*, in which the overcoming is left behind. That is due to the fact that Husserl comes now to realize that psychologism is just possible in a naturalist perspective. If psychology is truly esteemed and understood, it turns into “phenomenological psychology” and thereby it will be fully realized inside the transcendental philosophy, what is performed through the release of psychology from “objectivist”, “dualist” residuals – which resulted from the rapprochement of psychology to physics and through the ensuing acceptance that there is a twofold experience, inner and external ones. (PORTA, 2013, pp. 109-119).

The unpretentiousness of indicating some conceptions else of “psychologism” in Husserl, forwarding to specialized literature, serves no purpose of exhausting the subject-matter and thereby establishing all the suitable distinctions. One reiterates that this indication consists of merely another element of this plot whose conclusion has come.

4 CONCLUSIONS

The emergence and development of the modern science, catalyzed by protean reasons, led us to a period of growing optimism about mechanics, of which the subsequent empirical-materialist epoch was an effect. The phenomena studied by sciences were unified through their naturalization. The rapture triggered by the *Naturwissenschaften* culminated in *empiricizing* even those sciences based on totally different methodology and typologies/categories. It was stressed, as thematic focus, logic. Logic moved, in Kantian terminology, from the analysis of analytical/formal laws/assertions to be considered a discipline branched off out of psychology, dealing with synthetic content. As asserted, if 19th century materialism was a natural and historical development of the rapture of the modern science, psychologism will be a development from both. Giambattista Vico's (1688-1744) statement that "we demonstrate geometric propositions because we make them" (apud ROSSI, 2001, p. 179) makes clear the link among different epochs by making clear some of the problems with which German philosophy to which Husserl belongs deals.

No advancement is constant and linear. There are setbacks and resistance. Although Edmund Husserl has not opposed empirical sciences, he was a sample of this "resistance". In spite of recognizing the importance of particular sciences, and considering the fact that his logic was initially explained as descriptive psychology, Husserl had perceived logic is not reduced into a normative/practical technics, nor is it a set of empirical laws collected or theoretically explained by psychology. And Husserl had perceived it because purely logical, mathematical objects are not confused with psychological, mental acts in which they are (re)presented. In the wake of Gottlob Frege's Platonism, Husserl did not strive for thwarting the development of empirical sciences (psychology in particular), in front of which philosophy had fallen into crisis. In the context of the identity crisis of philosophy, in which many thinkers endeavored to place it into the overall picture of sciences, Husserl, too, sought to rescue "the mother of all sciences", giving her a new foundation and placing her in an outstanding position in an age of materialism, empiricism. To outline the boundaries and to justify the foundation of philosophy, distinguishing it from empirical sciences on the basis of the distinction between ideal/actual dimensions, are goals aimed in the very introduction of *Logical Investigations*. Such a distinction between two domains both anticipates and follows

from the Platonism unifies Husserl and Frege: a conception of logic founded upon ideality and objectivity. The rescue of Plato in the late nineteenth century, as an aspect of the answer to the asking for the possibility of a subjectivity in a materialist background, emerges from the conflict between the assertion of an ideal objectivity and a mechanistic worldview. It emerges, therefore, from the idealism/materialism conflict. This conflict, however, is constant, because it does not only characterize the 19th century, but also previous centuries. No less constant than such a conflict is the appeal to Plato over the years, fact noticed by Alfred North Whitehead, according to whom “the safest general characterization of the European philosophical tradition is that it consists of a series of footnotes to Plato”. (apud KRAUFT, 2010, p. 32).

We will not speak of Plato, nor will we go further back in time. To remember the aforementioned conflict has as goal to evince the ubiquity of the problem. What is more, it is to evince the very universality of a problem that manifests in different guises. Therewith one may put psychologism in our current perspective. If the transformation of philosophy into psychology was a way out of the crisis of identity, and if by “way out” it is meant the possibility of making philosophy a scientific enterprise, one may notice that what is faced is actually an elementary problem that travels across the entire history of philosophy – what is science? Is philosophy science? From this perspective psychologism is up to these days a problem. Indeed, up to nowadays philosophy is a concept under dispute, and its possibility of becoming science is up to nowadays argued. Empirical sciences, psychology included, but currently followed by neurology and neurosciences, continue to add to the debate. The methodologies and types of explanation of any and every phenomenon, including philosophy itself, must be aligned to those of natural sciences, which report a monistic, integral view of the totality. Such a perspective may be found in, for instance, (CHICK, 1995) and (PAPINEAU, 2015), according to whom everything that exists must be examined by the method of natural sciences, into which philosophy shall thin out. What was then called “psychologism” is now called “naturalism”, but the general problem of then is the same problem of now. Today’s influence of cognitive sciences explains this older process of which “naturalizing phenomenology” is currently just a fraction. (ZAHAVI, 2017, pp. 137-169).

