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## Hans Driesch and the problems of “normal psychology”. Rereading his *Crisis in Psychology* (1925)

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### ABSTRACT

In 1925, the German biologist and philosopher Hans Driesch published a booklet entitled *The Crisis in Psychology*. It was originally published in English and was based on lectures given at various universities in China, Japan and the USA. The “crisis” in psychology of that time, in Driesch’s opinion, lies in the necessity to decide about “the road which psychology is to follow in the future”. This necessity refers to five “critical points”, namely (1) to develop the theory of psychic elements to a theory of meaning by phenomenological analysis, (2) the overcoming of association theory, (3) to acknowledge that the unconscious is a fact and a “normal” aspect of mental life, (4) to reject “psychomechanical parallelism” or any other epiphenomenalistic solution of the mind-body problem, and (5) the extension of psychical research to new facts as described by parapsychology, for instance. Driesch saw close parallels between the development of modern psychology and that of biology, namely in a theoretical shift from “sum-concepts” like association and mechanics, to “totality-concepts” like soul and entelechy. The German translation of 1926 was entitled *Grundprobleme der Psychologie (Fundamental Problems of Psychology)* while “the crisis in psychology” forms just the subtitle of this book. This underlines that Driesch’s argumentation—in contrast to that of Buehler—dealt with ontological questions rather than with paradigms.

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### 1. Introduction

In 1925 the German biologist and philosopher Hans Driesch, who held a chair of philosophy at the University of Leipzig at that time, published a small booklet entitled *The Crisis in Psychology*. Aged 58, he was at the top of a remarkable career. During the 1890s he had worked in Naples at the Marine Biological Station. His experiments in embryology established the idea of a ‘pluripotency’ of embryonic cells, which was one of the most influential ideas leading to modern biology. At that time, embryology was dominated by the mechanistic theory of Wilhelm Roux, like Driesch a student of Ernst Haeckel. The results of Driesch’s experiments shattered his conviction that the development of living beings could be explained by purely mechanistic principles. He eventually converted, as Mayr (1997, p. 13) puts it, from a convinced mechanist to a vitalist and a “rabid anti-Darwinian”. In 1899 Driesch presented an account of the life processes in genuinely teleological terms in his book *Die Lokalisation morphogenetischer Vorgänge*

(*The Localization of Morphogenetic Processes*), which he declared in the subtitle as “*Beweis vitalistischen Geschehens*” (*a proof for vitalistic phenomena*).

In 1907 and 1908 Driesch delivered the *Gifford Lectures* at the University of Aberdeen on *The Science and Philosophy of the Organism*, which can be regarded as the first comprehensive presentation of his neo-vitalistic ideas (Driesch, 1908). From 1909 onwards he taught natural philosophy at the Faculty of Natural Sciences in Heidelberg (which included psychology). In 1919 he was appointed full professor of systematic philosophy at Cologne and in 1921 professor of philosophy at Leipzig, but he also taught at the Universities of Nanjing and Beijing (1922/23), Wisconsin (1926/27) and Buenos Aires (1928). In 1933 he was forced by the Nazi government to retire prematurely from his chair in Leipzig because of his socialist leanings. He died in 1941 in Leipzig.

*The Crisis in Psychology* was originally written in English. As Driesch reports in the preface, during his stay in the USA he had been invited by Princeton University Press to contribute a volume to its

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scientific series. Although the editors suggested a biological topic (Driesch, 1951, p. 201), he was free to choose the subject. As he writes, he “did not hesitate” to choose the topic of “The Crisis in Psychology”, which “has formed the subject matter of a number of lectures”, which he “delivered during the years 1922 and 1923 in various parts of the world”, namely at the National University of Beijing, at Nanking and at the Imperial University of Tokyo, and, in a condensed version, at Columbia University. I quote from his *Lebenserinnerungen*:

“Mit den Grundfragen der Lehre von Seelenleben hatte ich mich, soweit das Leib-Seele-Problem in Frage kam, ja schon seit 1903 beschäftigt; in der Ordnungslehre und sonst hatte ich die Probleme der Denkpsychologie analysiert, hatte insbesondere den Prozess des so genannten Denkens, das ‘Nachdenken’, als einen unbewussten Vorgang erkannt und hatte auch eine Klassifikation der, um in meiner sich an Rehmke anlehrenden Terminologie zu sprechen, ‘bewusst gehabte’ Gegenstände vorweggenommen und die ‘Elementarien’ aus ihnen herausgeschält. Zu Vorlesungen in China und Amerika hatte ich diese Probleme wieder und immer wieder durchdacht. So war es also nur nötig, die bereits bestehenden Materialien in ein, in der zweiten Auflage der Ordnungslehre bereits vorgezeichnetes System zu gießen.” (Driesch, 1951, p. 201)<sup>1</sup>

“As far as the problem of body and mind was concerned, I had already dealt with the fundamental questions of the science of mental life since 1903; in my *Ordnungslehre* and elsewhere I had analysed the problems of the psychology of thinking, and I had made out, in particular, the process of the so-called thinking, of reflection, as an unconscious process. Furthermore, I had carried out a classification of those objects we ‘consciously have’—according to my terminology which follows that of Rehmke—and I had singled out their elementary aspects. For my lectures in China and in America I had reasoned out these problems again and again. Thus, it was just necessary to cast the material already existing into a system which had been outlined already in the second edition of my *Ordnungslehre*.” (My translation, C.A.)

