

Leaving the Soul Apart. An Introductory Study

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I.

At the beginning of his *Analysis of Mind* (1921: 10-11), Bertrand Russell proves to be fully converted to *neutral monism*, that is the idea that “the stuff of which the world of our experience is composed is (...) neither mind nor matter, but something more primitive than either. Both mind and matter seem to be composite, and the stuff of which they are compounded lies in a sense between the two, in a sense above them both, like a common ancestor.” According to Russell, in particular, the idea that “the ‘stuff’ of the world is neither mental or material, but a ‘neutral stuff’” plays an important role in contemporary philosophy of science, since it “reconcile[s] the materialistic tendency of psychology with the anti-materialistic tendency of physics” (Russell, 1921: 6). In *The Analysis of Mind*, Russell ascribes that view to William James and the American new realists, but he is well aware that the “neutral monist ‘movement’” has been inaugurated by Ernst Mach (see e.g. Russell, 1927). After having contrasted them in a series of articles for the *Monist* in 1914 (“On the Nature of Acquaintance I, II and

III.” See Russell, 1984), Russell in fact adopts Mach’s and James’ comparable views of the relation of the psychological to the physical, and develops them in order to deal with the mind-body problem (see Banks, 2003: 151 ff.). As for the analysis of mind, the main outcome of neutral monism consists in a strongly anti-metaphysical and anti-essentialistic view of consciousness (or I, or soul), a view that we find clearly stated, for example, in both Mach’s *Analysis of Sensations* (1886) and James’ *Does “Consciousness” Exist?* (1904). In his book from 1921, Russell particularly refers to James’ late criticism of consciousness, and stresses its importance for the studies in psychology. According to Russell, the latter’s claim that “consciousness (...) is the name of a nonentity, and has no right to a place among first principles” (Russell, 1921: 22; James, 1977: 169), is in fact a turning point in the contemporary philosophy of mind, since it leads her to reject consciousness as an entity and thus to reconsider her metaphysical principles. James’ view has been “chiefly held in America” – as Russell properly observes (1921: 22) – but she has a long story behind her, a story that Russell does not take into account and that started in central Europe around 1850.

II.

One of the main features of psychological research as it was carried out in Europe in the second

half of the nineteenth century is the intention of giving psychology the status of a real science, that is a mathematically founded discipline, which is able to furnish the tools to measure the object under investigation. The problem of the scientific foundation of psychology arose at that time due to Kant's reflections in the *Critique of Pure Reason* regarding the issue of the psychological knowledge of the soul as a substance and the philosophical problem related to it of the "community of the soul with the organic body."¹ The attempt of authors active in the first half of the nineteenth century to solve or at least circumvent the difficulties noted by Kant gave rise to multiple solutions, the most effective and most significant of which can be ascribed to Johann Friedrich Herbart and Gustav Fechner. The former developed a system of mathematical computability of the soul, while the second is the father of psychophysics, a discipline based on a neutral assessment of physical and psychic events, focusing in particular on the possibility of measuring sensations.² The contribution of both researchers was undoubtedly important, especially since it constituted a reference for further investigations. These were, however, characterized

by an additional feature. In particular, they had in view the rejection of those metaphysical principles that still characterized psychological studies, for the sake of a more honest "return to Kant." Since the mid-nineteenth century in philosophical and scientific domains people felt the need to return to Kant's epistemology and relinquish the idealist philosophy of nature and, with it, the metaphysical and speculative interpretation of Kant's thought. Authors who belong to the school of Neo-Kantianism – such as Friedrich Lange and Otto Liebmann – and to whom we owe a first reception of Fechner's ideas, have privileged scientific themes in the work of Kant, particularly those relating to problems of psychology and anthropology. They tried, first of all, to grasp Kant's lesson without relapsing into the errors of previous interpreters. Secondly, they kept their investigation up-to-date as much as possible by relying on the most recent results of scientific knowledge.³

A further characteristic feature of German psychology, directly linked with the intention of establishing its scientific foundation, concerns the interest in the physiological investigation of sense organs. Given the difficulty of applying an exact method of investigation to a non-ascertainable object as the soul, reference to the bodily dimension appeared to be an

¹ See Kant (1781/1787: A384, A392-393, and B427). On Kant's view of the possibility of the existence of any "psychophysical problem", see Martinelli (1999: 9-19).

