

The Crisis of Philosophy and the Meaning of the Sciences for Life

Emiliano Trizio¹

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Abstract

Despite the significant number of critical analyses devoted to the subject, the precise definition of the famed crisis-notion that lies at the heart of Husserl's last work remains controversial. The aim of this article is to defend and expand the account of Husserl's notion of the crisis of philosophy and of the resulting crisis of the European sciences that I have developed in a number of publications. This will be done by further exploring the notion of the meaningfulness of the sciences for life as well as its relation to their scientificity. Based on this result, I will then respond to some objections advanced against my proposal, and I will present further arguments to the effect that the crisis of philosophy consists in the collapse of its pretension to be scientific, and the consequent crisis of the European sciences consists in the resulting enigmatic character of their scientificity.

Keywords Crisis · Scientificity · Existential significance of the sciences

Recent years have seen several attempts to interpret the key-concepts of Husserl's last unfinished work *The Crisis of European Sciences and Transcendental Phenomenology* (Husserl, 1976/1970).¹ Unfortunately, instead of establishing a common framework, these attempts have prompted new controversies, which point to the enduring enigmatic character of one of the most complex theoretical works of the past century (for a discussion of four such controversies, see: Staiti, 2020). Regret-fully, there is considerable disagreement even about the very definition of Husserl's famed "crisis-concept". In 2016, I advanced a definition aiming to provide both a unitary account of Husserl's so called multiple "crises" and to situate it within his

Emiliano Trizio Ph.D. emiliano.trizio@unive.it

¹ Henceforth, *Krisis* followed by the page numbers of the English translation.

¹ Department of Philosophy and Cultural Heritage, Ca' Foscari University, Venice, Italy

philosophical project (Trizio, 2016). Since then, a number of scholars have discussed various aspects of my proposal (Heffernan, 2017; Trnka, 2020; Staiti, 2020). The aim of this article is to reply to George Heffernan's objections, while expanding the thesis contained in my 2016 article and subsequently developed in two other works (Trizio, 2020a, 2020c). As will appear from what follows, these disagreements are not merely terminological, nor do they consist in an idle quibbling about conceptual *minutiae*. On the contrary, they are the sign of significantly different ways of interpreting and assessing some of the cardinal notions of Husserl's philosophy.

1 The crisis of philosophy as the dissolution of the ideal of the universal science of being, the crisis of the positive sciences as the resulting questionable character of their genuine scientificity

My account of the crisis-concept requires six key-notions that can be introduced in the guise of dramatis personae: (1) crisis of philosophy, (2) crisis of the positive sciences, (3) crisis of European culture (or humanity), (4) prima facie or positive scientificity, (5) genuine (or authentic) scientificity, (6) meaningfulness of the positive sciences for life. The identity and mutual relations of these "characters" is what matters, not their more or less arbitrary denominations. Krisis I comprises seven sections. It is my contention that what appears in the title of § 2 should be neither identified with Husserl's conception of the crisis of the positive sciences nor included into it, as most readers have done. Such conception, instead, is announced in § 1, spelled out in § 5, and it is at work in all other passages of the Krisis in which Husserl speaks about the crisis of a science, whether explicitly (Krisis: 203, 212) or implicitly (Krisis: e.g., 56, 58, 67-68, 89, 96-97, 99-100, 119-120, 134-135, 189, 194, 211, 213-214, 225–226, 261–262). Let us see why. One should take seriously the general definition of crisis of a science (be it a positive science or philosophy itself or, again, any other of its sub-disciplines) given in § 1, according to which it consists in the fact that its genuine scientificity has become questionable, where this amounts in turn to the rationality pertaining to its task and method (Krisis: 3). The idea is simple. What is a science? An interpersonal, traditionalized activity whose aim is to theoretically determine a domain of objects by means of a rational method grounded in the domain itself. What makes a science a science is its scientificity, and a science whose scientificity has become questionable is a science whose very identity as a science is in question. The question is: is this a real, genuine, science? Assuredly, this question is inseparable from the skeptical doubts about the possibility for a science to achieve its epistemic task. Husserl employs this definition in full generality for he immediately discusses it in regards not only to all positive sciences, but also to philosophy itself. It appears that, at first sight, only philosophy obviously falls short of scientificity, where all positive sciences produce rationally compelling theoretical results on the basis of rigorous methods. This is also true of the sciences of spirit, despite their tendency to model themselves after the natural sciences, and is true, at least to an extent, even of psychology. Thus, philosophy is in crisis because its scientificity appears hopelessly missing, whereas positive sciences, so far, do not appear to be in crisis at all.

Therefore, Husserl distinguishes between two types of scientificity: what I call the *prima facie* scientificity of the positive sciences and their genuine (or authentic) scientificity,² and sets out to establish that the scientificity of the positive sciences can be considered questionable in the second sense. The prima facie scientificity, or positive scientificity is the one whereby sciences are *theoretical techniques* or have only the technical rationality allowing the application of methods to a domain of objects to obtain true or probably true results. To understand what is missing from prima facie or positive scientificity, Husserl introduces another dramatis persona: the meaningfulness of science for life ("Lebensbedeutsamkeit"). Thus, in § 2, he suggests looking at a phenomenon that he considers undoubtedly real and visible, so to speak, to the *naked* eye of educated Europeans: the fact that the positive sciences have lost their significance or meaningfulness (or, more plainly, importance) for life. Although this will require further discussion, it should be quite simple, already at this stage, to acknowledge that the scientificity of a science, what makes that science a science, i.e., knowledge of true being is one thing, while its value for our life, the way it contributes to make our existence meaningful (nay, happy) is another, despite the relations existing between them. At the second level, science is reconsidered from the ethical, axiological point of view. One thing is to ask what science is, quite another is to ask what makes science something valuable, what our life can expect to "gain out of it". This ethical and axiological level, in several authors, includes theological considerations, Husserl being a case in point.

Holding on to this distinction helps us recognize that Husserl in § 2 turns to the loss of existential value of the sciences to unfold a narrative through §§ 3-5 clarifying how the crisis of philosophy announced in § 1 and consisting in its scientific bankruptcy implies the crisis of the positive sciences in terms of their scientificity, and the crisis of European culture in terms of its own sense and purpose. This movement can be thus summarized: (i) According to today's predominant conception of science, scientific knowledge is knowledge of *facts* only, but (ii) this leaves out all questions narrowly or broadly ranked under the heading of metaphysics, which have to do with the problem of reason and unreason, and, thus, cannot be reduced to mere questions of fact; (iii) anything that has to do with norms and values falls in this broad category, from the specifically epistemological norms necessary to assure validity to the positive sciences themselves, to the axiological and ethical insights necessary to guide human conduct, as well as to the ultimate specifically metaphysical questions concerning human freedom, immortality, and the theological sense of the world and of its divine source. (iv) However, at the beginning of modernity, according to the reborn, ancient ideal of philosophy, all sciences were so many branches of philosophy as the universal science of being, and, within this unity, they received both a rational grounding of their task and method and a meaningfulness for life. (v) Yet, by virtue of a process further clarified in Krisis II, the philosophical ideal of modern rationalism has undergone an inner dissolution. Modern philosophy has failed to

² I do not introduce any distinction between *genuine* and *authentic* scientificity. The German expression in question here is "*echte Wissenschaftlichkeit*", which literally means "true, genuine, real science" (Husserl uses "*eigentlische Wissenschaftlichkeit*" very rarely and, presumably, with the same meaning. In my 2016 article, I rendered "*echt*" with "authentic" (Trizio, 2016: 203, 206) following the translations into Latin languages. To avoid any possible misunderstandings, I will here translate "*echt*" with "genuine" only.