In the same year, namely in 1925, the first German edition of his book was finished published with the title *Grundprobleme der Psychologie* (Driesch, 1926).<sup>2</sup> It was not merely a translation but had been “improved in some respect”, as Driesch writes in his *Lebenserinnerungen* (1951, p. 202). In 1929, a revised second German edition of this book was published. The title of the German translation was *Grundprobleme der Psychologie (Fundamental Problems of Psychology)*, while *The Crisis of Psychology* forms just the subtitle of these editions. This underlines that Driesch’s argumentation—in contrast to that of Buehler (1927/2000)—dealt with ontological questions rather than with paradigms. I will return to this point later. Before I begin an interpretation of these arguments, I will try to give an overview of the main theses of his book. Some remarks about the position of this work in the historical context of the “crisis” debate and about its contemporary reception will close this presentation.

The crisis in psychology of that time, in Driesch’s opinion, lies in the necessity to decide about “the road which psychology is to follow in the future”. This necessity refers to five “critical points”, namely (1) to develop the theory of psychic elements to a theory of meaning by phenomenological analysis, (2) to overcome association theory, (3) to acknowledge that the unconscious is a fact and a “normal” aspect of mental life and not anything “abnormal” or unexplainable by serious science, (4) to reject “psychomechanical parallelism” or any other epiphenomenalistic solution of the mind-body problem, and

(5) to extend psychological research to new facts, for instance to those described by parapsychology (Driesch, 1925, pp. 262–65).

Let us now consider these points in particular.

## 2. From a theory of psychic elements to a theory of meaning

In the introduction to his book, Driesch argues that

“... in order to define psychology accurately, we must start with a certain most fundamental statement upon which all philosophy (and science) rests, namely, the irreducible and inexplicable primordial fact: I have something consciously, or, in brief, I ‘know’ something, knowing at the same time that I know.” (Driesch, 1925, p. 1)

It is exactly this fact which, as Driesch argues, cannot be grasped by those paradigms of psychology which dominated in the era of its emergence as a scientific discipline, namely “psychophysics and the theory of association” (*ibid.*, p. 3). What Driesch calls the “theory of the materials” formed “almost the whole content of the psychological text-books”, while “the so-called higher functions of the mind” were widely neglected. Driesch mentions Eduard von Hartmann, William James and Henri Bergson as authors who “share the honor of having first seen the impossibility of the psychology of their time” and thus initiated “modern normal psychology”. But these writers were “critics rather than builders”, they just prepared the ground from which the paradigmatic turn could take off, which led to a new psychology of the modern age. This new psychology, according to Driesch, is characterized by its focus on the aspects of meaning and significance. I quote:

“In fact, a psychology which does not explain *meaning* and *significance* in the single acts of psychical life and which does not take sufficient account of the enrichment of that life in meaning and significance during its progress in time, is a psychology that leaves unexplained the main points. The older psychology explained neither the one nor the other. For the only conscious contents which it registered were so-called sensations and images, and its only law was the law of association, i.e., a law formed in analogy to mechanics.” (*ibid.*, pp. 5–6)

At this point the question arises: What about Wilhelm Wundt? Neither the accusation to have neglected the “so-called higher functions of the mind” nor the accusation to have adhered to a blind and mechanical association theory is true for Wundt if we consider his work in its totality. It is remarkable that Driesch did not mention Wundt in any passage of the original version of his book on *The Crisis in Psychology*. It may be an indication that Driesch became aware of this omission, when in the later German edition (which appeared just some months after the English original) he inserted a chapter entitled *Einige Worte über psychische Ganzheit (Some words on psychic wholeness; Driesch, 1926, p. 61)*, where Wundt is explicitly mentioned. In this chapter Driesch refers to the emergence of Gestalt psychology (which he had also just marginally mentioned in the English original) and argues that Ehrenfels in his theory of perception and with his concept of *Gestaltqualität*, had explicitly referred to what had been “perhaps vaguely seen” at that time. In a footnote Driesch explains who he had in mind when he wrote this sentence. The text of this footnote is:

“Man denke an Wundt’s ‘Schöpferische Synthese’, die freilich garnicht zu seiner auf Assoziation gebauten theoretischen Grundlage passt“ (*ibid.*, p. 63)

<sup>1</sup> Johannes Rehmke (1848–1930), whom Driesch mentions in this context, taught philosophy at the University of Greifswald. The quotation probably refers to Rehmke’s *Die Welt als Wahrnehmung und Begriff (The World as Percept and Concept)*, Berlin 1880.

<sup>2</sup> Driesch himself dated the publication of this edition in his *Lebenserinnerungen* (1951, p. 202) by 1925.

(Think of Wundt's 'creative synthesis' which admittedly does by no means fit with his theoretical foundation which is based on association; my translation, C.A.)