² On Herbart and Fechner see especially Banks (2003: chapters 3 and 6), Heidelberger (1996), Sachs-Hombach (1993), Leary (1980).

³ See Lehmann (1987) and Martinelli (1999: 52-53). On this topic, see also Martinelli's contribution to the present volume.

essential step to provide psychology with a solid foundation. More than anyone else, Herbart struggled with problems relating to the establishment of a scientific study of the soul. At first he rejected Johannes Müller's influential idea that "no one is a psychologist without being a physiologist" (Müller, 1822: 45). In so doing, Herbart gave physiology a subordinate role, privileging instead a purely mathematical quantification of the entities studied by psychology. Herbart's intention of avoiding any form of measurement proved, however, untenable in the eyes of scientists of his time: the mathematical model should, in fact, be applied to anything, that is, the intended quantification could not subsist without measurement. On the other hand, such measurement could be applied to nothing else but sensations, a fact inconsistent with Herbart's theoretical assumptions. Thus, his proposal ultimately failed because of its purely speculative character. Studies continued in the direction of an experimental psychology that could enable an effective measurement of the soul. A further step on this course was made by Fechner, who proposed a scientific procedure to determine quantitatively the relation between psychic experience and measurable external stimulus. More simply, Fechner resorted to the physiology of sense organs to measure sensations, on the assumption that these are nothing but physical evidence of psychic phenomena.⁴

⁴ For a more extensive and comprehensive recon-

III.

It was Ernst Mach who pointed out this transition in one of the writings in which he demonstrated to adhere, at least in the beginning, to Fechnerian psychophysics. In his *Vorträge über Psychophysik* (1863: 204), Mach in fact observed that "the part of the life of the soul which is immediately connected to the organism's physical phenomena has become in recent times accessible to exact research. I mean the sensations." Mach emphasized what I stated above, namely the fact that in psychology one cannot talk about "exact research" with reference to Herbart's mere mathematical quantification; rather, it was necessary for research to make use of processes aimed at the measurement of sensations, and therefore Herbart's mathematical psychology could be accepted only in the light of Fechner's psychophysics.

At the same time, however, Mach noticed the inadequacy of Fechner's solution: according to him, Fechner still pursued the analysis of material phenomena involved in psychic phenomena with the purpose of locating a "seat of the soul," thus upholding a position that was still metaphysical. Conversely, Mach observes that the route taken by psychological research in its development goes in the direction of the soul's disappearance inside the nervous system. Nothing remains of the soul except

struction of this process, see Guzzardi (2010: chapter 2).

its final effect, the fact that it is a principle able to give unity to the manifold, whereas its complete redefinition on the basis of the body leads to a “psychology without a soul” as its necessary outcome.⁵ Mach presents this conclusion in his *Knowledge and Error* (1905/1976: 8), but his anti-metaphysical view of the I is more exhaustively discussed in the *Analysis of Sensations*. In this book, Mach proposes a possible solution for the determination of the relation of the physical to the psychical, without falling into the difficulties raised by psychophysics, but maintaining, at the same time, its fundamental monistic structure. Mach’s proposal consists primarily in

⁵ Before Mach, the idea of a “psychology without a soul” had been expressed by Lange, in the second edition of the *History of Materialism* (1875), taking over what was previously written by Brentano in his *Psychologie vom empirischen Standpunkt* (1874: I, 76). On this topic, see Gori (2015: §§ 3 and 5). Lange’s *History of Materialism* is an important and referential book for late nineteenth-century philosophy of science, particularly for what concerns the topic of this paper. The third part of the second volume is devoted to the way in which the natural sciences have addressed issues relating to *man and soul*. In the chapters on *Brain and Soul* and *Scientific Psychology*, which are included in that section, Lange reconstructs the debate concerning the relation between brain and soul in nineteenth century German psychology, and shows that this discipline was moving towards a scientific account of the problem, understood in the sense of a complete emancipation from the metaphysical traces of scholastic metaphysics (see Gori, 2015: 173 ff.). The idea of a “psychology without a soul” also influenced the Danish philosopher Harald Høffding; on this, see Grigenti’s contribution to the present volume.