develop a rigorous method for its task, and, thus, at least from Hume's time, it has become a "a problem for itself," it has fallen in a state of crisis whereby the very possibility of a scientific philosophy has become doubtful. (vi) The crisis of philosophy has determined in turn the crisis of the sciences, the loss of their meaningfulness for life, and the general crisis of European culture, as is clear in the fundamental passage opening § 5:

The necessary consequence was a peculiar change in the whole way of thinking. (1) Philosophy became a problem for itself, at first, understandably, in the form of the [problem of the] possibility of a metaphysics; and, following what we said earlier, this concerned implicitly the meaning and possibility of the whole problematics of reason. As for (4) the positive sciences, at first they were untouchable. Yet the problem of a possible metaphysics also encompassed eo ipso that of the (5) possibility of the factual sciences, since these had their relational meaning-that of truths merely for areas of what is-in the indivisible unity of philosophy. Can reason and that-which-is be separated, where reason, as knowing [erkennende Vernunft], determines what is? [...] A definite ideal of a universal philosophy and its method forms the beginning; this is, so to speak, the primal establishment of the philosophical modern age and all its lines of development. But instead of being able to work itself out in fact, (1) this ideal suffers an inner dissolution. As against attempts to carry out and newly fortify the ideal, this dissolution gives rise to revolutionary, more or less radical innovations. Thus, the problem of the genuine ideal of universal philosophy and its genuine method now actually becomes the innermost driving force of all historical philosophical movements. But this is to say that, ultimately, (2) all modern sciences drifted into a peculiar, increasingly puzzling crisis with regard to the meaning of their original founding as branches of philosophy, a meaning which they continued to bear within themselves. This is a (2) crisis which does not encroach upon (4) the theoretical and practical successes of the special sciences; yet it shakes to the foundations (5) the whole meaning of their truth [ihre ganze Wahrheitssinn]. This is not just a matter of a special form of culture—"science" or "philosophy"—as one among others belonging to European mankind. For the primal establishment of the new philosophy is, according to what was said earlier, the primal establishment of modern European humanity itself-humanity which seeks to renew itself radically, as against the foregoing medieval and ancient age, precisely and only through its new philosophy. Thus the (1) crisis of philosophy implies (2) the crisis of all modern sciences as members of the philosophical universe: at first a latent, then a more and more prominent (3) crisis of European humanity itself in respect to the total meaningfulness of its cultural life, its total "Existenz." (Krisis: 11-12)

This fundamental passage mentions, whether explicitly, items (1) to (5), or implicitly, item (6), the most important *dramatis personae* of *Krisis I*, and outlines their relationships. I have numbered and highlighted their occurrences. The crisis of philosophy, item (1), which was announced in § 1 as the uncontroversial questionability of philos-

ophy's scientificity, appears here in its historical origin and repining, as the process of inner dissolution of the ideal of universal philosophy (see the title of § 5) during the modern age and culminating with Hume (*Krisis*: 89). First, philosophy "becomes a problem for itself" because its possibility to address scientifically the ultimate meta-physical problems, those connected to the idea of reason itself, becomes a problem, and, subsequently, despite the attempts to find its "genuine method" throughout the 19th century, its scientific ideal dissolves, i.e., is deemed inherently non-valid. What about the special sciences? Husserl claims that, at first, they "remain untouchable", in the sense that they still produce "theoretical and practical success". This is the undisturbed *prima facie* scientificity, item (4), which Husserl acknowledged at the end of § 1. Yet, the shockwave of the crisis of philosophy was bound to impact them too. In what way? The text is clear: with respect to their *very possibility as genuine special sciences*, which means as systems of truths for specific provinces of reality, in other words, as branches of philosophy *qua* universal science of being. Thus, they are affected as accomplishments of *knowing reason*.

The question left suspended at the end of § 1 can now be answered. In what way can we speak of a crisis of the positive sciences too? Not, as we know, concerning their unimpeded theoretical and practical progressiveness, but with respect to their possibility of achieving genuine knowledge of specific provinces of being (item 5). This possibility requires a philosophy (a "reason") able to elucidate their own domain, justify their method, thus clarifying the sense of their truths ("Wahrheitssinn"). Therefore, that "all modern sciences drifted into a peculiar, increasingly puzzling crisis... as branches of philosophy," means that the crisis of philosophy implies the crisis of the sciences with respect to what makes them "second philosophies", i.e., genuine sciences of specific object-domains (see also: Husserl, 1959: 248). The dissolution of the ideal of universal philosophy has the effect that the sense of their truths has become enigmatic. Let us add that within Husserl's own foundational project the notion of genuine scientificity acquires a very precise sense. A genuine science is one that can be developed in complete theoretical responsibility, i.e., in such a way that any statement can be completely justified. This type of scientificity demands that a science be elucidated by transcendental phenomenology conceived as the ultimate "Wissenschaftstheorie" encompassing both pure logic (the science of the essence of science in general) and the different material eidetic disciplines relevant for that science. The sense in which a science's corresponding domain can be said to be, so to speak "in-itself", vis-à-vis knowing consciousness, i.e., its "Seinssinn", is elucidated by the theory of constitution. The term "Wahrheitssinn", in turn, that plays such an important role in this passage, indicates the theoretical correlate of the "Seinssinn" (*Krisis*: 104).³

Now, at this stage (before "This is not just a matter..."), *there has been no mention* of the existential value of the positive sciences. So far, the discussion remains at the knowledge-theoretical level (that of "*erkennende Vernunft*") at which Husserl was seeking the deeper sense of scientificity in which the triumphant positive sciences could nonetheless be deemed to be in crisis. Thus, Husserl's aim has been achieved.

³ For a reconstruction of the development of this idea across Husserl's corpus, see: Trizio, 2020a: Chapter II; Trizio, 2020c: 153–155.

The danger for the reader is to misunderstand the notion of "*Wahrheitssinn*" and to confound it with something quite different, namely item (6). We will come back to this. For the moment, let us see how the loss of meaningfulness of the positive sciences comes back in *Krisis I*, at least, implicitly. The lines following "This is not just a matter..." outline the relation between the three crises. Since philosophy was meant to be the "guide for the new man", since, through its work, reason was meant to decide not only about what concerns "things", realities, but also "values and ends", the crisis of philosophy does not imply only the aforementioned crisis of the positive sciences, but also a crisis of European culture (item 3). In this cultural and existential crisis, the positive sciences, too, appear without a clear existential value. In this way, albeit without an explicit mention, Husserl lands on what, at the beginning of § 2, was introduced as a fact visible to everybody. Only that now we have acquired the awareness that our sciences have not only lost their meaningfulness for life (as everyone already knows), but also suffer from an "identity" crisis, which brings into question their very claim to be real sciences.

2 "Lebensbedeutsamkeit" and its relation to scientificity

The fact that in the extant part of the *Krisis* we find scant indications about what the "*Lebensbedeutsamkeit*" of the sciences might be in light of Husserl's own project has not helped to correctly frame this concept and its relations to scientificity. In this section, I will try to fill this lacuna, at least partially, based on other writings by Husserl. The following considerations should help us understand better what we read in §§ 2–3 of the *Krisis*.

The section "*Die höhere Wertform einer humanen Menschheit*" (Husserl, 1988a: 54–9) of the unpublished *Kaizo* article "*Erneuerung und Wissenschaft*," portrays a humanity that, under the guide of genuine philosophy, strives to approximate the ideal of "genuinely humane" humanity. This description contains precious indications of the function and value that *science* would have in a culture in which scientific philosophy performs its guiding role, in short, in a healthy and mature "European" culture self-consciously progressing in the infinite task of fulfilling its inner entelechy. After outlining the normative role that science, broadly conceived, exerts in all spheres of personal, political, institutional, and scientific life, Husserl lists its *highest functions*:

Science, though, does not only have significance ["Bedeutung"] within some limited spheres and directions of research, it exercises its highest functions precisely as universal and absolute science; apart from the fact that $[LB_1]$, as universal science it enables human beings to discover the totality of realities and possibilities according to factual laws and laws of essence and thereby to gift humanity with a bountifully great and beautiful realm of values as the correlate of a great and beautiful life of knowledge. And not only because $[LB_2]$ as natural science it enables human beings to shape nature by means of technology according to their practical needs, just as, on the other hand, the sciences of spirit can become practically useful for the pedagogical, political, etc. praxis.