But this is the only reference to Wundt we can find in Driesch's *Crisis in Psychology*. This is in fact remarkable and requires explanation. My thesis is that this omission of Wundt's ideas does not mean neglect. Driesch of course knew the work of Wundt, but for him, the biologist and natural scientist, Wundt's *Völkerpsychologie* was not a "second psychology"—as Michael Cole (1996) called it—but some kind of ethnological or historical material, which he (Driesch) could not bring into accord with the elementaristic approach to the basic phenomena of mental life Wundt had pursued in his experimental work. He aimed at a holistic psychology and not at the supplementation of an experimental psychology by a philosophical superstructure. In this way he misunderstood the unity of Wundt's work but, as we know, this misunderstanding has a long tradition in psychology (cf. Jüttemann, 2006).

Driesch criticised Wundt's elementaristic approach in a similar way as Gestalt psychology did at that time. This is underlined by the fact that in the later editions of his *Crisis in Psychology* authors of the Gestalt tradition were increasingly referenced. The question remains why important representatives of this tradition had not already been quoted more intensively in the original edition of this work. A trivial reason for this may be that Driesch was travelling around the world in these years and did not completely realise what was happening in German psychology.

Another crucial aspect of Driesch's argumentation lies in his emphasis on meaning and significance. In the summary of his "theory of psychic materials" he stated that his own approach differed "fundamentally from almost all earlier psychological systems in two different respects", the first of which is that "meaning, which had been overlooked in its objective character in almost all former systems, had its proper place in the theory of elements: I have consciously various forms of meaning or significance just as a I have 'green' or the note 're'". (Driesch, 1925, 42). The argumentation Driesch used in this context sometimes is very similar to that of Jerome Bruner in his work *Acts of Meaning* where he attempts to reconstruct the original intention of the 'cognitive turn'. Thus the objective Driesch conceptualised for a future psychology beyond Gestalt psychology shows some interesting parallels to those of the cognitive turn. However, there is also an important difference: In the second part of this argument Driesch stresses that these 'acts of meaning' are not conscious activities: "Psychical doing, becoming, performing, and, therefore, thinking and willing also, taken as processes, do not belong to the conscious sphere" (ibid., p. 42).

This means: On one hand Driesch supported a reorientation of psychology from a science of mental elements and structure to a science of psychic processes (which in principle was also intended by Wundt despite the fact that his approach was regarded as "structuralism"), but on the other hand he did not think that the analysis of psychic processes could be pursued within the limits of traditional 'Bewusstseinspsychologie'. What Driesch, in this context, discusses under the title *The dynamics of inner mental life* (ibid., p. 43), is explicitly not bound to conscious processes. "Causal conception of the temporal sequence of conscious contents would be a rather easy matter", Driesch argues (ibid.), "if the connection between a content A and the next content B were itself consciously possessed as a causal, a dynamic, connection". But this is not the case. What we refer to by the term 'stream of consciousness' does not exist as a primordial

fact in consciousness: "I now have this content, and then that, etc. But I have nothing between this and that and that" (ibid., p. 46). Thus, "the very first step in causal psychology leads us right out of the realm of our immediate 'possessions'" and forces us to introduce the concept of 'unconscious states'. In this context, Driesch argues, the principle of 'association' had to be introduced to "traditional psychology" as the general principle "according to which the change from the unconscious state of a certain something into the conscious state is due" (ibid. p. 48; all italics in this paragraph are taken from the original). But since "the whole course of [psychical] life is directed towards an increase of meaning", association theory "is absolutely unable to explain these important features of psychical life", because "it has nothing to do with meaning at all" and "is absolutely incapable of explaining the origin of any new content" (ibid., p. 51 f.). Thus, the transition to "modern" psychology includes the overcoming of association theory because "all sorts of quasi-'mechanistics' are to be given up, if psychical life is to be explained as it really is".

### 3. The overcoming of association theory

In order to overcome the pitfalls of association theory, its "static" principles are to be replaced by "limiting and directing agents", that means "unconscious causal psychical factors" as an indispensable presupposition of "a complete theory of psychical life" (ibid., p. 54 f.). The need for a theory of this kind arises, according to Driesch, when we go beyond the 'primordial fact' ('Ursachverhalt'), *I consciously have something*—which refers to the phenomenological level—to the extended statement "that the something which I consciously have is ordered" (ibid., p. 73). The fact that *I consciously have a something in order* leads from phenomenology to psychology, since, as Driesch argues, "my soul is the unconscious foundation of my consciously having", it is "posited" in the service of order" (ibid.). Since this is the core attribute of the soul, "there is only one concept in normal psychology which is quite final: *My ordered and ordering unconscious soul*", and all other concepts of "ordinary psychology such as production, association, limiting factors, directing factors or tendencies, and so on, become concepts of only secondary and, I might say, preliminary value" (ibid., p. 75).

