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Wundt contested: The first crisis declaration in psychology

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ABSTRACT

When reflecting on the history and the present situation of their field, psychologists have often seen their discipline as being in a critical state. The first author to warn of a crisis was, in 1897, the now scarcely known philosopher Rudolf Willy. He saw a crisis in psychology resulting, firstly, from a profuse branching out of psychology. Adopting a radical empiriocriticist point of view, he, secondly, made the metaphysical stance of scholars like Wilhelm Wundt responsible for the crisis. Meanwhile, the priest Constantin Gutberlet responded to the claim of crisis arguing, on the contrary, that the crisis resulted from research that was empirical only.

Throughout the discipline psychologists felt troubled by a widespread sense of fragmentation in the field. I will argue that this is due to psychology's early social success and popularization in modern society. Moreover the paper shows that the first declaration of crisis emerged at a time when a discussion of fundamentals was already underway between Wundt and the empiriocriticist Richard Avenarius. The present historical research reveals the depth of the confrontation between Wundt and Willy, entailing a clash of two worldviews that embrace psychological, epistemological, and political aspects.

> "*Are not the mountains, waves and skies a part of me and of my soul, as I of them*?"
>
> George Gordon Byron

1. Introduction

The English poet's question turns up in the writings of philosopher and psychologist Rudolf Willy (1908a), one of the most ardent critics of the psychology of his time and author of the first crisis declaration in this field. He was struck by the visionary poet's accurate expression of the relation between us and our environment in a way that breaks completely with the traditional scientific theory of knowledge. Without recourse to mysticism, he noted, Byron must have felt liberated and lifted above depressing everyday life, to "protuberantly enhanced experience"[1] (Willy, 1908a, p. 118). In this experience the environment and the self, in the usual sense of being distinct entities, have disappeared: they persist only as resonating components of a total complex (*Gesamtkomplex*) defined as "the intimacy of the personalized external world" (Willy, 1908a, p. 118).

These ideas were developed by Willy after a time of intense debate over philosophy and psychology and the relation between the two disciplines. During the last decade of the nineteenth century the project of psychology as a science was discussed enthusiastically, often in relation to theory of knowledge (*Erkenntnistheorie*). The Swiss philosopher, who had started his career as an empiriocriticist and student of Avenarius, was involved in a confrontation that took place between Wundt and Avenarius. Willy soon criticized contemporary psychology and philosophy, making claims of a crisis in an attempt to develop his own point of view (of which I have already given a preliminary sketch).

Willy is an astounding figure. His intellectual work received some acknowledgment during the first decade of the twentieth century. Mach (1900) cited him in *The analysis of sensations*, as well as Lenin in *Materialism and empiriocriticism* (Lenin, 1909). But he was not successful academically. He never became a full professor, his correspondence bemoans difficulties in publishing and neither at the time nor today has much notice been taken of him in philosophical and psychological literature.

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[1] All translations of the German citations are mine. Whenever conducive to understanding I have added the original in footnotes.

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It is perhaps justified to ignore Willy as a philosopher, as Thiele (1970) proposed. But, as I shall show throughout the paper, the criticism he launched against psychology was not unfounded. Intending to reach a more inclusive historiography, I will examine his crisis text looking for possible insights regarding foundational discussions concerning psychology that took place at the end of the nineteenth century. Willy's contribution helps us shed new light on psychology's historical situation and scientific status. Evading neither friction nor conflict, his text on crisis focused on the problems of the discipline, revealing the strong sentiments of fragmentation and confrontation present at that time.

The Swiss philosopher saw a crisis in psychology resulting from a extreme branching out of psychology and from the philosophical stance and methodological approach propagated by scholars like Wilhelm Wundt. Some contemporaries, such as the Catholic priest Constantin Gutberlet agreed partly with Willy's diagnosis but, in accordance with his scholastic approach, looked at the problem from the opposite side (Gutberlet, 1898).

In both cases Wundt's experimental psychology was one of the main issues questioned. This paper attempts a reappraisal and discussion of Wundt's contribution to psychology as related to the diagnosis of crisis put forward by Willy.