If on the one hand the ubiquity of the problem reveals itself with the simplicity of the ask for what is science, it also reveals, on the other, the complexity of

psychologism, which one again and in conclusion stresses. Edmund Husserl's reception in his *Prolegomena zur reinen Logik* concerns merely one kind of psychologism, not the integrality. One has called it, for didactic convenience, "logical psychologism". This type of psychologism results from the upgrowth of psychology and developments in the scope of mathematics, logic, and geometry. Generally speaking, this "logical psychologism" is located in the more specific context of *die logische Frage* and the arise of the non-Euclidean geometry. These three phenomena – psychology, *die logische Frage*, and developments in mathematics – make room for another account for logic. Now, since *die logische Frage* portrays the dispute on the status and foundation of logic, psychology is on occasion introduced as a workaround solution for the debate. This "immanentist" trend endowed logic with relative, no longer absolute, aspect. The once pure, ideal laws of logic are now regarded as psychological, "mental" laws according to a considerable fraction of thinkers, mainly in Germany. All the content of logic, its objects are no longer idealities and objective, but actualities and subjective – these objects are in fact reducible to one's consciousness. The classic and reductionist characterization that "psychologism" means the foundation of logic upon psychology is the result of this historical-thematic process, to which Husserl added decisively with his *Prolegomena*.

The treatment introduced in his *Prolegomena*, however, does not exhaust the problem. The complexity of this phenomenon lies precisely in the diversity of approaches to psychologism. Edmund Husserl himself, throughout his career, coined several expressions and re-problematized psychologism, driving it from the logic to different fields. One may see this breadth both in the historical and thematic categorization of psychologism, of which psychologism in sociology, in semantics, in history, and in law are examples. Back to philosophy, one may notice the heterogeneity of the phenomenon in the very fact that Husserl was accused of being "psychologist". Such an accusation, of which Frege's criticism that Husserl was a psychologist thinker for assuming the principle of immanence is a sample, was not received without objections, as well as Husserl's objections on psychologism were replied (many times as being non-psychologist). This heterogeneity, in sum, whose developments in Germany were named *Psychologismusstreit*, is what enable to conclude, referring to the introduction, that Edmund Husserl both was and was not a psychologist thinker.

BIBLIOGRAPHY

- ANGIONI, L. *As Noções Aristotélicas de Substância e Essência*. Campinas: Editora da Unicamp, 2008.
- ANTAL, L. *Psychologism, Platonism and realism in linguistics*. *Word*, 35, pp. 163-175.
- BARNES, J. *The Cambridge Companion to Aristotle*. New York: Cambridge University Press, 1999.
- BEISER, F. C. *After Hegel: German philosophy 1840-1900*. New Jersey: Princeton University Press, 2014.
- _____. *Late German Idealism: Trendelenburg and Lotze*, Oxford: Oxford University Press, 2013.
- _____. (org.). *The Cambridge Companion to Hegel*, New York: Cambridge University Press, 1999.
- BENEKE, F. E. *Die Philosophie in ihrem Verhältnis zur Erfahrung, zur Spekulation und zum Leben*. Berlin: Posen und Bromberg, 1833.
- _____. *Kant und die philosophische Aufgabe unserer Zeit: Eine Jubeldenschrift auf die Kirtk der reinen Vernunft*. Berlin: Mittler, 1832.
- _____. *Pragmatische Psychologie oder Seelenlehre in der Anwendung auf das Leben*. Berlin: Mittler, 1850.
- BERGSON, H. *Time and Free Will: an essay on the immediate data of consciousness*. Mineola: Dover Publications, 2001.
- BERNARD, C. *Introduction à l'étude de la médecine expérimentale*. Paris: Garnier Flammarion, 1966.
- BOLZANO, B. *Wissenschaftslehre. Versuch einer ausführlichen und grösstenteils neue Darstellung der Logik mit steter Rücksicht auf deren bisherige Bearbeiter*. Sulzbach: J. E. Seidelschen Buchhandlung, 1837.
- BRAUNSTEIN, J-F. (2012). The French invention of "Psychologisme" in 1828, *Revue d'histoire des sciences* 65(2): 197-212.
- BRENTANO, F. *Psychologie vom empirischen Standpunkt*. 2. Ed. Leipzig: Meiner Verlag, 1924.
- _____. *Über die Zukunft der Philosophie*. Hamburg: Meiner, 1968.