Association theory—so Driesch's conviction in a nutshell—was a wrong answer to the central question of psychology, namely how order is generated in the mind. It is exactly at this point where Driesch inserted the additional chapter *Einige Worte über psychische Ganzheit* (*Some words on psychic wholeness*), which I have already mentioned. Here we find some further explanations in the German edition that are missing in the English original: "Eine Dynamik auf dem Boden des Summenbegriffes, also eine Dynamik, welche alles die Resultante von Teilkräften sein lässt, wie die Assoziationstheorie, kann solche Erklärung nie und nimmer leisten",<sup>3</sup> Driesch argues (ibid., p. 62). In this respect Driesch explicitly supports Krueger's argument against the Gestalt psychologists Köhler and Wertheimer: They had spoiled the pure concept of psychic wholeness by quite vague physiological and, in the end, physical and chemical hypotheses in order to save an irretrievable psycho-physical parallelism in a new form.<sup>4</sup>

Thus, with respect to the different interpretations of structure and wholeness of the Berlin and the Leipzig tradition, Driesch clearly favoured the Leipzig variant.

If we consider this in light of the following historical development, the crisis in psychology was not solved in the way that

<sup>3</sup> "A dynamics on the base of the sum concept, that means a dynamics which conceives all as a resultant of partial forces, will never achieve such an explanation" (my translation, C.A.).

<sup>4</sup> "Etwas grundsätzlich Neues kann ich daher in der Strukturpsychologie von Köhler und Wertheimer ebenso wenig finden, wie Krüger es in ihr zu finden vermag. Ich bin vielmehr der Ansicht, dass die Genannten durch recht vage physiologische, und zwar letztlich physikalisch-chemische Hypothesen den reinen Begriff psychologischer Ganzheit getrübt haben—offenbar um den unrettbaren psycho-physikalischen Parallelismus in neuer Form zu retten." (ibid., p. 63)



Driesch proposed, and this is probably good. It would not be fair to make a direct association between Driesch's concept of 'wholeness' and the political misinterpretations of this concept in the following Nazi era, but it has to be stated that the aura of unconsciousness and mystery that adhered to this concept as well as to Driesch's central construct of "the soul" was not an innovation from which a new psychology could have originated. While Driesch's argumentation sounds quite modern with respect to his first aspect of the "crisis in psychology", namely the plea for a psychology of sense and significance, with respect to the second point his vocabulary was outdated even at that time. He surely was right in his criticism of associationism but this criticism was shared by a vast majority of the scientific community, even by Wundt. But the alternatives he presented can be traced back to pre-empiric phases of psychology and could not widely be accepted by contemporary science.

With respect to another argument which Driesch puts in this context I would rather agree with him, namely when he states that traditional psychology had strengthened the boundaries between psychology and related disciplines like history and sociology. For Driesch—similar to the position of Dilthey—history and sociology are, "taken in the widest sense of the words. . . to a great extent, perhaps even completely, applied psychology" (Driesch, 1925, p. 82). Thus they need psychology as a basic discipline. But, he continues,

"... of course they need only a psychology of which they really can make use. Now the older psychology, with its very primitive theory of materials, and its unsatisfactory association theory, could not be used or 'applied' by those sciences at all. Historians and sociologists, therefore, did not care much for psychology, indeed they very often had a decidedly hostile attitude toward it. And they were right." (ibid., pp. 82–83)

In contrast, "the modern psychologist not only offers to the historian a sound psychology" but "may even dare to say that the work of the historian and sociologist may be helped enormously by such an application" (ibid., p. 83). Although Driesch probably overestimated the role of psychology in this context and in particular the applicability of his own approach, his diagnosis is true that psychology and historical disciplines rather diverged in this era of early experimental psychology. In my opinion, this has been a desire until recently: It was not before the emergence of modern cultural psychology that these boundaries were put on the agenda and that integrating concepts had been developed.

#### 4. The Unconscious as a "Normal" Aspect of Mental Life

It is already in this context that Driesch mentions "another branch of modern psychology which is to be of great importance for history and the sciences connected with it", namely "the psychology of what is generally called the subconscious" (ibid., p. 83). The third point of his 'crisis' agenda deals with the role of the unconscious within the context of 'normal psychology'. In his book on the *Crisis of Psychology* Driesch goes into this in more detail in the 6th chapter of the section *The Organization of Mind*.

This chapter starts with some critical remarks on contemporary theories and concepts, in particular on the concept of mental acts of Husserl and Brentano and on the "so-called 'understanding' psychology", which I cannot discuss in detail in this context. Unlike Brentano, Driesch presupposes that "the soul is in the main an unconscious being" and that "only part of it is conscious in the form of the 'I have something'" (ibid., p. 169). But since "the dynamic soul is always working as a whole" (ibid., pp. 170–171), "all dynamic

concepts applied by ordinary experimental psychology, such as association, 'determining tendency', etc., are only of preliminary kind and must never overshadow the basic wholeness" (ibid., p. 171).

This is the reason why Driesch comes to the conclusion that acknowledging the unconscious as a fact and a "normal" aspect of mental life has to be seen as an important 'critical' decision for the development of a future psychology. In this context, the term 'unconscious' denotes "a *something* which, though belonging to the physical sphere and not being physical, is yet not a something which 'I have' or 'have had'" (ibid., pp. 191–192); it is, therefore, a contradiction to speak of 'unconscious ideas'.