With regard to Wundt's legacy, relevant historiographic work has been done since the 1970s, when Blumenthal (1975, 1979) and Danziger (1979, 1980) began reinterpreting Wundt's psychology. These historians, and subsequently others, have corrected some misconceptions by showing how intimately Wundt's psychology is linked to his philosophy and *Völkerpsychologie*. Reappraising his work one hundred years after he opened his laboratory kindled new interest in Wundt and the significance of his contribution (Araujo, 2010; Bringmann & Tweney, 1980; Danziger, 1983; Greenwood, 2003; Hatfield, 1997; Jüttemann, 2006; Leary, 1978, 1979; Wong, 2009, etc.). Research must follow the lead prepared by these scholars, but also move forward to a better understanding of the context surrounding the Leipzig scholar. This is where the claims of crisis are of interest. They dramatically expose psychology's difficulties as a science and how Wundt's contemporaries viewed crucial aspects of his system.

Contemporary historians of psychology often signal that they are vaguely aware of the existence of controversies or divergent points of view in German psychology around this time. But from the effort devoted and the topics dealt with, it becomes clear that Wundt's experimental approach is conceived of as the groundwork for a "new psychology", even when some rival conceptions of a secondary nature do find mention, such as those of Edward Titchener, Carl Stumpf, Franz Brentano, or Hermann Ebbinghaus (Viney & Brett, 2003; Hergenhahn, 2008; Hothersall, 2004; Leahey, 2004; O'Boyle, 2006; etc.). Only very few historians, like Danziger (1979), deal with the discussion between Wundt and the empiriocriticists that took place in the nineteenth century. In-depth work on this is still lacking. The paper takes a step in this direction, adding a new dimension to the historical reappraisal of Wundt's repudiation with the help of the crisis declaration, giving attention to conflicting views about the philosophical basis of psychological research.

Fritsche (1980) is the only author that studied Wundt's role in relation to crisis. But the influence of the historiographic style of scholars from former East Germany forced her to look for a real crisis and subsume all the contributions under an idea of an alleged struggle between idealist philosophy and materialist psychology (see also Fritsche, 1981). From this perspective Wundt is (erroneously) promoted as a materialist psychologist (see Meischner & Eschler, 1979; Araujo's critique, 2010). For this reason Fritsche could only conclude that Willy's criticism of Wundt's idealism is wrong, having merely "demagogical value".

I take a different approach. First, my research follows Danziger's call to build on primary sources in an attempt to avoid, as much as possible, forcing the author's position into a previously adopted historical framework of fixed opinions. Second, I am not supposing that any real crisis actually existed simply because individual psychologists suggested that it does. My concern is rather historical and historiographic, attempting to elucidate how psychologists, at a specific time, *perceived* the evolution of psychology and the state of their art. Crisis matters only as a concept used by the historical agents in their description. Therefore, my topic turns on an interest in the debates and reactions to the alleged crisis.

2. Willy and the crisis in psychology

2.1. A glimpse into Avenarius's empiriocriticism

The fact that the author of the first declaration of crisis in psychology had studied under Richard Avenarius (1843–1896) makes it necessary to start by exposing some basic traits of Avenarius's empiriocriticism. His *Critique of Pure Experience* (Avenarius, 1888), together with Mach's work (Mach, 1900), probably represents the most radical attempt to go back to "original" empirical experience. It represents a call for starting philosophy on a "realistic" basis, questioning all previous theorizing.

Following Kant, Avenarius's "critique" was meant to offer a foundation for sciences in the form of a general theory of knowledge said to be of use for scientific psychology, scientific pedagogy, logic, ethics, aesthetics, philosophy of law, economy, linguistics, and so on. His approach relied on two "empriocriticist axioms". The first, called the axiom of the content of knowledge, says: "Originally, every human being assumes the existence of an environment composed of many elements, including other individuals that say many things that in turn are dependent on the environment" (Avenarius, 1888, p. VII). Second, "The forms and means of scientific knowledge are basically no different than that of other knowledge" (ibid, p. VII); the scientist has at his disposal only the same cognitive functions to perceive and think as any other human.