Utilities are subordinate to ethical norms and, thus, in themselves they must be considered only relatively. But $[LB_3]$ a universal science resting on ultimate foundations amounts to scientific philosophy and makes the totality of realities and possibilities ultimately knowable, brings about the understanding of the "sense" of the world and thereby the possibility of a life that has the character of a self-conscious absolute life, which by living realizes the absolute sense of the world, and does so in knowing, in evaluating, in creative and aesthetic activities and in the ethical action in general. (Husserl, 1989: 57)

Note that Husserl uses the word "*Bedeutung*" to introduce his outline of the meaningfulness for life of philosophy and of the positive sciences. This is coherent with similar occurrences of the word (and the cognate "*bedeuten*") in *Krisis I* (cf. e.g., Husserl, 1976: 3, lines 30–31; 5, lines 14–15). What is at stake is not what science is and should strive to be (under the title of scientificity), but what its value for life is and should be. In this text, one can discern three components of "*Lebensbedeutsamkeit*", which I indicated as LB_{1-3} respectively. As is clear from the way they are introduced ("apart from..." and "not only..."), Husserl regards LB_1 and LB_2 as well-known, and foregrounds LB_3 . Indeed, LB_3 is the decisive component and, furthermore, it encompasses the previous two. In *Krisis* § 2, it holds center stage.

Component LB_{I} is the most closely connected to the practice of all scientific endeavors, including philosophy, as the "universal science" encompassing all factual and eidetic sciences. To its gradual development, there corresponds the progressive creation of a realm of cognitive/intellectual values, which is the correlate of a "great and beautiful life of knowledge." Later in the Kaizo articles, Husserl expands on this analysis in the context of his reconstruction of the Greek origins of the theoretical attitude, and utilizes the expression "Erkenntnisfreude" for the joy arising from the satisfaction of the theoretical interest (see also: Husserl, 1988: 424). Scientific progress, thus, creates a realm of intellectual goods, perennial possession of an open community (Husserl, 1989: 84). Further, this realm gives raise to new values and specific virtues for the community of scientists, of those who value knowledge for its own sake (Husserl, 1989: 84-85). Obviously, even when adopting an austere form of theoretical attitude, such as the naturalistic, in which all value-predicates of the corresponding object-domain, nature, are suspended, subjectivity is not only knowing, but also evaluating and willing (Husserl 1952a: 26). This holds true in general: "Erkennendes Bewußtsein ist zugleich wertendes und wollendes" (Husserl, 1988, 174). The value of knowledge motivates the activity of the theoretical subject, and the joy of scientific accomplishment contributes to the meaningfulness of a life based on reason. The joy of knowledge, for Husserl, also comes in degrees. For instance, a simple truth like "1+1=2" cannot arouse the same enthusiasm of complex mathematical theories (Husserl, 1988: 173). Now, what is the relation of LB_1 to a science's scientificity? On the one hand, the latter *founds* the former. Cognitive values are founded on the conformity of knowledge to the norms of scientificity. But, what about Husserl's claim that our positive sciences are deficient precisely from the standpoint of their scientificity? Does it mean that the sciences have lost this component of their meaningfulness for life too? Only to an extent. Husserl does not think that the vitality of our culture is so exhausted that scientists can no longer experience "Erken*ntnisfreude*". They do, despite the increasing technization or even mechanization of research. However, "*Erkenntnisfreude*" comes in degrees not only as a function of the complexity of its object, but also of a science's level of genuineness. This is why, in the introduction of *Formal and Transcendental Logic*, he invites us not to be "satisfied by the joy of creating a theoretical technique" (Husserl, 1974: 9/1969: 5).⁴ Only a genuine science can *completely* satisfy our theoretical interests and elicit the full cognitive joy of grasping true being. The further away we are from genuine scientificity, the more crippled our accomplishments will be by reappearing skeptical doubts. In sum, LB_I is the contemplative, "Aristotelian" aspect of the sciences' meaningfulness for life. For Husserl, it is (a) inseparable (*but not indistinguishable!*) from scientificity, and (b) directly proportional to it.

Component LB_2 consists in the power that the natural and the social sciences bestow upon us to shape our natural and social environment. Note that Husserl believes in the practical resources of psychology, pedagogy, and political science too. As for the relation between the LB_2 of a given science to its scientificity, neither (a) nor (b) remain true. First, LB₂ is not inseparable from scientificity because a science gives a positive contribution to our life in this respect only if its results are applied under the guidance of valid ethical principles, which belong to other sciences, the axiological and practical. What is needed is an ethical regulation that makes them work for the good of humanity and not in the service of individual and national egoism. Indeed, one can imagine a science instantiating the essence of genuine scientificity (say, a perfectly elucidated mathematical physics) and nonetheless being used to foster unethical aims. Second, the practical utility of a science is not directly proportional to it (even in presence of a valid ethical regulation), witness the fact that a theoretical technique like contemporary physics is no less technologically successful for being so far from "Echtheit". This has made possible radically instrumentalist/ pragmatist approaches to science underplaying its ontological value.

Component LB_3 evokes Husserl's entire project of a metaphysics founded on transcendental phenomenology. Science here means, once more, universal philosophy. In its unity, all factual and eidetic knowledge receives its ultimate elucidation, acquiring genuine scientificity. In particular, empirical sciences become the first layer of metaphysics according to a terminology Husserl used until the twenties, that is ultimate sciences of reality. But metaphysics in the eminent sense is the science of the "höchsten und letzten Fragen" (Husserl, 1950: 165), and revolves around the problem of the sense of nature, of human life, of history, all comprised under the title of "Sinn der Welt". The word "Sinn", here, does not mean the same as "Seinssinn".⁵ The latter indicates the sense of the objective being "in-itself" of the world disclosed in the theory of its transcendental constitution (Husserl, 1959: 247), the former indicates the teleological sense of the world (Husserl, 2012: 105; Husserl, 1994: 98–99), which philosophy is called to reconstruct on the basis of the irrationality of facticity (Husserl, 2014: 238). Yet, these senses are related. The teleological sense can emerge only after the factual sciences have been founded by phenomenology, and, thus, the "Seinssinn" of the corresponding objectivities has been elucidated. Based on this,

⁴ The remaining part of the sentence is noteworthy too (see also: Husserl, 1952b: 96).

⁵ See the texted quoted in the Editor's introduction to Husserliana XLII, pp. LXXIV-LXXV, note 2.

the further (and different) scientific task of reconsidering their results in axiological, practical, and teleological terms becomes possible. Furthermore, this teleological understanding of the world, as described by genuine sciences, points to God as the ultimate teleological source (Krisis: 9). For Husserl, existential questions cannot be separated from teleological/theological problems (1992: 105). Without such teleological sense, the world, and human existence are ultimately "sinnloss" (Husserl, 1959: 258). True, this appeal to a world-teleology/theology remains largely programmatic, yet it is necessary to grasp the meaning of Husserl's most inspired and "existential" statements, such as those contained in Krisis I. Husserl's struggle against contemporary nihilism does not rest only on the prospect of an enlightened humanity guided by reason. Just as in Plato, the Republic is followed by the Timaeus: the ideal city can be truly happy only in a universe teleologically ordered towards the Good. Husserl's Republic, too, a genuinely humane humanity living under the guide of philosophy must be completed by Husserl's *Timaeus*, by a universal teleology informing the world itself in its factual being and being-so as elucidated by transcendental investigations. Without a universal teleological sense-horizon, genuine happiness is not achievable, nor is nihilism finally vanguished.