In the 6th chapter of the section *The Organization of the Mind* which is entitled *On Certain Modifications of Mental Life*,<sup>5</sup> Driesch gives an overview of phenomena that form the subject matter of psychology of the unconscious to be further developed within a future psychology, namely dreams, hypnosis, 'physical' phenomena like hallucinations, illusions, suggestive or autosuggestive influences or posthypnotic suggestion and, finally, the phenomenon of dissociation of the personality. Another important phenomenon mentioned by Driesch in this context, is 'co-consciousness', defined by Driesch as "the evident existence of two Egos related to one soul (and body) at the same time" (ibid., p. 211). Driesch derives this evidence from observations in hypnosis experiments but also from phenomena like automatism.

The chapter is summed up in a list of fifteen 'states of the soul', reaching from 'the Ego in waking' on to different modifications and combinations of modifications of mental states. All these states, Driesch argues, are 'abnormal' only insofar as they are not frequent in everyday life. But they reveal potentials of the soul that can play an important role within the 'normal' functioning of mental life. Driesch was convinced that "in every science the problematic side is more important for its advancement than the side which is well established and more or less definite" (ibid., p. 242), and it was mainly for this reason why Driesch pled for an integration of these processes into a theory of the organisation of mind as a core concept of a future psychology.

In the German edition, Driesch adds a practical reason for the integration of the unconscious into the objectives of psychology by pointing again to the applicability of psychological theories to historical and sociological sciences:

"Alles, was mit dem *Unterbewussten* zusammenhängt, zumal scheint mir nun historisch und soziologisch von *allergrößter* Bedeutung zu sein. Hier wahrlich kann mehr *erklärt* werden als auf dem Boden einer angeblich 'verstehenden' Psychologie und Geschichtsschreibung, welche ja eben, weil die Wirkung von 'Komplexen' eine so ganz ungeheure ist, doch nicht eigentlich 'verstehet.'" (Driesch, 1926, p. 185).

(Whatever touches upon the *subconscious* seems to be of utmost importance in the historical and sociological context. Indeed, more can be *explained* on this basis than by a supposedly 'understanding psychology' and historical research, which—due to the enormous effectiveness of 'complex' interactions—does not really 'understand' [my translation, C.A.]<sup>6</sup>.)

From a recent point of view we may state that Driesch's claim for a broader acknowledgement of subconscious aspects of mental life was partially fulfilled, but in a different sense. Modern theorising in psychology takes subconscious processes into account but has widely abandoned the search for a systematic position of 'the unconscious' within the architecture of 'the soul'. Driesch rightly refers to psycho-analysis as an impetus that stimulated attention

<sup>5</sup> In the German edition, this text forms the 7th chapter because Driesch had inserted a new chapter 4, entitled *Die Wahrnehmung im Rahmen des gesamten psychophysischen Problems*.

<sup>6</sup> I thank Josef Perner for his advice in translating these sentences.

to unconscious mental processes but the integration of these processes into modern psychology in general did not happen in psychoanalytic terms. We may concede that Driesch rightly pointed to a ‘critical’ element of the development of psychology in the early 20th century, but offered the wrong solution. His vitalistic conception of a “whole and whole-making soul” (Driesch, 1925, p. 90), strictly separated from ‘nature’ did not fit the general trend of sciences in the 20th century.

### 5. The Rejection of “Psychomechanical Parallelism”

Let me now come to the fourth aspect of the crisis in psychology mentioned by Driesch. It concerns the problems of psychophysics which leads him finally to the relation of conscious and unconscious processes in mental life. He begins the discussion by pointing to an essential difference between his conception of psychophysics and that of ordinary textbooks in psychology: While most of the textbooks “stand on a ‘naïve-realistic’ platform” and “regard ‘my body’ as an accepted, self-evident fact”, which produces “‘sensations’ in the psychophysical sense”, the starting point of Driesch’s psychology is “the change in time of *my having something consciously*,...leading ultimately to the concept of *my soul*” (Driesch, 1925, p. 93). Thus, psychophysics as “the science which tries to investigate all [...] functional dependencies” between “my consciously having a certain complex of *pure suchness* and the quasi-independent happening in certain parts of my body” cannot provide a fundamental explanation of the functioning of mental life because it regards, at least in the “naïve-realistic” form as presented in most text-books in psychology, ‘my body’ as an accepted, self-evident fact”. Since this approach takes “‘my body’ [...] as ‘existing’ without asking what it means” it represents just a supplementary means of explanation: Driesch introduces psychophysics “only because we are forced to do so by certain facts, namely, the impossibility of explaining the appearance of *all* conscious contents on the foundation of the concept of *my soul* with its inner dynamics” (ibid., p. 92–93):

“The older psychology began with sensations coming from the action of things, while modern psychology begins with my having all sorts of contents including significance, and then proceeds, because it is compelled to do so in the service of order, to create the strange object, ‘my body’, and to posit the concept of sensation in a rather complicated way.” (ibid. p. 94)