- BRISART, R. *Husserl et Frege. Les ambiguïtés de l'antipsychologisme*. Paris: Vrin, 2002.
- CAPALDI, N. *David Hume: the newtonian philosopher*. Boston: Twayne Publishers, 1975.
- CARNAP, R. *Überwindung der Metaphysik durch logische Analyse der Sprache*. *Erkenntnis* 2, 219–241 (1931). <https://doi.org/10.1007/BF02028153>.
- _____. *Logical Foundations of Probability*. London: Routledge & Kegan, 1950.
- CAVALLIN, J. *Content and Object: Twardowski, Husserl, and Psychologism*. Dordrecht: Kluwer Academic Publishers, 1997.
- CASSIRER, E. *Das Erkenntnisproblem in der Philosophie und Wissenschaft der neueren Zeit*. V. IV: Von Hegels Tod bis zur Gegenwart (1832-1932). Stuttgart: Wissenschaftliche Buchgesellschaft, 1957
- _____. *The Philosophy of the Enlightenment*. Princeton: Princeton University Press, 2009.
- _____. *Erkenntnis, Begriff, Kultur*. Hamburg: Felix Meiner Verlag, 1993.
- COHEN, J. MORAN, D. *The Husserl Dictionary*. London: Continuum, 2012.
- COHEN, B. SMITH, G. E. *Cambridge Companion to Newton*. Cambridge: Cambridge University Press, 2002.
- COTTINGHAM, John. *The Cambridge Companion to Descartes*. New York: Cambridge University Press, 2006.
- COUTURAT, L. (1906). "La Logique et la philosophie contemporaine". In *Revue de Métaphysique et de Morale* 14(3): 318-41.
- CRICK, F. *The Astonishing Hypothesis*. London: Touchstone, 1995.
- CROMBIE, A. C. Expectation, modeling and assent in the history of optics. Kepler and Descartes. *Studies in History and Philosophy of Science*, 22, 1, 1991.
- D'ALEMBERT, J. L. R.; DIDEROT, D. *Enciclopédia, ou Dicionário razoado das ciências, das artes e dos ofícios*. Volume 3: Ciências da natureza. Tradução de Pedro Paulo Pimenta, Maria das Graças de Souza. São Paulo: Unesp, 2015.
- DAVIDSON, L. *Overcoming Psychologism*. New Haven: Springer, 2021.
- De Gruyter, 1963.
- DESCARTES, R. *Meditations on first philosophy*. New York: Oxford Cambridge Press, 2008.
- DILTHEY, W. *Das geschichtliche Bewusstsein und die Weltanschauungen*. Gesammelte Schriften. Vol. VIII. Leipzig: Teubner, 1934.