The role of empirical sciences within this teleological/theological worldview is twofold. On the one hand, the very existence of scientific truth, of nature "in-itself" (and even more so of a nature developing towards increasing level of complexity), as well as of a coherent and progressive cultural and historical world, is but a contingent fact, a fact harboring a teleology pointing to God (Husserl, 2014: 203). On the other hand, as we read in the text quoted above, life contributes to realize the sense of the world, "in knowing, in evaluating, in creative and aesthetic activities and in the ethical action in general." Thus:

In science and in scientific praxis all true objectivity of nature, of values, of goods finds expression.

And in scientific research and its result, humanity acquires self-awareness of its telos: pure God-humanity ["reines Gott-menschentum"]: All consciousness is on the way to completion, all consciousness is ruled by the direction to Entelechies that teleologically determine the development. (Husserl, 2014: 176)⁶

We now appreciate why both LB_1 and LB_2 are encompassed by LB_3 , by virtue of which they receive their ultimate interpretation. The *telos* of humanity, here called "reines Gott-menschentum" is the most perfect/complete consciousness of the most perfect world (Husserl, 1988: 227–228). Thus, "*Erkenntnisfreude*" (LB_1) acquires now an *ontological and theological sense*, whereby it marks a progress in the "*Vollendung*" of consciousness by means of theoretical knowledge, whereas the shaping of the natural and human environment by a technology subject to ethical norms partakes in humanity's oeuvre "to realize the sense of the world" in ethical actions. Finally, for this ultimate level of meaningfulness of the sciences for life neither (a)

⁶ As we can see, for Husserl, genuine science is literally "a way to God" (as well as a way of God's selfrealization through us). Thus, Husserl held a view that, according to Max Weber, nobody in our age could even take seriously (Weber, 1946: 142). Such is Husserl's way of "re-enchanting" the world.

nor (b) above hold. The science-theoretical grounding of a science is only a necessary step for the interpretation of its praxis and of its results in teleological and theological terms, but it can exist without it.

These sketchy considerations do not exhaust the vast (and little explored) theme of the "*Lebensbedeutsamkeit*" of the sciences from the standpoint of phenomenology.⁷ Yet, we have gained awareness of the difference between genuine scientificity and "*Lebensbedeutsamkeit*" and of the complex relations existing between them.⁸ In particular, I hope they have clarified why Husserl believes that, without becoming ontologically transparent components of a universal philosophy, the positive sciences can enjoy only a limited and relative significance for life, and that overcoming their crisis by turning them into genuine sciences is a necessary but not sufficient step to bestow upon them a full significance for our existence.

3 Scientificity and its senses

Let us now turn to Heffernan's interpretation (2017). As we shall see, the definition of scientificity and its relation to "*Lebensbedeutsamkeit*" will lie at the center of the following discussion. Let us first mention two points on which our readings agree: i) From *Philosophy as a rigorous science*, "Husserl composes a continuous series of *Krisis*-texts, all of which articulate the cultural, existential, human, and scientific *Krisen* of the times" (Heffernan, 2017: 236).⁹ Indeed, the critique of the present state of science and philosophy, and of European culture are a fundamental *leitmotiv* of Husserl's work. ii) These themes are intertwined with Husserl's insistence that "Genuinely scientific philosophy-and this includes, of course, his transcendental phenomenology-must address *existential questions*" (Heffernan, 2017: 237). These questions are comprised in what, as we have seen, Husserl calls the *höchsten und letzten Fragen*. Thus, Heffernan's painstaking reconstructions of Husserl's enduring engagement with the crisis-theme and with existential questions are a valuable contribution to these issues.¹⁰

⁷ For instance, the grand enlightenment theme of how science, by removing prejudices about the natural and social world, helps us *directing* our actions, whether mediated by technology or not, requires a detailed analysis, and so does its relation to genuine scientificity (cf. Husserl, 1989: 222).

⁸ Husserl's views about the existential value of scientific knowledge and the relation of such value to genuine scientificity are by no means obvious. To name but two classic authors holding different opinions, Epicurus denied that theoretical knowledge, by itself, contributes in any way to our happiness. Such knowledge is worth pursuing only if and to the extent to which it contributes to *ataraxia* (Epicurus, *Ratae Sententiae* XI-XII). Nietzsche, instead, in his early reflections on historical science, questioned the link between scientificity and value for life, arguing that the quest for scientific rigour ultimately makes historical knowledge harmful (Nietzsche, 2007: 67).

⁹ Unfortunately, Heffernan adopts the opposite terminological convention and uses "*Krisis*" for the crisisconcept and "*Crisis*", for Husserl' book.

¹⁰ It is, instead, unfortunate, that Heffernan has misread my 2016 article as implying a rejection of both i) and ii). In this way, he has made our disagreement look much larger than it is. As to i), he says: "Thus it is misleading to say that the term or the concept *Krisis* "was rather foreign to the technical development of Husserl's own thought (Footnote: Trizio 2016, 193)" (Heffernan, 2017: 236). However, what I say, there, is only that the term ("word"), *not the concept behind it*, is foreign to the technical development of Husserl's thought, because he used that word only late, and few times (Trizio, 2016: 192–193). On

Let us now turn to Heffernan's account of the status quaestionis:

According to the traditional interpretation, advocated by Gurwitsch, Paci, Carr, Boehm, Ströker, Bernet, Kern, and Marbach, as well as Dodd, for example, the *Krisis* of the European sciences lies not in the inadequacy of their scientificity but in the loss of their meaningfulness for life. According to an innovative suggestion, advanced by Trizio, for example, the *Krisis* lies not in the loss of their meaningfulness for life but in the inadequacy of their scientificity. (...) The paper proposes that Husserl's *Krisis* of the European sciences should be identified *both* as a *Krisis* of their scientificity *and* as a *Krisis* of their meaningfulness for life. It also posits that only this approach does justice to the many different senses of *Krisis* in Husserl's *Krisis*-texts as well as to the dual character of the *Krisis* of the European sciences in *The Crisis*. (Heffernan, 2017: 232)

This account has three shortcomings. (i) It is not true that all the interpreters listed there have explicitly denied that the crisis of European sciences involve their scientificity. The situation is more nuanced (see Trizio, 2016: 206–207, footnote 24). To my knowledge, there are few explicit statements that the crisis of the sciences *does not* concern the inadequacy of their scientificity (e.g., Ströker 1988: 207). What is true is that they all failed to carefully distinguish between questions concerning the scientificity of the positive sciences and those concerning their meaningfulness for life and to articulate correctly the relationship between these two notions,¹¹ and this is partly due to the fact that they *all* read the title of § 2 as expressing Husserl's own conception of the crisis or as contributing to it.¹² Instead, I do claim that the crisis of European sciences consists solely in the fact that their scientificity has become questionable, *and not* in their (otherwise unquestionable) loss of "*Lebensbedeutsam-keit*". Thus, the real shortcoming of "traditional" interpretations is that they failed