This sounds very similar to the Anti-Cartesian attitude and the struggle against the sensation concept which we can find in the writings of phenomenological psychology; I take Erwin Straus’s *Vom Sinn der Sinne* (Straus, 1956/1978; English: Straus, 1963) as well as Maurice Merleau-Ponty’s *Phénoménologie de la perception* (1945; English: 1962) as examples—Driesch himself refers to Henri Bergson in the first chapter of *The Crisis in Psychology*. But there were also other authors who had already argued in a similar way some years previously, for example Jakob von Uexküll, a contemporary of Driesch in the founding of modern biology. Thus, also these reflexions were not entirely new to the contemporary theoretical discussion. I omit the rather lengthy description and discussion of particular phenomena like Müller’s ‘Law of specific sense energy’ in the context of this section of the book. The most important chapter of this section deals with the traditional problem of mind and body. This problem, according to Driesch, forms one of the aspects of the ‘crisis in psychology’ because the dominating solution of this problem during the last few decades of the nineteenth century, namely psychophysical parallelism or—as Driesch prefers to call it—“psychomechanical” parallelism—had lost its status as “the official theory as to the relation between mind and body” (Driesch, 1925, p. 115).

The parallelistic theory, according to Driesch’s interpretation, can be characterised by the assumption “that there is no state or event in the soul and, therefore, no conscious state either, which is not accompanied by physiochemical or, in short, mechanical states or events in the brain, the latter being regarded as a true mechanistic system” (ibid.). In this context Driesch distinguishes two main varieties of parallelism, namely epiphenomenalism and panpsychism. Epiphenomenalism, according to Driesch’s interpretation, can be characterised by denying all unconscious “psychical events” and reducing them to mere mechanical events in the brain: “only here is there becoming and causality” (ibid., p. 116). On the basis of this assumption “the continuity of the psychical breaks down completely”; it is nothing but an addition, a rather luxurious one at that, to certain states of a given dynamic mechanism” (ibid.). This was absolutely contrary to the central role Driesch ascribed to “unconscious causal psychical factors” in his “theory of psychical life” (see above). Panpsychism just enlarges this assumption in the other direction: there is also “nothing physical without psychical correspondence” (ibid.).

In the following paragraphs Driesch brings forward a long chain of arguments against “psychomechanical parallelism” (which he had already discussed more in detail in his book *Leib und Seele*, 1923). Firstly, he argues that psychomechanical parallelism would imply “that there would be a strict correspondence, a sort of photographic identity, between memory images and their originals, i.e., perceptions”, which is not the case. Secondly, parallelism cannot explain the recognition of the same in various absolute expressions, for example a melody as the same if heard in a different key. Thirdly, “mechanical parallelism” could only use the theory of association “to explain what happens along its psychical parallel” (Driesch, 1925, p. 125) because this “parallel” works mechanically, which was the main argument of Driesch against this theory. Fourthly, psychomechanical parallelism implies that “the nature of human action” is “a physical process” and “the acting man” is just “matter in motion” (ibid., p. 128), which would exclude all psychological concepts from explanation. Finally he argues that “the general structure of the physical differs in a most fundamental way from the structure of the psychical [...] and it is scarcely understandable how two communities with such structural differences as described could be ‘the same’ at bottom” (ibid., p. 140). Again Driesch argues in this context that “there cannot be any doubt that in the sense of the theory of ordinary psychomechanical parallelism, the concept of ‘the psychical’ must exclusively be taken as meaning ‘the conscious’” (ibid., p. 139). In fact, it seems to have been the main reason of Driesch’s aversion to psychophysical parallelism that “there are many parallelists who deny altogether the existence of the ‘unconscious psychical’” (ibid.).

Not all of his arguments are convincing and could be discussed in detail. In any event, the result of Driesch’s analysis was that psychology had lost its dominating epistemological doctrine and that this is one of the aspects of its ‘critical’ situation.

Whether we accept this analysis or not—the interesting point remains: What are the alternatives and in which direction should modern psychology decide to go? Driesch’s answer is unclear: That psycho-mechanical parallelism has been refuted does not form a compelling argument to accept the competitive theory of “so-called psychophysical ‘interaction’”—at least “not without great restrictions” (ibid., p. 145). The resistance of Driesch to the concept of ‘psychophysical interaction’ comes mainly from the fact that he conceived nature and mind as “two spheres of empirical existence which are absolutely separated from one another and, therefore, are absolutely unable to act upon one another in a causal way” (ibid., p. 145–146). Since interaction can only happen *within* both of these spheres, Driesch postulates such an interaction only *within* the sphere of nature, using thereby the term ‘entelechy’, the use

of which is closely connected with his theoretical switch from ‘machine theory’ to vitalism.<sup>7</sup> In his *Lebenserinnerungen* (1951, pp. 109–10) Driesch argues that the results of his experiments with sea-urchin eggs, namely that “the examined organic object remained the same with regard to its achievement ability” despite a partial destruction of its material integrity, could not be explained on the basis of mechanical processes but required the assumption of a “nonmechanical causal agent”, namely “entelechy”.<sup>8</sup> It is exactly the same argumentation we find in his *Crisis in Psychology*:

“Like all organic bodies it [sc. my body] is governed by a non-mechanical agent, entelechy. ... Now there is, firstly, ‘interaction’ between the ‘entelechy’ and the matter of my body, and vice versa. This interaction occurs in the realm of nature, for ‘entelechy’ is a factor in nature. But, secondly, the working of the ‘entelechy’ of my body is ‘parallel’ to the working of ‘my soul’, certain states of which were parallel to ‘my conscious havings’.