admitting as the only reality that of the “elements.”⁶ The latter comprise, for example, colours, sounds, temperatures, pressures – that is, the “ultimate component parts [of reality investigated scientifically] which hitherto we have been unable to subdivide any further” (Mach, 1914: 5-6). These elements do not possess any characteristic in themselves; they may be described in physical as well as in psychical terms depending on the dimension that in each case we are referring to (be it constituted by physical objects outside us – *Körper* – or by our own body – *Leib*). On these basis, Mach formulates his “principle of complete parallelism of the psychical and physical” (Mach, 1914: 60), and claims for himself a position superior to that of Fechner, in an explicitly “anti-metaphysical” sense. Thanks to his conception of the elements, Mach says that the view he advocates

is different from Fechner’s conception of the physical and psychical as two different aspects of one and the same reality. In the first place, our view has no metaphysical background, but corresponds only to the generalized expression of experiences. Again, we refuse to distinguish two different aspects of an unknown *tertium quid*; the elements given in experience, whose connexion we are investigating, are always the same, and are of only one nature, though they appear, according to the nature of the connexion, at one moment as physical and at another as psychical elements. (Mach, 1914: 61)

⁶ On Mach’s notion of “element” see Banks (2003).

Mach rejects the metaphysical foundation of Fechner's psychophysics, but agrees with the idea of overcoming the distinction between a corporeal and a spiritual world, focusing as well on the functional dimension of the relation between both domains. Since there is no physical or psychic phenomena, but only a physical or psychic interpretation of them, it does not make sense, in scientific research terms, to take into account anything else except the way in which the elements are assembled. By focusing in turn on relatively more stable connections, it is possible to define the "metaphysical concepts of 'body' and 'I' (matter and soul)" (Mach, 1914: 40), which in Mach's system clearly lose the metaphysical sense of an independent subsistence of their component elements.⁷

In the light of these observations, it is possible to briefly address the specific issue of the I in Mach. According to this perspective, the I is not anything beyond the multiplicity of elements that are related to the body (*Leib*); its origin is purely logical and derives from the demand of unity for the purpose of recognition. By means of the determination of a soul (Mach explicitly relates the psychological unity to this notion), it is, in fact, possible to identify a per-

⁷ We can easily see how this complete elimination of the dualism between body and I, matter and soul, would have inspired the contemporary investigations of the mind-body problem. The idea that there is no substance subject behind our brain activity is in fact revolutionary, and offers a quite new perspective on that topic.

son as such while observing her changes. The need to orient itself leads the intellect to build a unitary reference which may be used to give a name to the most persistent content of a complex of sensations (elements). There is nothing beyond this purely practical process. The I, as well as the physical bodies (*Körper*), lose for Mach their traditional metaphysical value since it is not possible to identify a "real" and material substrate that remains once an object is deprived of all its properties. Both the bodies and the I are simply a thought-construction; they are "only makeshifts, designed for provisional orientation and for definite practical ends" (Mach, 1914: 13).

Furthermore, in his analysis of the I, Mach pays particular attention to the ontological primacy of the elements in what concerns the purely nominal unitary complex of notions developed by the intellect. The fundamental psychological concept is then to be defined starting from the formation of an "ideal mental-economic unity," whose function is to bring together "elements that are most intimately connected with pleasure and pain." "The delimitation of the ego," continues Mach, "is instinctively effected, is rendered familiar, and possibly becomes fixed through heredity" (Mach, 1914: 22-23). On a strictly ontological basis, the complete dependence of the I from the elements demonstrates the illusory character of "its" metaphysical value. The elements, in fact, represent the "material" that, once connected, constitutes the

individual soul; without the former there would be nothing to delimit (Mach, 1914: 23-4). On the basis of this monistic conception, it is impossible to maintain the integrity of the alleged psychical unity, as has been done in the past by science (Mach, 1914: 26-7). The I is in fact lost in the (impermanent) connections between elements, and it is thus necessary to abandon any pretension of ascribing an autonomous existence to it. As Mach famously argued (1914: 24), “*das Ich ist unrettbar*” – “the I cannot be saved”!

IV.