the contrary, I claim there that, despite this lexical novelty, "Neither Husserl's interest in the history of philosophy and science, nor his disaffection with the present state of Western culture are new" (Trizio, 2016: 192), and that "What is required is to dig through the limited and circumstantial use of the language of crisis in order to highlight in what way Husserl's diagnosis of the illness of Western sciences connects with the fundamental theses of his philosophy" (Trizio, 2016: 193). As to (ii) Heffernan attributes to me the claim that "Bedeutung (meaning), Bedeutsamkeit (meaningfulness), Sinn (meaning or sense), Unsinn (nonsense), Sinnhaftigkeit (meaningfulness), Sinnlosigkeit (meaninglessness or senselessness), and Lebensbedeutsamkeit (meaningfulness for life) [...] do 'not belong to Husserl's technical language' or 'have no technical use' in The Crisis (Footnote: Trizio 2016 197-198)" (Heffernan, 2017: 236-237). However, there, I only claim that "Lebensbedeutsamkeit' (...) does not belong to Husserl's technical language and is never found elsewhere in the Krisis. The terms 'Bedeutung' and 'bedeuten' themselves have no technical use in this text" (Trizio, 2016: 197). Furthermore, when I say that *those* terms (not the others in Heffernan's list!) have no technical use, I do not intend to "neutralize their existential valence" (Heffernan, 2017: 237 footnote 78), but to highlight that they belong to plain German and that they shouldn't be confused (as Carr's translation, by employing the term "meaning" across the board, incites to do) with compounds of "Sinn" such as the "Wahrheitssinn/Seinssinn", which, instead, do belong to Husserl's technical language, and have a specific science-theoretical role. In my article, I regularly mention the existential implications of Husserl's crisis-concept (Trizio, 2016: 191, 200, 202, 209-210).

¹¹ Even Paci's penetrating discussion of the relation between scientificity and the rationality of life is ultimately unsatisfactory (Paci, 1972: \$\$ 31–33).

¹² Only Patočka wasn't misled by it (Patočka, 2015: 21).

to distinguish and articulate the different moments comprising Husserl's critique of European culture, as well as the different corresponding moments of his therapy, which, in turn, correspond to components of his idea of philosophy and of its guiding role. (ii) Heffernan presents his own proposal as if it amounted to combining two competing alternatives, thus replacing an "either/or" with a "both/and". Yet what he does in fact is rather different and far less clear, as we are about to see. (iii) Finally, I do not claim that the crisis of European sciences lies simply "in the *inadequacy* of their scientificity". That inadequacy is a necessary, but not sufficient condition for their crisis. Genuine scientificity is a regulative idea that sciences can only approximate. For them to be in crisis, their scientificity must be so inadequate as to make a skeptical threat possible. Furthermore, an acute awareness of such threat must have arisen, so that their scientificity has indeed become *questionable*, *enigmatic*, if not altogether bankrupt, what happens only with Hume and not before, although sciences had never been strictly speaking genuine. To the notion of crisis of a cultural formation, be it a science or not, there necessarily belong awareness, doubt, disorientation, and a weakening of the motivational resources propelling it. A crisis, in Husserl's sense, is always an identity crisis.¹³

But let us turn to the parts of *Krisis I* on which the disagreement hinges, which are §§ 1–2 of the *Krisis* and the already quoted part of § 5. The first section of *Krisis I*, entitled "*Is there, in view of their constant successes, really a crisis of the sciences*?" acknowledges that speaking of a crisis of positive sciences, one affecting their genuine scientificity, is problematic. Thus, in § 2 (*The positivistic reduction of the idea of science to mere factual science. The "crisis" of science as the loss of its meaning for life*), Husserl evokes a fact that he claims to be *generally acknowledged at the time*, namely the loss of "*Lebensbedeutsamkeit*" of the sciences, and suggests that this can be a starting point to find out what is wrong with the scientificity of the sciences.

It may by, however, that motives arise from another direction of inquiry—that of the general lament about the crisis of our culture and the role here ascribed to the sciences—for subjecting the scientificity of all sciences to a serious and quite necessary critique without sacrificing their primary sense of scientific discipline, so unimpeachable within the legitimacy of their methodic accomplishments. (...) We make our beginning with a change which set in at the turn of the past century in the general evaluation of the sciences. It concerns not the science in general, had meant and could mean for human existence [their scientificity in the second sense]. (Krisis: 5)

In the last quotation, I have reported between brackets Heffernan's explanatory interpolations, which I consider unacceptable. According to my reading, while Husserl considers the loss of meaningfulness for life a dramatic fact, he believes that it can be called "crisis" only between quotation marks (as appears in the title of § 2), and that

¹³ This remark provides the answer to one of Staiti's objections (Staiti, 2020). My approach does not imply that a non-genuine science is *ipso-facto* in crisis (which would be indeed wrong) because so long its scientificity is not explicitly exposed as "*fraglich*" the crisis is not there yet.

it does not amount to the real sought-for crisis spelled out in terms of genuine scientificity. This is also evidenced by Husserl's contrasting scientificity and existential meaning in the last two lines of the above quotation (read without Heffernan's interpolations). Indeed, when the expression "crisis of sciences" first reappears in § 5, as we know, it refers to the uncertainty concerning their "*Wahrheitssinn*", a theme that philosophy brings to light and that neither the working scientist nor the general public are aware of. Nowhere else the word "crisis" is used to indicate the loss of "*Lebensbedeutsamkeit*". ¹⁴

Heffernan, too, accepts Husserl's characterization of the crisis of a science in § 1 as the questionability of its genuine scientificity.¹⁵ Let us stress that it would be really difficult to do otherwise, first, because, as we read in the above passage, Husserl mentions the loss of *"Lebensbedeutsamkeit*", in order to find motives "for subjecting the scientificity of all sciences to a serious and quite necessary critique", second, because if Husserl were including something other than genuine scientificity in the crisis-concept, he would be claiming, absurdly, that a science can be fully genuine, and yet in crisis.

However, Heffernan also takes at face value the definition given in § 2 as the loss if its "*Lebensbedeutsamkeit*". While he does not explain the presence of quotation marks in the title of § 2, he rejects my view that they signal Husserl's distance from that definition.

When he first mentions the *Krisis* in the existential sense and in doing so places the word "Krisis" under quotation marks, this does not mean that Husserl is not speaking in his own voice or that he doubts whether there is a *Krisis* of the European sciences in this sense. [...] If he had intended the statement to be understood in this way, then Husserl would surely have placed the quotation marks differently by writing: "The crisis of science as 'loss of its meaningfulness for life'." (Heffernan, 2017: 252).

These lines show once more that, according to Heffernan, I do not acknowledge that for Husserl sciences have lost their existential value (or that I think Husserl doubts it) and that he deems addressing it a decisive philosophical task. Indeed, if Husserl believed that such loss of "*Lebensbedeutsamkeit*" is not a fact, it would make sense for him to put it between quotation marks. However, my claim is not that Husserl is not "speaking in his own voice" when he refers that such loss. My claim is that, for him, the *true fact of such loss* is but a "crisis" between quotations marks, and not

¹⁴ This interpretation is also confirmed by the Prague conference. This text, too, begins with the admission that the notion of crisis of the sciences sounds surprising given that it would mean that their genuine scientificity has become "*fraglich*" (Husserl, 1992: 103). After turning to the problem of their loss of existential meaning (Husserl, 1992: 103, line 26-104, line 28), without, by the way, ever using the world "crisis" to refer to it, Husserl makes a short excursus on the way this meaning was assured within the scientific unity of modern philosophy, and how the latter ultimately collapsed (1992: 104, line 29–106 line 29). As a result of this collapse, natural sciences acquired a "Fraglichkeit in subjektiver Hinsicht" (1992: 106), i.e., one affecting not their results, but the rationality of the subjective operations underlying them (cf. Husserl, 1974: 18). This is the same account of the crisis-concept we find in *Krisis* §§ 1–5.