On the basis of these two assumptions Avenarius built up a general and formal theory of human knowledge in which he described the composition and links of knowledge as a general process. Therefore, to start by using terms like "consciousness", "thinking", the "immediate given", would mean to start at the wrong end. In contrast, Avenarius started with the basic assumption built on everyday statements supposedly given to every human being alike: if there is a relation between the human individual and any part of our environment, then he or she can state something like "something is experienced" or "something is experience", etc. (Avenarius, 1888, p. 3).

From there he got to the synthetic concept of pure experience: Experience as something that has been stated that—in all its parts—presupposes only elements of our surroundings. A second, analytical, concept of pure experience refers to experience uncontaminated by anything else that itself is not experience.

Avenarius is fully aware that all analysis must proceed from a certain point of view. He defined his point of view in a completely literal and spatial sense: "We are confronted on the one hand with the components of our surroundings, on the other with human beings that are in the same spatial determination, like travellers observing foreign scenery and peoples, like market visitors, or like the actors and audience at the theatre" (Avenarius, 1888, p. 10). He did not think of a point of view in an abstract sense but in a very concrete sense that includes the physical and chemical elements of the surrounding and the individual determined by the anatomical and physiological, state and variability.

In order to disconnect his philosophy from previous views, Avenarius introduced a completely new terminology. Take for example the following basic distinction of three terms. The value of the elements of our environment is coded into what he called

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"r-values" (*R-Werte*) and the value of a content of a statement made by another individual as "e-values" (*E-Werte*). Very important is also the c-system (*System C*) with which he referred to the central nervous system that records changes in the periphery. Avenarius' philosophy aimed to determine the relation of dependence of all possible e-values in relation to the variances and the conditions of variance. If elementary physiological processes cause a change in the system disturbing the equilibrium, then the process of variances form what he called "a vital train" (*Vitalreihe*). Psychical states as expressed in the statements of other persons are called "dependent vital trains" (*abhängige Vitalreihe*).

Empiriocriticism aimed at deducing psychical life in form of e-values from all kinds of variations of the c-system. While working on this in order to achieve a natural world conception it also tried to eliminate philosophical "introjections" (Avenarius, 1891, 1894/95). The term "introjection" refers to what a person adds beyond strictly sensual experience in form an idea of a supposed soul, consciousness or will, while observing another person.

These necessarily sketchy remarks will have to suffice to give an idea of the starting point and the basic assumptions underlying Avenarius's empiriocriticism (for more information see also Avenarius, 1888, 1891; Carstanjen, 1897, 1898; Petzoldt, 1900; Wundt, 1898a, 1898b; Ewald, 1905).

2.2. Willy's philosophy and conception of the crisis

The first declaration of crisis was written by one of Avenarius's students, Rudolf Willy (1855–1918) (Willy, 1897a, 1899), who had studied medicine, law, and philosophy, and written a thesis on Schopenhauer's relation to Fichte and Schelling (Eisler, 1912). After receiving 1882 the doctor title in philosophy, he worked as a *Privatdozent,* teaching philosophy first in Bern, and then, between 1897 and 1902, in Zürich. After that he apparently abandoned academia and returned to his hometown Mels (Canton St Gallen) (Ziegenfuss, 1949). The break in his career can be followed through his publications as he ceased publishing in scientific journals like the *Vierteljahrsschrift für wissenschaftliche Philosophie* after the turn of the century.

His first publications (Willy, 1892, 1894, 1896) revealed his initial enthusiasm for Avenarius's thought. In 1894 for example he wrote: "There is nothing we desire more [. . ..] for the profit of positive science than to spread the universal concept of pure experience developed by Avenarius using his "human world-concept" (Willy, 1894, p. 2). Although always critical, in his later writings he increasingly abandoned his master's philosophical stance. His book on crisis included criticism. Willy accused Avenarius of transferring the analytical procedure from natural science to the domain of psychology. Using the philosophical instrument of analysis he studied human individuals in the same way we analyze movements by fixing the various segments of a movement in separate drawings (Willy, 1899). The problem is that the philosopher, although able to analyze the human individual very cleverly, then has an irreparable problem because ". . . no one is able to put it back together again" (ibid, p. 106).