This attitude towards the *ego* can be found also in William James, whose view of thought and consciousness has been deeply inspired by Mach’s *Analysis of Sensations* (see e.g. Thiele, 1978 and Ryan, 1989).⁸ The simi-

⁸ As Erick Banks stressed (2003: 143), Mach’s influence on James “was direct as could be. James and Mach worked in some of the same areas of sense physiology and were thus familiar with each other’s writings in a technical field long before they become acquainted with each other’s philosophical views. (...) Their correspondence probably began in the middle 1870,” and they personally met in 1882. Moreover, we know that James read – and particularly admired – both the first and the fourth edition of Mach’s *Analysis of Sensations* (1886 and 1903. See Ryan, 1989: 51 ff.), and that he also read the *Mechanik*, the *Wärmelehre*, and the *Populärwissenschaftliche Vorlesungen* (which Mach dedicated to him). These books had great influence on James,

larity between Mach’s and James’ dealing with consciousness and the Self is particularly clear if we consider the path that leads from the *Principles of Psychology* (1890) to *Does “Consciousness” Exist?* (1904). James’ starting point in the 1890 book was the naive dualism of common sense, according to which “reality can be divided into ‘me’ and ‘not-me’, [and] all my thoughts are ‘owned’ and are ‘mine’” (Edie, 1973: 328). This dualism is gradually destroyed by James, as far as he works out a notion of consciousness that coincides with the stream of “thoughts themselves” (James, 1890: I, 291 ff.).⁹ The main problem, for James, is that when we turn to consciousness we do not find an entity distinct from its objects, but only a cognitive “function” of having objects. Moreover, when I examine the objects which I call “mine” or “me”, I find that their unity consists in their all being related to my experience of being embodied in a place (Edie, 1973: 330-331). The question about what do I discover if I distinguish the “empirical” self, the “me” as it is experienced, from the *ego* conceived as an active and emotional source, is bound to remain unanswered (see James, 1890: I, 300-1). That leads James to “reject the theory of a ‘substantial soul’ because the soul (...) cannot be experienced”, and to

who frequently referred to them during his lectures (see Thiele, 1978: 173).

⁹ Ryan (1989: 52) particularly stressed the influence of Mach’s 1886 treatise on the chapter “The Stream of Thought” that James included in the *Principles of Psychology*.

adopt a “non-egological theory of consciousness” (Edie, 1973: 334). According to James, consciousness is not an entity juxtaposed to the other she knows, but only the function of objectification. Furthermore, she “can be fully described without supposing any other agent than a succession of perishing thoughts, endowed with the functions of appropriation and rejection, and of which some can know and appropriate or reject objects already known, appropriated, or rejected by the rest” (James 1890: I, 342).

James’ argument in the *Principles of Psychology* is quite close to Mach’s discussion of the irreality of the Self, and so is the former’s further development of his view of consciousness. As Russell stresses (1921: 22-3), in *Does “Consciousness” Exist?* James in fact adopts a neutral monist conception of mind, thus rejecting consciousness as a first principle of psychological inquiry. In that essay, James in particular explains that what used to be the soul has gradually been refined down to the Kantian “transcendental ego”, which, according to him, “attenuates itself to a thoroughly ghostly condition, being only a name for the fact that the ‘content’ of experience *is known*” (James, 1977: 169). Thus, James concludes:

I believe that “consciousness”, when once it is evaporated to this estate of pure diaphaneity, is on the point of disappearing altogether. It is the name of a nonentity, and has no right to a place among first principles. Those who still cling to it are clinging to a mere echo, the faint rumour left behind by the disappearing “soul” upon the air of philosophy.

V.

I will not further develop that topic. What interests me the most, in this introductory study, is to stress that both Mach and James focused on an issue as important as problematic. As E. Banks states (and as I have shown above), they both regard the conscious ego “as a second-order ‘functional’ connection among sensations, mental images, feelings, and other phenomena, which has no independent existence as a substance or stage or embedding circumambient medium” (Banks, 2014: 9). In so doing, they deal with a question that is raised by the nineteenth-century psychological inquiries. In fact, the outcome of both Mach’s and James’ considerations fits perfectly in the wider context of nineteenth-century science, which shares with psychology the sense of a lack of metaphysical foundations and is engaged in freeing itself from animistic and mythological conceptions that had their origin in the worldview of common sense.¹⁰ As it is well-known, during the nineteenth century, Western thought underwent a radical transformation, witnessing the collapse of the principles on which its knowledge was built: physical investigations revealed a much less definite and unchangeable reality than what was believed, while mathematical studies

¹⁰ It is worth reminding that Mach was among the forerunners of that position. See e.g. Blackmore (1972).

undermined the foundations of Newtonian physics and reshaped the descriptive scope of the Euclidean system, on the basis of which the former stood. Without expanding on a topic that deserves a thoroughly different treatment, I think it is important to emphasize the sense of disorientation experienced by scientists of those times, with which, however, they dealt in a positive way, turning it into a stimulus for a re-configuration of the process of investigation of their own disciplines.