¹⁵ Not without ambiguity, though, see further note 18.

the real crisis of the sciences, which can be spelled out only in terms of scientificity properly understood (i.e., in knowledge-theoretical terms). This is why the quotations marks are where they are. Quotation marks can be used, as they are here, to signal that a term is mentioned in its common use, but that such use is not the appropriate one. Husserl, as many of us, does it quite often.¹⁶

So, how can Heffernan grant that the crisis-concept must be spelled out in terms of genuine scientificity while taking at face value its characterization in the title of § 2? This is the substance of Heffernan's "dual" account of Husserl's crisis-concept.

To this end, he proposes to define "the 'crisis' of science" in terms of a distinction between the *scientificity* (*Wissenschaftlichkeit*) of the sciences in "the first sense" (that of § 1), which is unquestionable, and the *scientificity* of the sciences in a *second sense* (that of § 2), which is questionable. "The first sense" pertains to the manner in which a science sets its task, develops its methodology, and achieves its results, while the *second sense* relates to the manner in which it cultivates its meaningfulness for life. Therefore the *Krisis* of the sciences will encompass *both* a *Krisis* of the adequacy of their scientificity in the reduced sense, that is, *only* of their tasks, methodologies, and results, *and* a *Krisis* of the adequacy of their scientificity in the enhanced sense, that is, also of their meaningfulness for life. (...) So he introduces a *second sense* of *the scientificity of the sciences* and includes their meaningfulness for life in their scientificity. (Heffernan, 2017: 241)

This passage explains why Heffernan suggests the bracketed interpolations reported above (which nothing in text justifies). The second sense of scientificity is also called by Heffernan "philosophical" (2017: 242)¹⁷ because it is the one sciences have lost due to their specialization (2017: 243–244). In other words, given that when sciences were part of a universal scientific philosophy, in the early modern era, they were contributing to solving existential questions, the crisis of philosophy, which Heffernan interprets in turn as the fact that it no longer poses such questions (2017: 253), has deprived the positive sciences of the broader scientificity that allowed them if not to address these questions directly, at least to contribute to doing so. *This* would be their crisis as the loss of their "*Lebensbedeutsamkeit*". Thus, Heffernan's interpretation rests upon the claim that genuine scientificity amounts to positivistic scientificity

¹⁶ As a dramatic example not unrelated to the crisis-theme, see what Husserl writes in 1920: "Ich konnte den Krieg und den nachgekommenen "Frieden' nur ertragen in allgemeinsten philosophischen Besinnungen" (Husserl, 1984: 533). Obviously, Husserl thought that the *otherwise undoubtedly real* time following the Treaty of Versailles could not be regarded as a *real peace*, despite how people called it. Note, finally, that my interpretation *does not rest on* the presence in the title of § 2 of what I take to be scare quotes. Rather, it is those whom I criticize who must base their interpretation on that one single instance in which Husserl might seem to use the term "crisis" as indicating the loss of "*Lebensbedeutsamkeit*". Thus, even if it turned out that the use of the quotations marks in that title was an oversight, or worse, the result of an editor's mistake, it would just amount to a single, deviant use of the term, in which Husserl mentions what everybody is able to see is missing from our sciences.

 $^{^{17}}$ See also the following claim: "Therefore § 2 (...) should be recognized as the place where Husserl introduces the *philosophical* sense of *scientificity* in order to explain how the sciences are in a *Krisis* in this sense" (Heffernan, 2017: 247).

plus philosophical scientificity.¹⁸ Heffernan also restates his thesis claiming that the philosophical component of the sciences' scientificity is "existential" and that "The *Krisis* of the European sciences consists not in the inadequacy of their positivistic scientificity but in the loss of their existential scientificity" (2017: 254).

Going back to point ii) above (that is to Heffernan's claim to have replaced an "either/or" with a "both/and"), we understand that what Heffernan does in fact, at least in this passage, is not to suggest a dual crisis, if not in a trivial way. Indeed, for him too, the problems afflicting the genuine scientificity of the positive sciences encompass their entire crisis because he sees their loss of "Lebensbedeutsamkeit" as the loss of a part of their scientificity (the "existential scientificity", expression, by the way, absent in Husserl's texts). Thus, formulated in this way, Heffernan's "dual" or both-and crisis-concept is both-and only in the sense in which one could say "I spent my summer both in France and in Provence", which is not a meaningless statement, but it is one entailing the truth of the statement "I spent my summer in France." In short, Heffernan just expands the notion of scientificity as to include "Lebensbedeutsamkeit", and, therefore, at bottom, agrees that the crisis of European sciences is only a matter of their genuine scientificity. Eventually, he acknowledges it himself: "The tenable reading of The Crisis is that according to which there is a sense in which the Krisis of the European sciences consists in a loss of their scientificity understood as a loss of their meaningfulness for life" (2017: 253).

Even acknowledging this trivialized both-and approach, however, does not remove the flat contradiction in the above quotation because Heffernan, there, claims that scientificity in the first sense is "unquestionable", and then adds that the crisis involves the "reduced sense" of scientificity too.¹⁹ This cannot be only a lapse because, as we will see, Heffernan does make an effort to include in his account of the crisis of the sciences also shortcomings of their *scientificity* other than their having lost "*Lebensbedeutsamkeit*" (which he deems included in such scientificity). In other terms, he tries to develop a non-trivial both-and approach, but his notion of scientificity does not allow him to do it satisfactorily. Let us see why.²⁰

¹⁸ "[Husser]] posits that *scientificity* in the *positivistic* sense alone is not sufficient to make a supposed science a genuine science but that *scientificity* in the *philosophical* sense is also necessary" (Heffernan, 2017, 252). Let us note that this way of characterizing scientificity and the crisis affecting it (reasserted, for instance also at p. 254) is contradicted by another claim by Heffernan: "Thus it is true that Husserl says that 'the crisis of a science [...] indicates *nothing less* than that its genuine scientificity [...] has become questionable'. Yet it is false that he means that 'the crisis of a science [...] indicates *nothing less* than that be believes that "*Lebensbedeutsamkeit*" is included in genuine scientificity. There are two ways of explaining this "nothing less". The most likely is that it is just a way to emphasise what follows. Alternatively, it could be read as referring to "questionable", that is, Husserl would be saying that scientificity must be *at least questionable*, if not completely bankrupt.

¹⁹ Unless "reduced sense" does not refer to the "first sense", but to yet another sense. In which case, the contradiction would be that Heffernan assumes three senses of scientificity, and not two.

²⁰ Let us also remark that "positivistic scientificity" is a misnomer. Husserl speaks about the "positive sciences" and could certainly speak about "positive scientificity" to designate what I call "*prima facie scientificity*", but what is "positivistic" is only a misguided conception of science whereby positive scientificity is scientificity enough, and not a technized component of genuine scientificity that is successfully, but blindly, used by today's scientists.

4 The crisis of the positive sciences can only be understood in terms of "Wahrheitssinn/ Seinssinn"

What is wrong with the definition of *genuine scientificity* as *positive scientificity* plus *existential scientificity*, and with the thesis that the crisis of the sciences consists in the collapse of the second component? The shortcomings of the thesis derive from those of the definition, which are two. It is (i) too narrow in one sense because it does not account for the epistemic inadequacy of the sciences, (ii) too broad in another because it illegitimately annexes *"Lebensbedeutsamkeit"* to scientificity. In this section, I will explain point i), and, in the next, point ii).