Willy's break from Avenarius and academia becomes more evident in his later works. After publishing a book in which he commented on Nietzsche (Willy, 1904), he criticized academic philosophy (Willy, 1905). In 1908 he tried to outline his own philosophical standpoint stating clearly that he no longer practices "methodological science" (Willy, 1908a, p. 4) because "with pure science it is not possible to attain the entire inclusive unity of human experience that I have in mind" (ibid, p. 4). Willy captures the basic difference between his and Avenarius's approach by saying that while his teacher, as a "conceptual thinker" based his thinking on a "natural world-concept", he, Willy, defined himself as an aesthetic man, seeking to build his view on "natural world-experience" (*natürliche Welterfahrung*). At this time he no longer thought of himself as an emiriocriticist, because of his new reinterpretation of Avenarius's point of view as being based on a hidden dualism (Willy, 1908a).

In his book on crisis Willy had already begun vaguely elaborating his own holistic definition of the human being, postulating the purpose of psychology as "to theoretically contemplate and describe real human beings, as a species and psychophysically undivided" (Willy, 1899, p. 238). In subsequent publications he tried to develop the idea further. He called his own approach "primary monism" based on the "total experience" of the individual, understood as the "immediate given organization of human experiences"[2] (Ziegenfuss, 1949, p. 888). But now we must turn to his text on crisis.

Willy took the term "crisis" from Avenarius. The latter had used the expression in the preface to his Critique (Avenarius, 1888), where he mentioned a crisis that the critique had produced in him. He hoped it would also have the same positive crisis-inducing effect on the reader: "To me, critique had become a crisis—perhaps it also helps another to enter a healthy crisis, or helps him out of one that is less healthy"[3] (ibid, p. XIII). Willy was aware that by elaborating a philosophical framework his teacher had not developed a critique full enough to demarcate his from other philosophical and psychological approaches. Thus, Willy was advancing a kind of critique that his master had consciously left out of his book.

Willy mixed Avenarius's two meanings of the concept of crisis to refer to a kind of negative state, in the sense of problematic, as well as a positive state, because it would lead to a notable improvement; similar to something like diagnosing a strong chronic illness in psychology which can and should be overcome. The process requires a "cleansing" or critique via "raising awareness" for the purpose of inducing a beneficial healing or general improvement. Thus, he compared crisis with an illness, except that the difference is that the crisis will be resolved purely through the acknowledgement of psychology's problems: "Thus, in our case the crisis will disappear through the insight that a crisis exists, much differently than is the case for normal illness" (Willy, 1899, p. 5).

In order to understand Willy's motive we must consider his philosophy. At the time still under the influence of Avenarius, he had promoted his empiriocriticist point of view as the "only scientific point of view", summed up in the formula "Everything is experience and experience is everything" (Willy, 1896, p. 59). Empiriocriticism should be based on "conceptually extended, firm, clarified, and perfected natural experience" (ibid, p. 57). The following five postulates sum up his position: 1. All that is "mental" is nothing other than a mirror und softened reflection of what we perceive; 2. All that we perceive is "sensual" and refers to other living beings, the surrounding in general, or concrete characteristics, states and changes; 3. To be and to think overlaps completely with the perceived; 4. To be and to know is to experience; and 5. There is nothing except human sensual and specific knowledge. Accordingly, Willy rejected the use of logic as it only originates from the motive to "mask the real character of all experience" (ibid, p. 63).

Empiriocriticism meant to Willy a critique of all kinds of scientific and pre-scientific worldviews, to reach what was called a "natural" or "original" experience, a kind of experience that has not yet been transformed by mythological or philosophical interpretation. It is precisely through critique that Willy thought to be able to

[2] "*unmittelbar gegebene Zusammenhang von Erlebnissen der Menschheit*".