- DRBAL, M. A. *Einige Worte über die Ursachen des Verfalls der Philosophie in Deutschland*. Prag: Calve (Becke), 1857.
- DROBISCH, M. W. *Neue Darstellung der Logik nach ihren einfachsten Verhältnissen. Nebst einem logisch-mathematischen Anhang*. Leipzig: Voß, 1836.
- DRUE, H. *Edmund Husserls System der phänomenologischen Psychologie*. Berlin:
- DUHEM, P. *Le système du monde, histoire des doctrines cosmologiques de Platon à Copernic*. 10 volumes. Paris: Hermann, 1913 a 1959
- DUMMETT, M. *The Interpretation of Frege's Philosophy*. London: Duckworth, 1981.
- ERDMANN, B. *Logik. Logische Elementarlehre*. Halle: Verlag von Max Niemeyer, 1892.
- FEUERBACH, L. *Grundsätze der Philosophie der Zukunft*. Leipzig: Wigand, 1843.
- FEYERABEND, P. K. *Contra o método*. Tradução Cezar Augusto Mortari. 2.ed. São Paulo: Unesp, 2011.
- FISCHER, K. *Kants Leben und die Grundlagen seiner Lehre*. Mannheim: Bassermann, 1860.
- FISSETTE, D. *Hermann Lotze and the genesis of Husserl's early philosophy (1886-1901)*. In: Apeiron, Estudios de filosofia, vol. 3, pp. 13-35. 2015.
- FIZER, J. *Psychologism and psychoaesthetics*. Amsterdam: John Benjamin B., 1981.
- FØLLESDAL, D. *Mind, meaning, and mathematics: essays on the philosophical views of Husserl and Frege*. Dordrecht/Boston/London: Kluwert Academic Publishers, 1994.
- FORTLAGE, K. *System der Psychologie als empirischer Wissenschaft aus der Beobachtung des inner Sinnes*. Leipzig: Brockhaus, 1855.
- FREGE, G. *Die Grundlagen der Arithmetik. Eine logisch mathematische Untersuchung über den Begriff der Zahl*, ed. Christian Thiel. Hamburg: Felix Meiner Verlag, 1988.
- _____. 1894. *Book review of Husserl 1891*. Zeitschrift für Philosophie und philosophische Kritik, 103: 313–332
- _____. *Logik in Schriften zur Logik und Sprachphilosophie*. Aus dem Nachlass, ed. G. Gabriel, Hamburg: Meiner, 1980.
- FREULER, L. *La crise de la philosophie au XIXe siècle*. Paris: Vrin, 1997
- FRIES, J. F. *Reinhold, Fichte und Schelling*. Leipzig: August Lebrecht Reineicke, 1803.

_____. *System der Metaphysik. Ein Handbuch für Lehrer und zum Selbstgebrauch.* Heidelberg: Christian Friedrich Winter, 1824.

FULLER, S. *Social Epistemology.* Bloomington: Indiana University Press, 1988.

GRAY, J. FERREIRÓS, J. "Epistemology of Geometry", *The Stanford Encyclopedia of Philosophy* (Fall 2021 Edition), Edward N. Zalta (ed.), URL = <https://plato.stanford.edu/archives/fall2021/entries/epistemology-geometry/>.

GUYER, Paul. *The Cambridge Companion to Kant's Critique of Pure Reason.* New York: Cambridge University Press, 2010.

GYEMANT, M. (ed.). *Psychologie et psychologisme.* Paris: Vrin, 2015.

HAAPARANTA, L. *The development of modern logic,* New York: Oxford University Press, 2009.

HAYM, R. *Hegel und seine Zeit: Vorlesungen über Entstehung und Entwicklung, wessen und Wert der Hegel'schen Philosophie.* Berlin: Gaertner, 1857.

HEIDEGGER, M. „Die Lehre vom Urteil im Psychologismus. Ein kritisch-positiver Beitrag zur Logik“. In: *Frühe Schriften.* Frankfurt am Main: Vittorio Klostermann, 1972.

_____. *Holzwege (1935-1946).* Frankfurt a.M: Vittorio Klostermann, 1950

_____. *Logic: the question of truth (1925-1926).* Translated by Thomas Sheehan. Bloomington: Indiana University Press, 2010.

_____. *The Metaphysical Foundations of Logic.* Translated by Michael Heim. Bloomington: Indiana University Press, 1992.

_____. *Vorträge und Aufsätze (1936-1953).* Frankfurt: Klostermann, 2000.

HEINE, H. *Sämtliche Werke.* vol. IX. Munich: H. Kaufmann, 1964.

HERBART, J. F. *Hauptpunkte der Logik.* In the 2nd edition of *Hauptpunkte der Metaphysik,* ed. Karl Kehrbach, Reprint. Langensalza: Beyer & Söhne, (1808) 1887.