Thus we have before us interaction in the purely natural sphere, i.e. between entelechy and the matter of my body; and three ‘parallels’, namely the working of my ‘entelechy’, the working of my soul and, as far as certain states of the soul are concerned, ‘my conscious havings’.” (Driesch, 1925, p. 146–147)

Thus, Driesch propagates a synthesis of parallelism and interactionism as a proper solution of the mind and body problem in order to form a solid philosophical basis for a future psychology. We could discuss now whether this solution avoided or combined the weaknesses and shortcomings of its components, but this is not my aim. It is evident that the history of psychology did not follow Driesch’s suggestions. Driesch himself confessed that his theoretical construction “sounds very artificial” but justified it by stating that “logic is a very artificial instrument, so to speak”. This argument, however, was not sufficient to convince the scientific community that the decision on models like this would be decisive for the future of psychology. Another obstacle for general acceptance may be seen in the fact that his central concept of ‘entelechy’ remained imprecise, even in the more elaborated way he presented it in his *Gifford Lectures* (cf. Freyhofer, 1982, p. 66).

## 6. Parapsychology as a Central Topic of “Modern Psychology”

As we saw in discussing the third point of Driesch’s ‘crisis’ agenda, namely the problem of the unconscious, Driesch relates this aspect of mental life closely to paranormal phenomena. Consequently, the fifth and last point of his ‘crisis’ agenda discusses the necessity to include parapsychology within the central topics of modern psychology. This is not unusual because quite a few renowned scholars of that time dealt seriously with this topic—I just point to Max Dessoir (1917), Frederic Myers (1903), C. D. Broad (1962) and William James.

For Driesch, the “factuality” of paranormal phenomena seems to be beyond doubt: He is convinced that there is enough evidence for the reality of such phenomena so that their existence cannot be called into question any more. He is so sure with respect to this point that he dismisses any sceptic with pure irony:

“Many people, some years ago, seem to have decided this question, and there have even been some who have maintained that so-called ‘psychical’ phenomena ‘never can be and never will be’. Such people, who were with God when he created the world, and who know what He was able to do and what not, never die out.” (Driesch, 1925, p. 229)

Since the existence of these phenomena seems sufficiently based on evidence, Driesch confines himself to a classification

and description of various types of paranormal phenomena, stressing in particular telepathy, mind reading, clairvoyance, telekinesis and materialisation. I am not going to discuss these paragraphs in detail either, but focus on the question why Driesch considered the inclusion of parapsychology as a ‘critical’ requirement for the development of modern psychology.

In this respect, Driesch is unclear. He does not give particular reasons for this view, maybe because he had already done this in the chapters on subconscious phenomena where paranormal phenomena had been explicitly included. But there is an implicit explanation by the fact that the chapter on classification of paranormal phenomena is immediately followed by an extensive chapter on the problem of freedom. Driesch begins here with a broad philosophical discussion on freedom and the relation of freedom and consciousness—a topic he extended once more in the first German edition and again in the second—but finally returns to phenomena of parapsychology, namely hypnotism and autosuggestion and even prophecy (Driesch, 1925, pp. 229–242). It seems to me that for Driesch, these phenomena represented interesting empirical instances for a psychological investigation of the question of freedom, a question he had thoroughly dealt with some years before in his book *Das Problem der Freiheit* (1st ed. 1917; 2nd ed. 1920). Thus, in my opinion, the interest of Driesch in paranormal phenomena was an indirect interest, motivated by his search for a psychological explanation for free will and the freedom of human action. However, his interest was strong enough to engage in scientific communities particularly devoted to the investigation of paranormal phenomena, like the (British) *Society for Psychical Research*, which he presided in 1926/27.<sup>9</sup>

I will just mention that the final chapter of *The Crisis in Psychology* deals with the question of immortality. I will omit this chapter because it has no relevance for our crisis debate but may throw additional light on the intentions of this book. For Driesch, the term ‘crisis’, following its etymological roots in ancient Greek, meant a situation of decision. From his vitalistic background, Driesch was deeply suspicious of all attempts to reduce ‘psyche’ or ‘soul’ to a material phenomenon and to limit it to the realm of nature and necessity. In his opinion, psychology had to decide between an inappropriate existence within the narrow boundaries of an experimental ‘natural’ science or “to re-establish the popular view of the psychical and its relation to mechanics”, as Driesch explicitly puts it in the conclusion of his book, and he continues:

“The older psychology, to a great extent at least, had become absolutely alien to mental life as it is experienced by natural men. It ‘explained’ something that did not exist! But modern psychology tries to explain what really is present. The popular view of mental life is deepened by it, but not replaced.” (Driesch, 1925, p. 266)

It is in fact astonishing how the terms ‘older psychology’ and ‘modern psychology’ are used in this context. Whereas the undoubtedly worldwide successful experimental psychology in the tradition of Wundt is denounced as ‘older psychology’, ‘modern psychology’ is conceptualised as a scientific justification of ‘popular’ and undoubtedly traditional concepts. We find an explanation for this remarkable point of view in the following lines where Driesch compares what he calls ‘modern psychology’ with what he calls ‘modern biology’:

“A comparison of modern psychology with modern biology is very instructive and impressive. In biology mechanism is overthrown, just as in psychology mere association is overthrown, with all its consequences. The parallel is, in fact, almost

<sup>7</sup> cf. Churchill (1969), Freyhofer (1982), Innes (1987). For a recent (and rather enthusiastically approving) reinterpretation of Driesch’s entelechy concept see Bennett (2010).

<sup>8</sup> I use the translation of Freyhofer (1982), p. 35.

<sup>9</sup> Driesch mentions this event in his *Lebenserinnerungen* (1951, p. 214) as well as his membership in the international committee of the 3rd International Congress on “Recherches physiques” in Paris 1928 (ibid., p.238).



complete: In psychology elements which are not of the ‘sensible’ [Footnote: *Anschaulich* in German] kind, in biology elements other than material ones. In both, directing agents, in both: the *unconscious*. Finally, all narrows down to the one very important point: In modern biology and in modern psychology the concept of the *whole* plays a *fundamental* part, while in the older biology and psychology everything was based upon the concept of *sum* and *resultant*. In the place of the ‘sum-concepts’, *association* and *mechanics*, we now have the ‘totality-concepts’, *soul* and *entelechy*.” (ibid., p. 267)<sup>10</sup>

As we know, neither ‘modern psychology’ nor ‘modern biology’ followed the suggestions of Driesch. Of course, mechanistic and elementaristic thinking in both sciences had problematic influence, but there have also been critical voices: in psychology primarily the representatives of Gestalt psychology, in biology scholars like Jakob von Uexküll, who tried to find new explanations. The anti-modernistic turn of Driesch was too radical; his epistemological models were too artificial in order to find a broad consensus within the respective scientific communities.

In the preface of the second German edition of 1929, Driesch reports about “many reviews” of his book in Germany; two of them he emphasises as “very thorough”, namely that of Kurt Koffka (1926) and the—rather provisional—remarks Felix Krueger had inserted as an “excursus” into his essay *Über psychische Ganzheit* (1926) immediately after the publication of the first German edition of his *Crisis* book (Driesch, 1926). Driesch responded to both of these reviews—which he regarded as an “immanent” criticism”, since he was convinced that “Krueger and Koffka in the main share the same stand point” (ibid, p. vii; my translation). The rest of the reviews seemed to him rather irritating and contradictory or even “diverting” (*ergötzlich*). Driesch complains that most of his critics had “succumbed to the error of mixing up my psychology with my vitalism: I am just ‘branded’ as a ‘vitalist’... Indeed, my psychology has *nothing* in common with my vitalism and just relates to it at one point of my reflexion about the mind-body problem” (Driesch, 1929, p. viii; my translation, C.A.).

In this point Driesch is right: It is in fact possible to elaborate a ‘normal psychology’ in the way he did in his *Crisis in Psychology*, without referring to his vitalistic approach, which was an essential background for many other parts of his work and in particular for his conception of biology.<sup>11</sup> But his adherence to the traditional concept of ‘soul’ formed a retrogressive element of his theory, which was to some extent contradictory to his claim for a ‘modern psychology’. This might be one of the reasons why his proposals for solving the ‘crisis in psychology’ could not be accepted by the scientific community.

Within the context of the ‘crisis debate’, Driesch’s book forms a rather monolithic contribution. In contrast to Buehler’s well-known essay Driesch dealt with ontological questions rather than with paradigms, and his intention was not primarily to analyse the situation but to force a certain solution. This is one more reason

for the fact that Driesch’s contribution fell into oblivion after a short debate in the journals. Although his vitalistic ideas as outlined in his Gifford Lectures (Driesch, 1908) “played a significant part in the popular enthusiasm for vitalism in America in the years before the First World War”, as Bennett (2010, p.48) states, their implications for a reinterpretation of the scope of psychological research have been practically ignored. His name will also be linked with his innovative ideas in biology in the future but not with his unfortunate attempt to point a new way for psychology.

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<sup>10</sup> For Driesch’s interpretation of the term ‘entelechy’ see above, p. \*\*\*. Driesch deals explicitly with this term in his *Philosophie des Organischen* (1908).

<sup>11</sup> Driesch argues in this context: “Furthermore, my vitalism does by no means offer a ‘solution of the crisis’ but my *Ordnungslehre* offers that” (Preface to the 2<sup>nd</sup> edition, Driesch, 1929, p. vii, my translation).