An author who shortly after the mid-nineteenth century became the spokesman for the explanatory problem of modern epistemology was Emil du Bois-Reymond with his two conferences in 1872 and 1880 respectively: *The Boundaries of the Knowledge of Nature* and *The World's Seven Puzzles*. The former is famous for the way it ends, with an “*Ignorabimus!*” that does not leave room for the possibility of surpassing certain cognitive limits and solving certain problems posed by natural reality. One of these problems concerns the discourse relative to our knowledge of psychic phenomena, particularly regarding their relation to the material dimension. Du Bois-Reymond argues that “consciousness [i.e. any mental process] cannot be explained by its material conditions” and that “it will never be explainable (...) on the basis of such conditions” (Du Bois-Reymond, 1886: 117), and continues carrying out a detailed analysis of the historical development of the debate on the relation between body and soul (*Leib und Seele*). His conclu-

sion in this regard is that, since there was no progress in the understanding of mental processes on the basis of their material states, they should be considered, as much as the relation between matter and force, an insurmountable limit of our knowledge of nature (Du Bois-Reymond, 1886: 125).¹¹

Apart from their content, that cannot be discussed in this short paper, those conferences are an important manifestation of the cultural context within which scientific psychology evolved. The latter, in particular, precisely expressed the demand to be defined on a new basis, freeing herself from the remnants of an age-old metaphysics that surreptitiously attempted to introduce something that it could not specify, much less quantify or measure.¹² This is precisely the ontological void that both Mach and James faced in dealing with consciousness and the ego. As I tried to show, their neutral monism is a natural product of their cultural framework – not a necessary consequence of the latter, of course, but nevertheless an outcome of psychological research as it was carried out in Europe in the second half of the nineteenth century.

¹¹ Du Bois-Reymond’s reflections aroused great interest at the time, and references to his conferences can be found in different writings coming from the field of natural history and physiology (see on this Bayerz/Gerhard/Jaeschke, 2007, and Nadia Moro’s contribution to the present volume).

¹² On the issue of “scientific psychology”, that is, an investigation anti-metaphysically oriented, see Gori (2015: § 3), and Martinelli’s contribution to the present volume.

Far from being definitive (particularly for James; see Čapek, 1953), that approach is important insofar as it leads us to debate the mind-body problem critically, that is by making no reference to any metaphysical principle.¹³ Furthermore, what is interesting at the most, from the point of view of the history of philosophy, is not the solution that Mach and James suggested, but rather the question they posed. “Can we save the I?” “Does ‘consciousness’ exist?” These questions are philosophical as much as scientific, theoretical as much as empirical. In dealing with them, we face a problem that pertains to Western thought from its origin; a currently debated topic that has been

particularly stressed during the last decades of the nineteenth century. Neutral monism is only one of the many possible strategies for dealing with the ontologically problematic in psychology that have been developed in the history of contemporary thought, and that are worth considering in order to provide current philosophical investigations with fundamental topics that too many times are neglected or even ignored. Moreover, all these strategies are of the greatest importance for both practical and theoretical philosophy, for they allow us to keep on talking of consciousness, I, or subject, leaving the “soul” apart.

¹³ In *The Analysis of Mind* (1921: 137), Russell – once more inspired by James – argues that “the dualism of mind and matter (...) cannot be allowed as metaphysically valid.” Furthermore (1921: 141), he considers the subject as “a logical fiction, like mathematical points and instants. It is introduced, not because observation reveals it, but because it is linguistically convenient and apparently demanded by grammar. Nominal entities of this sort may or may not exist, but there is no good ground for assuming they do.” In so claiming, Russell completely agrees with both Mach’s and James’ neutral monist view of the subject. As shown above, in the *Analysis of Sensations* Mach in fact sees the I only as “an ideal mental-economic unity, not a real unity” (2014: 24), a thought-construction “designed for provisional orientation and for definite practical ends” (1914: 13). As for James, in the closing remarks of his essay *Does “Consciousness” Exist?* he argues that “the entity known to [philosophers] as consciousness (...) is fictitious, while thoughts in the concrete are fully real. But thoughts in the concrete are made of the same stuff as things are” (James, 1977: 183).

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