Let us ask ourselves what is wrong with a science whose scientificity is but the positive one, i.e., such as positivists would have it? What is wrong with its failing to be scientific in a philosophical sense? As we have seen, according to Heffernan: "The problem with the positivistic reduction of science is existential" (2017: 242). However, in *Formal and Transcendental Logic*, Husserl is clear on the matter:

The *unphilosophical character of this positivity* consists precisely in this: The sciences, because they do not understand their own productions as those of a productive intentionality (this intentionality remaining unthematic for them), are unable to clarify the genuine being-sense (*Seinssinn*) of either their provinces or the concepts that comprehend their provinces; thus they are unable to say (in the true and ultimate sense) what belongs to the existent of which they speak or what sense-horizons that existent presupposes-horizons of which they do not speak, but which are nevertheless co-determinant of its sense. (Husserl, 1974: 17–18/1969: 13)

What makes the positive science unable to become *philosophical* is the failure to clarify the Seinssinn of their object-domain, not their failure to cooperate "with philosophy" in addressing existential questions. Assuredly, they cannot successfully do that either, so long they are not truly genuine.²¹ But the historical considerations of Krisis II revolve around the knowledge-theoretical theme announced in this passage. Without an insight into the constitutive accomplishments of knowing consciousness, without the consequent elucidation of ontological domains of the sciences in the lifeworld, the objectivistic interpretation of the being of nature first introduced by Galileo and then taken up by Descartes was bound to undermine the reborn ideal of philosophy, while at the same time preempting a genuinely scientific psychology. Hume's "fictional" reinterpretation of the being of nature and Kant's misguidedly transcendental attempt to "subjectivise" it are fundamental chapters of this history, whereby the true "Seinssinn" of nature, the true sense in which nature can be said to be, is missed, and the inability to overcome skepticism "shakes to the foundations" the corresponding "Wahrheitssinn" of scientific theories. In Krisis IIIB, Husserl focuses on how to identify and elucidate the object-domain of psychology (that modernity has

²¹ As Husserl also hints at in the lines following this passage. See also: Husserl, 1992: 108, where Husserl remarks that the highest philosophical problems belong also to the "*Wahrheitssinn*" of natural sciences, i.e., they cannot be grasped correctly without clarifying it.

completely missed) on the soil of the life-world introduced in *Krisis IIIA*. This is the real crisis of European sciences, one affecting not its positive, but its genuine (call it also *philosophical*) scientificity precisely in this sense. Now, this sense of scientificity, the one requiring the clarification of the couple "*Seinssinn/Wahrheitssinn*" is neither that of § 1 of the *Krisis*, nor the supposedly "existential" one that Heffernan sees in § 2. Indeed, Heffernan does not and cannot do justice to it because, when Husserl mentions it in the passage of § 5 quoted above, Heffernan misreads it as referring to the existential function of the sciences. In short, Heffernan's two senses are insufficient to give an account of what is wrong with the scientificity of the sciences *in knowledge-theoretical terms*.

This problem becomes particularly evident in the Conclusion, where we read:

(1) There is a *Krisis* of the European sciences in so far as the natural and mathematical sciences have become purely positivistic. (2) There is a *Krisis* of the European sciences in so far as the human sciences have lost their way by modelling themselves on the natural and mathematical sciences. (3) There is a *Krisis* of European psychology, the supposed science of human spirit, in so far as it cannot clarify its own subject matter. (Heffernan, 2017: 253)

So "natural and mathematical sciences" appear to have lost their "existential scientificity" only and have no troubles in terms of task and method, while the problem with the human sciences and psychology concerns their task and method (presumably, in addition to their "Lebensbedeutsamkeit").²² As for crisis (1), one should repeat that the aim of Husserl's entire discussion of Galilean mathematization is to show that while Galileo identified the real object of physics, material nature, and its basic eidetic structure, due to his objectivism, he nonetheless completely missed its "Seinssinn", and this has paved the way to Hume's skepticism. As to psychology, one would expect Heffernan to apply his earlier general definition to this case and claim that psychology is in crisis because it has lost its existential scientificity. But he cannot do so because Husserl explicitly says that the crisis of psychology invests its task and method and that its history is one of repeated crises (Krisis: 203, 212). How could one claim that Husserl means that psychology repeatedly lost its "existential scientificity"? Now, which of Heffernan's two senses of scientificity is involved in the crisis of psychology, the one introduced in § 1 of the Krisis or the "existential one" supposedly introduced in § 2? Again, the answer is neither.²³ Similar considerations apply to the naturalistic illness affecting the methods of human sciences, which doesn't undermine their scientificity qua theoretical techniques (§ 1), but which bars for them the road to genuine scientificity.

These supposedly different three crises can be understood *in a completely unitary way* in terms of the "unphilosophical character" of the positive sciences explained

²² This, by the way, means that the both-and approach has now turned into an "in some cases one thing-in other cases another" approach.

 $^{^{23}}$ Let us remind ourselves that Husserl, in § 1, *denies* that psychology and the human sciences are in a crisis when considered through the lens of their practical and theoretical success because, at that stage, he has not yet explained what is wrong with their way of setting their task and method.

by Husserl in the last quotation. They all derive from the lack of that scientificity requiring the elucidation of the "*Seinssinn*" of a science's domain, whence its method (sense explicitly mentioned in § 5). The difference is only that the situation in psychology (as in the human sciences) is worse because, contrary to physics, psychology hasn't even clearly identified its own domain, and its overarching feature, intentionality, nor, a fortiori, its "*Seinssinn*" (Husserl, 1959: 233–234).

5 It is illegitimate to include the "*Lebensbedeutsamkeit"* of the sciences in their scientificity

The reader will now wonder whether there is a way to reformulate the both-and thesis so as to address these objections while retaining Heffernan's move to include "Lebensbedeutsamkeit" into scientificity and, thereby, into the crisis-concept. For this, one would have to define genuine scientificity as implying not two, but three levels or, equivalently, to split the philosophical scientificity into two sublevels. A genuine science would thus be not only one having positive scientificity, but also one whose "Seinssinn/Wahrheitssinn" is elucidated by the phenomenological theory of knowledge, and one endowed with the alleged "existential scientificity". One could then (non-trivially) claim that the crisis of European sciences involves both the second (epistemic) and the third (existential) level. This enhanced both-and crisis-concept would sound like this: "The crisis of European sciences consists in the fact that their genuine scientificity has become questionable and this, in turn, means that both their possibility to acquire genuine knowledge of being and to contribute to a philosophy that gives meaning to human existence has become questionable." This version (which I consider for the argument's sake and has not been advanced by anybody) would at least have the advantage of encompassing what the entire extant part of the Krisis focuses on, namely the vicissitudes of "epistemic scientificity" (allowing this pleonasm, again, for the argument's sake), and would thus be rather unharmful. But is it acceptable? No. Let us see why. In this way, we will also deal with point ii) above and show that it is illegitimate to include the "Lebensbedeutsamkeit" of the sciences in their scientificity.

Let us first note that Husserl never explicitly includes "*Lebensbedeutsamkeit*" into genuine scientificity. On the contrary, as we have seen, each such definition is concerned, as the expression itself suggests, with the idea of rationally grounded knowledge of being (*episteme*).²⁴ Furthermore, arguing, as Heffernan does, that the crisis

²⁴ When Heffernan seeks support for his way of distinguishing between "a positivistic sense of scientificity and a philosophical sense of scientificity", he mentions the following passages of the *Krisis*: Husserl, 1976, 60, 69, 102–103, 106, 123, 126–127, 129, 134–135, 156, 168, 176, 178, 182, 185, 218, 259, 264, 274 (2017: 242). These are all the occurrences of the word "scientificity" in *Krisis II* and *Krisis III*, they appear in a variety of contexts, and none of them support Heffernan's thesis. Similarly, his claim that "Husserl's distinction between the *first, restricted*, sense of *scientificity* and the *second, inclusive*, sense of *scientificity* does not coincide with a distinction between *genuine scientificity* and *superficial scientificity*, for scientificity in both senses is supposed to be genuine" (2017: 252) is not supported by the added list of passages (Husserl, 1976, 1–2, 62, 91, 102, 119, 127, 159, 197, 200–201, 203, 217, 219). Let us repeat that Husserl's entire theory of science rests on the tension between the sciences as they are in their positivity (theoretical techniques), and the philosophical task to transform them into genuine sciences.

of European sciences inherits from the crisis of philosophy its existential nature,²⁵ one fails to see that the crisis of philosophy, too, consists in the bankruptcy of its (epistemic) scientificity, as Husserl himself says already in § 1. Obviously, this bankruptcy implies also that philosophy cannot secure a meaning to our life, but this is, once more, a consequence of its dissolution. By the same token, without a scientific philosophy, the positive sciences can neither be truly scientific, nor have a meaning for life.