[3] "*Mir war die Kritik zur Krisis geworden—vielleicht verhilft sie auch einem Andern zu einer wohlthätigen Krisis oder hilft ihn heraus aus einer, die ihm nicht wohltut.*"

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re-gain something like a "pure experience". Rejecting all theorizing, he thought he would discover the common nucleus of all worldviews (Willy, 1896).

Thus, empiriocriticist Willy saw the profuse critique in his crises book as a "cleansing process" through which a return to the original experience as a kind of unquestionable immediate knowledge would be achieved. This nucleus of simple experience common to all human beings would be a new common ground for philosophy in the form of psychology. It was expected to inaugurate a new era, leaving all philosophical quarrels and confrontations behind. Thus he concluded that the different philosophical points of view—be these realism or idealism, materialism or spiritualism, empiricism (positivism) or rationalism, dogmatism, skepticism, criticism, or whatever they are called—must be replaced by a commonly shared general experience (Willy, 1896).

2.3. Crisis diagnosis due to a profuse branching out of psychology

How should we characterize the 1890s? As a period with a generally accepted program, or as already haunted by a (perceived) crisis? Karl Bühler (1879–1963) said that to explore the background of the crisis of psychology one must begin with circumstances around 1890 (Bühler, 1927; for more on Bühler's crisis see Sturm in this issue). Bühler's strategy was based on historical contrast. He thought that never before had there existed so many competing psychologies at once as in the 1920s. The wealth of novel approaches and research pursuits at that time promoted a state of crisis in psychology: "a rapidly acquired and yet not mastered body of new thoughts, proposals, and research opportunities", he wrote, "has produced a state of crisis in psychology" (Bühler, 1927, p. 1). This was positive, he thought, calling it a "constructive crisis", due to an *embarras de richesse*. In an almost nostalgic tone he contrasted the diversity of psychology in the 1920s with the historical situation around 1890: back "then there existed a sort of shared program and shared hope" (ibid, 1927, p. 1). He writes of Mach's analysis of sensations (Mach, 1886) as having inspired the kind of a psychology represented by the group behind the journal *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* (*Journal of Psychology and Physiology of the Sensitive Organs*), namely Hermann Ebbinghaus, Carl Stumpf, Hermann von Helmholtz, Theodor Lipps, and others.

With the help of Willy's crisis text and other contemporary testimonies I will show in the present paper that there existed no sense of being immersed in a joint project or common program. In his article published in 1897 Willy diagnosed the strong and chronic crisis in psychology as being caused by two main factors: the crisis followed, first, from difficulties ensuing from the profuse branching of psychological material and, second, from the fact that psychological research does not take as its starting point this original experience. I will deal now with the first observation and in the next section with the second.

The first factor shows that during Willy's lifetime psychological research was already producing a considerable amount of material. The Swiss philosopher complained that psychological branches of specialization were "spreading so much that it is difficult to see the trunk" (Willy, 1899, p. 3). Many psychological research pursuits were based on physiology, biology, cultural history, linguistics, law, ethics, and experimental psychology. Willy noted also that psychologists themselves were going all separate ways instead of working together.

Other contemporary psychologists such as Stern (1900), reflecting in popular lectures on the state of the art at the end of the nineteenth century, confirmed this impression, although they did not discuss it in terms of crisis. The latter was very specific in describing the bewildering situation naming what he called "different psychological disciplines" like experimental psychology, physiological psychology, evolutionary psychology (*genetische Seelenforschung*), social psychology (*Gemeinschaftspsychologie*), psychopathology, and differential psychology (*differenzielle Psychologie*) (ibid). It is clear that he agreed with Willy on the branching, tagging it "*multum et multa*",[4] "multum" meaning the increase in psychological activity, number of professionals, and specializations. "Multa" refers to the fact that the wealth of material had not been adequately processed intellectually. "Extreme plurality is the infant ailment of our field" (ibid, p. 414) he diagnosed, describing the situation as follows:

> "Abundant laboratories—but all working on their own, concentrating on individual tasks, solving them with a minimum of test persons, and leaving it at that. Abundant textbooks, compendia, and outlines—but here, too, the same particularism. Not seldom do they speak different languages and the portraits sketched of the psyche have so many different hues and varying accentuations of individual traits that it is often difficult to recognize the identity of the object represented. Apart from a strong empiric tendency and the use of experimental results one finds nearly no basic characteristics common to them all" (Stern, 1900, p. 414–415).