_____. *Lehrbuch zur Psychologie,* ed. G. Hartenstein. Leipzig, Verlag von Leopold Voss, 1882.

HUSSERL, Edmund. *Logische Untersuchungen.* Erster Band: *Prolegomena zur reinen Logik.* Ed. Elmar Holenstein. Husserliana XVIII. The Hague, Martinus Nijhoff, 1975; Zweiter Band, Erster Teil: *Untersuchungen zur Phänomenologie und Theorie der Erkenntnis.* Ed. Ursula Panzer. Husserliana XIX/I. The Hague/Boston/Lancaster, Martinus Nijhoff, 1984; Zweiter Band, Zweiter Teil: *Untersuchungen zur Phänomenologie und Theorie der Erkenntnis.* Ed. Ursula Panzer. Husserliana, XIX/II. The Hague/Boston/Lancaster, Martinus Nijhoff, 1984.

_____. (1903) *Besprechung von M. Palágyi. Der Streit der Psychologen und Formalisten in der modernen Logik*, in *Husserliana* 22, ed. B. Rang, The Hague: Martinus Nijhoff, 1979.

_____. *Cartesianische Meditationen und Pariser Vorträge*. Ed. S. Strasser. *Husserliana* I. Den Haag: Martinus Nijhoff, 1950.

_____. (1911) *Philosophie als strenge Wissenschaft*, in *Husserliana* 25, eds. T. Nenon and H. R. Sepp, Dordrecht, Boston and Lancaster: Martinus Nijhoff, 1987.

_____. (1936) *Die Krisis der europäischen Wissenschaft und die transzendente Phänomenologie*. Eine Einleitung in die phänomenologische Philosophie. 2. Ed. Ed. Walter Biemel. *Husserliana* VI. Den Haag: Martinus Nijhoff, 1976.

_____. (1906-1907) *Einleitung in die Logik und Erkenntnistheorie*, in *Husserliana* 24, ed. U. Melle, Dordrecht: Martinus Nijhoff, 1987.

_____. (1913a) *Introduction to the Logical Investigations: a Draft of a Preface to the Logical Investigations*, ed. Eugen Fink, trans. P. Bossert and C. Peters, The Hague: Martinus Nijhoff, 1975.

_____. (1925/1927-1931) *Phänomenologische Psychologie*, *Husserliana* 9, ed. W. Biemel, The Hague: Martinus Nijhoff, 1962.

_____. (1913b) *Ideen zu einer reinen Phänomenologie und phänomenologischen Philosophie. Erstes Buch: Allgemeine Einführung in die reine Phänomenologie*. in *Husserliana* 3. Ed. K. Schuhmann. Nachdruck. Den Haag: Martinus Nijhoff, 1976.

_____. *Philosophie der Arithmetik*. Mit ergänzten Texten. Ed. Lothar Eley. *Husserliana* XII. Den Haag: Martinus Nijhoff, 1970.

_____. *Transzendente und formale Logik*. Versuch einer Kritik der logischen Vernunft. Ed. P. Janssen. *Husserliana* XVII. Den Haag: Martinus Nijhoff, 1977.

_____. *A ideia da fenomenologia*. Cinco lições. Tradução de Marloren Lopes Miranda. Patrópolis: Vozes, 2020.

_____. *The Phenomenology of Internal Time-Consciousness*. Translated by James S. Churchill. Bloomington: Indiana University Press, 2019.

INGARDEN, Roman. *On the Motives which led Husserl to Transcendental Idealism*. Translated from the Polish by Arnór Hannibalsson. The Hague: Martinus Nijhoff, 1975.