As we all know, it is always difficult to argue about definitions. However, our previous results about "Lebensbedeutsamkeit" suffice to show why it would be impossible, within Husserl's conceptual universe, to include it into genuine scientificity. Recall that the *definiendum* here is "genuine science". This implies the following criterion: whatever one includes in the concept of genuine scientificity must have a science-theoretical role, i.e., it must belong to the conditions necessary to count as a real science. Let us now consider the three components of "Lebensbedeutsamkeit" in turn. As we have seen, LB_1 is inseparable from scientificity, however, it would be absurd to claim that a necessary condition to count as a real science is the occurrence of a corresponding "Erkenntnisfreude" in those who practice it! This example also highlights that, by claiming that it is illegitimate to include "Lebensbedeutsamkeit" into genuine scientificity, one is not thereby committed to the further claim that the latter can exist without the former. The principled distinction between scientificity and "Lebensbedeutsamkeit" would hold even if the former could only exist in conjunction with the latter, much in the same way as a surface is no less different from qualitative filling for the fact of requiring it. Yet, in the case of LB_2 and LB_3 , I am also committed to the further claim that genuine scientificity can exist without them. We have already seen that a genuine science must not necessarily produce a benevolent technology. To this we can add that the possibility of the latter rests also on the factual "docility" of the correspondent domain of reality to our factual powers. Astrophysics can be brought to the level of scientific genuineness, but, for factual reasons, it does not allow us to shape the universe as we do with our surrounding territory. As for LB_3 , could we not include into the doctrine of genuine scientificity the teleological/ theological eidetic disciplines required for bestowing "Lebensbedeutsamkeit" upon science? The answer is no. True, the goal of philosophical reason in general is also to discover the teleological order of the world, but this is not the ultimate goal of scientific reason at work in the different sciences. Natural scientists cannot aim to discover the teleological order of the world, even though the truths they discover amount to a founding layer of such order. This is because, their disciplines, as we know, exclude in principle all value-predicates. Natural scientists investigate the factual world, not whether it has a teleological sense. Without the latter, their science would not lose its motivation, neither would it degrade to a technique because it would achieve truth, and, pending the condition of genuine scientificity, it would do so in an epistemically rational and transparent way. Even more importantly, the aforementioned eidetic disciplines could never guarantee a priori that the world does have teleological sense

²⁵ "The Krisis of European philosophy means the Krisis of the European sciences. But the Krisis of European philosophy is a Krisis of its meaningfulness for life. Therefore the Krisis of the European sciences is also a Krisis of their meaningfulness for life" (Heffernan, 2017: 254).

beyond what is required for the very existence of science because not all scientifically cognizable world is also what Husserl calls a teleological world (2014: 242), a "*Gotteswelt*" (2014: 203). Nature and history could conspire to slowly and irreversibly turn this world into a perennial nightmare, without thereby losing their transparency to knowing reason.

The last considerations make us realize that between scientificity and "Lebensbedeutsamkeit" there lies an unbridgeable categorical difference that, once more, makes the inclusion of the latter into the former impossible: the former is determined by a set of eidetic, hence a priori disciplines, whose aim is to define an idea, while the second rests also on facts. By virtue of an ideally complete "Wissenschaftstheorie" grounded in transcendental phenomenology and comprising all relevant eidetic disciplines, we may well succeed in founding the rationality of the sciences, and perfectly elucidate their objects, methods, i.e., their idea. Further, we may even succeed in extending the domain of a priori knowledge as to embrace all normative disciplines, thus handing over to humanity the guide it needs in its struggle for reason and sense. However, for Husserl, there is no a priori guarantee that the world will continue to conform itself to the idea of science, nor to allow the existence of moral actions tout court, nor, finally, to exhibit a coherent teleological evolution towards the good. These facts are contingent upon the future course of transcendental facticity. The exclusive focus on Husserl's critique of the positivistic worldview on the grounds that it admits knowledge of matters of fact only and ignores the sphere of rational principles, norms, and values shouldn't make us forget that the teleological sense of the world is not ascertained *in abstracto*, at the level of such principles, but only by means of their application to the matters of fact occurring in nature and history. No a priori consideration can guarantee that this world is scientifically objectifiable, and no a priori consideration can further guarantee that in a scientifically objectifiable world technology is guided by genuine ethical principles, and that nature and history have an ultimate teleological sense beyond what is required by their knowability. The therapeutic power of phenomenology does not reach so far. A priori knowledge establishes only the possibility of sense and removes what makes us blind to it. Thus, while the struggle for sense requires the lofty realm of ideas, it cannot be won there, but only in a factual world forever in the making.

6 Conclusions

It is not the case that a supposed both-and interpretation can combine the insights of two allegedly one-sided "traditional" and "innovative" interpretations. Rather, the situation is the following. Traditionally, most readers have failed to correctly frame the essence and mutual relations of "scientificity" and "*Lebensbedeutsamkeit*", and this has resulted in the wrong interpretations identifying the crisis of the sciences with their loss of meaningfulness for life or including the latter into the crisis-concept. The attempt to annex "*Lebensbedeutsamkeit*" to scientificity falls squarely in this traditional camp. The importance of pinning down the concepts of scientificity and of its crisis correctly becomes manifest as soon as we realize that much of the extant part

of the *Krisis* revolves around scientificity and its relations to the notions of "*Wahrhe-itssinn*/ *Seinssinn*". The term "crisis" may not be there, but its precise sense is.

It is also not the case that Husserl makes a vague or fluctuating use of the word "crisis" when he refers it to different sciences, or to different cultural phenomena. On the contrary, I believe that one can extrapolate from Husserl's texts a general (or formal) sense of the word "crisis" that he applies to all cultural formations (be it philosophy, science, European culture or humanity, etc.). This sense is: "X is in crisis=the teleological idea characterizing X in its true, genuine being has become questionable/ enigmatic/object of scepticism". Thus, if X is philosophy, the teleological idea is the universal, rigorous science of being. If X is a specific positive science, its teleological idea is a complete and genuine scientific cognition of *its* subject matter (and not of its subsequent axiological and teleological re-evaluation, which is a different scientific task). Finally, if X is European culture (or European humanity) its teleological idea is that of a genuine humanity whose life is guided by reason, and, more specifically, by scientific philosophy and its various ramifications.

In general, the crisis-concept describes a situation provoking a "*Besinnung*"²⁶ about our failure to be faithful to what defines our own being. If sometimes Husserl, under the heading of "*Besinnung*" seems to lump together what I carefully distinguish, it is because his considerations are ultimately aiming at the totality of philosophy of which all scientific tasks are moments. To all existential questions (those concerning the teleological/theological sense of the world, human freedom, morality) there correspond specific *scientific tasks*, which find their place in the unity of phenomenological philosophy. What we need, according to Husserl, is not an alleged "existential scientificity" of the positive sciences (or of philosophy in general), but a scientific philosophy able to address all "existential questions" *scientifically*, including those pertaining to the existential significance of the positive sciences and of their findings. All existential questions belong to what Husserl calls the "highest and ultimate questions" of philosophy.

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Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

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