The result was "numerous problems and numerous attempts at solving them—but the outcome remains undecided for almost all essential questions" (ibid, p. 415). Stern concluded that "The incredible and admirable achievements made in the study of the mind in the nineteenth century lie in analysis and specialization, in precise scientific individual work" (ibid, p. 436). He sincerely hoped that the twentieth century would achieve consensus and arrive at a synthesis capable of comprehending the immense amount of material.

Willy's and Stern's observations show that at the end of the nineteenth century psychologists in Germany already felt overwhelmed by the expansion of their own discipline. Furthermore, psychology itself was deeply divided, split up into frequently incompatible and competing research projects.

How did things look from Wundt's perspective? His academic position was influential. The Leipzig institute was the point of departure for many careers in psychology. In 1890 Wundt had stepped down from the office of university rector and begun a new phase in his life, marked by the temporary evacuation of his laboratory due to university building renovations. The laboratory profited from the changes. Wundt personally enjoyed the 1890s, it was "a time of internal growth" (Steinberg, 2002; Wundt, 1920, p. 306). Wundt's career from the 1880s onward has been described by some historians like Ash (1980) as an attempt to gain a secure if limited place for experimental methods in psychology while also demonstrating his own worthiness to "belong" to philosophy proper. In the present paper we will see why for him it was essential to be recognized as philosophical expert, in order to be able to counter-attack some epistemological points of view that would drown his psychological project.

Moreover, the 1890s were years of increasing dissidence. Several of Wundt's former students and co-workers, including Külpe, Kraepelin, Meumann, and Münsterberg had been able to make themselves names in the academic world, independently pursuing experimental research in psychology.

But these were not the only psychologists around. Prior to the turn of the century many professionals considered themselves and were also held (at least in part) by others to be psychologists. These included names of scholars usually ignored in historical

[4] Instead of "*multum, non multa*" (many, but not many kinds).

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research like Avenarius, Hans Cornelius, Sigmund Exner, Paul Flechsig, Gutberlet, Friedrich Jodl, Felix Krüger, Theodor Lipps, Ernst Mach, Johannes Rehmke, Heinrich Rickert, Alois Riehl, Christian von Ehrenfels, Johannes von Kries, and Willy to mention only some. The approaches associated with these names represent divergent and often furiously competitive opinions on how work in psychology is to be done. Even the narrower circle of experimental psychology lacked harmony. In the 1890s, while Ebbinghaus debated with Dilthey, Wundt quarreled with Stumpf, Münsterberg, Titchener, and even Külpe, over aspects essential to psychological research (Danziger, 1979). No wonder, Wundt observed bitterly, that opinions were divided over several issues. He stated sadly "probably more than any other area of philosophy, at the turn of the century psychology finds itself in a very controversial state" (Wundt, 1904, chap. 5, p. 163). But here I will only deal with the confrontation that arose between Wundt and the empiriocriticists, basically Willy, and also comment shortly on Gutberlet later.

2.4. Willy's crisis diagnosis, based on Wundt's approach

A quick look into Willy's publications shows that we are dealing with a very different character, totally opposed to his teacher. While Avenarius's style was strikingly self-critical, modest, careful, and friendly, Willy's style was aggressive, offending, and straightforward. Comments by contemporaries like Wundt (1898a, 1898b) and Stern (1898) show that his polemical and presumptuous attitude had made him a "persona non grata" in academia. His militant attitude had already become evident in his article on empiriocriticism (Willy, 1896). There he says that "...apart from purely scientific research, critical-polemical dispute and retaliation has its right, too; and of this right we shall make use" (ibid, p. 56).