- JACQUETTE, D. (ed.) *Philosophy, Psychology, and Psychologism*. Critical and Historical Readings on the Psychological Turn in Philosophy. Dordrecht: Kluwer Academic Publishers, 2003.
- JOLLEY, N. *The Cambridge Companion to Leibniz*. New York: Cambridge University Press, 1998.
- LAKATOS, I. *Philosophical Papers*. vol. 1: The Methodology of Scientific Research Programmes Cambridge: Cambridge University Press, 1978.
- LANGE, F. A. *Geschichte des Materialismus und Kritik seiner Bedeutung in der Gegenwart*. Iserlohn: Baedeker, 1866.
- LAUGEL, A. *Science et philosophie*. Paris: Mallet-Bachelier, 1863.
- LIEBMANN, O. *Kant und die Epigonen*. Stuttgart: Schober, 1865.
- LIPPS, T. (1880) „Die Aufgabe der Erkenntnistheorie und die Wundtsche Logik“ *Philosophische Monatshefte* 16: 529-39.
- LOCKE, J. *An essay concerning human understanding*. Electronic Classics Series, The Pennsylvania State University: 1999,
- KANT, I. *Crítica da razão pura*. Tradução de Manuela Pinto dos Santos e Alexandre Fradique Morujão. Lisboa: Fundação Calouste Gulbenkian, 2013.
- KOCKLEMANS, J. J. *Edmund Husserl's phenomenological psychology: A historico-critical study*. Pittsburgh: Duquesne University Press, 1967.
- KRAUFT, R. *The Cambridge Companion to Plato*. New York: Cambridge University Press, 2010.
- KUSCH, M. *Psychologism*. A Case Study in the Sociology of Philosophical Knowledge. London: Routledge, 1995.
- MARLEAU-PONTY, M. *Phenomenology of perception*. Atlantic Highlands, NJ: Humanities Press, 1964.
- MEYER, J. B. *Kants Psychologie*. Dargestellt und erörtert, Berlin: Verlag von Wilhelm Hertz, 1870.
- MILL, J. S. *System of Logic: Raciocinative and Inductive*. New York: Harper and Brother Publishers, 1869.
- MOOG, W. *Logik, Psychologie, Psychologismus*. Wissenschaftssystematischen Untersuchungen, Halle: Niemeier, 1919.
- MOHANTY, J. N. *Readings on Edmund Husserl's Logical Investigations*. The Hague: Martinus Nijhoff, 1977.

- MURPHY, R. T. *Hume and Husserl: towards radical subjectivism*. Dordrecht: Martinus Nijhoff, 1980.
- NATORP, Paul. *Einleitung in die Psychologie nach kritischer Methode*. Freiburg: J. C. B. Mohr (Pauls Siebeck), 1888.
- NEWTON, I. *Principia: princípios matemáticos de filosofia natural*. Livro 1. 2. Ed. São Paulo: Editora da Universidade de São Paulo, 2020.
- NOTTURNO, M. A. (ed.) *Perspectives on Psychologism*, Leiden, New York, Kobenhavn and Köln: E. J. Brill, 1989.
- _____. *Objectivity, Rationality and the Third Realm: Justification and the Grounds of Psychologism. A Study of Frege and Popper*. Nijhoff, Dordrecht, 1985.
- PALAGY, M. *Der Streit des Psychologisten und Formalisten in der modernen Logik*. Leipzig: Engelmann, 1902.
- PAPINEAU, D. *Naturalism*. In: ZALTA, E. N. *The Stanford Encyclopedia of Philosophy*. 2015. <http://plato.stanford.edu/archives/fall2015/entries/naturalism>.
- PASCAL, B. *Pensées*. édition présentée, établie et annotée par M. Le Guern. Paris: Gallimard Folio classique, 1977.
- PECKHAUS, V. *Logik, Mathesis universalis und allgemeine Wissenschaft. Leibniz und die Wiederentdeckung der formalen Logik im 19. Jahrhundert*. Berlin and New York: Akademie Verlag, 1997.
- PIRES, A. S. T. *Evolução das ideias da Física*. São Paulo: Editora Livraria da Física, 2008.
- POPPER, K. *The Logic of Scientific Discover*. New York: Harper & Row, 1968.
- PORTA, Mario Ariel Gonzalez. *Psicologia e Filosofia*. Estudos sobre a querela em torno ao psicologismo (*Psychologismusstreit*). São Paulo: Loyola, 2020.
- _____. *Edmund Husserl: psicologismo, psicologia e fenomenologia*. São Paulo: Loyola, 2013.
- _____. *Estudos neokantianos*. São Paulo: Loyola, 2011.
- _____. *Brentano e sua escola*. São Paulo: Loyola, 2014.
- PYLE, A. *Atomism and its Critics: From Democritus to Newton*. Bristol: Thoemmes Press, 1997.
- RATH, M. *Der Psychologismusstreit in der deutschen Philosophie*. Freiburg and München: Alber, 1994.
- RICHARD, K. *The Cambridge Companion to Plato*. New York: Cambridge University Press, 2010.

- RICHARDS, J. (1980), 'Boole and Mill: differing perspectives on logical psychologism', *History and Philosophy of Logic* 1:19–36.
- RICOEUR, Paul. *A key to Husserl's Ideas I*. Translated by Bond Harris. Milwaukee: Marquette University Press, 1996.
- ROSSI, P. *O nascimento da ciência moderna na Europa*. Bauru: Editora da Universidade do Sagrado Coração, 2001.
- RUSSELL, B. 1920. *Letter to E. Husserl*, 19 April 1920, #95393, Box 5.47, Bertrand Russell Archives, McMaster University, <http://bracers.mcmaster.ca/95393>.
- RUYSSSEN, T. *Psychologisme et sociologisme*. *L'année psychologique*, vol. 15, pp. 357-372, 1908.
- SCARRE, G. *Logic and Reality in the Philosophy of John Stuart Mill*. Dordrecht: Kluwer, 1989.
- SCHNÄDELBACH, H. *Philosophie in Deutschland – 1831-1933*. Frankfurt am Main; Surkamp, 1983.
- SEEBOHM, J; MOHANTY, J. N. (eds). *Phenomenology sand the formal sciences*. Dordrecht/Boston/London: Kluwert Academic Publishers, 1991.
- SELLARS, W. (1949), *Realism and the new way of words*, in *Philosophical Analysis*, Appleton, New York, 424–546.
- SIGWART, C. *Logik*, 2. vols., Tübingen: J. C. B. Mohr (Pauls Siebeck), 1904.
- SKORUPSKI, J. *John Stuart Mill*. London: Routledge, 1989.
- SMITH, B; SMITH, D. W. *The Cambridge Companion to Husserl*. New York: Cambridge University Press, 1999.
- SMITH, D. W. *Husserl*. New York: Routledge, 2013.
- SPILEERS, S. *Edmund Husserl Bibliography*. Dordrecht/Boston/London: Kluwert Academic Publishers, 1999.
- STUMPF, C. *Erkenntnislehre*. Lengerich: Pabst Science Publishers, 2011.
- TAYLOR, C. *Hegel: sistema, método e estrutura*. São Paulo: É Realizações, 2014.
- TRENDELENBURG, A. *Die logische Frage in Hegels System*. Leipzig: F. A. Brockhaus, 1843.
- _____. *Logische Untersuchungen*. Berlin: Bethge, 1840.
- ÜBERWEG, F.; T. K. ÖSTERREICH. *Grundri der Geschichte der Philosophie*. vol. 4, 13th ed., revised by T.K.Oesterreich. Basle: Schwabe, 1951.

- ULRICI, H. *Zur logischen Frage. (Mit Beziehung auf die Schriften von A. Trendelenburg, L. George, Kuno Fischer und F. Ueberweg.)*. Zeitschrift für Philosophie und philosophische Kritik (Neue Folge) 55: 1–63.
- VOGT, C. *Physiologische Briefe für Gebildete aller Stände*. Zweite vermehrte und verbesserte Auflage. Giessen: Ricker, 1853.
- WELTON, D. *The New Husserl: A Critical Reader*. Bloomington: Indiana University Press, 2003.
- WESTFALL, R. S. *The Construction of Modern Science: Mechanisms and Mechanics*. New York: Cambridge University Press, 2009.
- WILLARD, D. *Translator's Introduction*. In: HUSSERL, E. *Philosophy of Arithmetic. Psychological and Logical Investigations with Supplementary Texts from 1887-1901*. Translated by Dallas Willard. Dordrecht: Springer, 2003.
- WINDELBAND, W. *Die Geschichte der neueren Philosophie in ihrem Zusammenhang mit der Allgemeinen Cultur und den besonderen Wissenschaften: Von Kant bis Hegel und Herbart*. Leipzig: Druck und Verlag von Breitkopf und Härtel, 1880.
- WUNDT, W. *Logik. Eine Untersuchung der Prinzipien der Erkenntnis und der Methode wissenschaftlichen Forschung*. Tübingen: Verlag von Ferdinand Enke, 1893.
- ZAHAVI, Dan. *Husserl's Legacy*. New York: Oxford University Press, 2017
- _____. *Husserl's Phenomenology*. Stanford: Stanford University Press, 2003.
- _____. *One hundred years of phenomenology: Husserl's Logical Investigations Revisited*. Dordrecht/Boston/London: Kluwert Academic Publishers, 2002.
- ZELLER, E. *Geschichte der deutschen Philosophie seit Leibniz*. Sidney: Wentworth Press, 2018.