His examination of relevant psychologies led him to seek confrontation with the prevalent psychological conceptualizations of his time. Through this critical exercise Willy analyzed what he perceived to be an underlying problem and second reason for the diagnosis of crisis that is a persistent idealist conceptualization: "...by describing modern, scientific, spiritualist psychology, we are also disclosing the reason for the crisis in psychology" (Willy, 1899, p. 2). Crisis in psychology, then, was a consequence of stubborn metaphysical speculation in the name of "rigorous, pure, empirical science" (ibid, p. 2).

Wundt is the author that Willy most clearly accused of such metaphysical speculation. Therefore in an article published in 1897 his diagnosis of psychology's crisis was directed exclusively at Wundt's approach. Later he published two more articles in Avenarius's journal (*Vierteljahrsschrift für wissenschaftliche Philosophie*), objecting to Johannes Rehmke and Franz Brentano (Willy, 1897a, parts 2 and 3). Not finished yet, he added three long critical pieces on works of other contemporaries and published it all two years later in a book titled "The Crisis in Psychology" (Willy, 1899). For present purposes it suffices to focus on Willy's attack on Wundt.

In the first philosophical section Willy directs his attack on Wundt's psychology as the latter had demarcated and defended it in his recent article "On the Definition of Psychology" (Wundt, 1896b). Here Willy focused his critique mainly on three aspects: Wundt's definition of psychology based on the principle of psycho-physical parallelism (also called dual-aspect identity theory), actualization theory, and voluntarism.

Wundt had defined his own position as "empirical psychophysical parallelism" (Wundt, 1896b). This heuristic principle (*Hülfsprincip*) allowed him to view experience as something uniform and global, always including two non-separable parts: the object of experience *and* the experiencing subject. He postulates one basic method for science, which is observation, but two different perspectives. Natural science is based on what he calls mediate or an indirect way of knowledge (*mittelbare Erkenntnisweise*) whereas psychology relies on direct or immediate apprehension (*unmittelbare Erkenntnisweise*). One consequence of Wundt's two approaches was to suppose the existence of two different kinds of causality: physical causality and psychical causality. These are seen as unique and independent systems (see also Wundt, 1894).

Willy says that Wundt superficially and obscurely distinguished psychological research based on material gained through immediate experience from the indirect and hypothetical approach used in natural science. As a researcher he uses and needs hypothesis also in his psychological research. So why should psychological science be more "direct" or "immediate" if it requires as much theoretical hypothesizing as natural science? This criterion is therefore useless for distinguishing psychology from the natural sciences (Willy, 1899).

A few passages may illustrate the acerbic, sometimes ironic and even sarcastic tone pervading Willy's book on crisis. He accused Wundt of being a thoroughly metaphysical psychologist chiefly because of his principle of psychical causality. Wundt, argued Willy, mingles "facts with 'explanations' so much that he (...) not only finds it not absurd, but, on the contrary, entirely natural to say that psychical processes are produced by the psychical" (Willy, 1897, p. 91). This is why Willy considers Wundt's principle of empirical psychophysical parallelism an "untenable melange of experience and metaphysics" (Willy, 1899, p. 9).

In addition Willy objected to Wundt's theory of actuality. According to this theory, the mental should be understood as activity, not as a substance (Wundt, 1896b). While substance theory is metaphysical, actuality theory is based on the study of immediate mental content, and is therefore empirical and inductive: "actuality theory only applies the general principle that psychology should interpret the facts of experience based on their own context, disclaiming any metaphysical hypothesis" (ibid, p. 36)[5]. Willy interpreted the actuality theory as substituting a material substance with a spiritual one. Why, otherwise, would Wundt emphasize the fact that the psychical undergoes constant change without any material support? For Willy: "...from the point of view of experience, 'psychical connectiveness' is not to be thought of as real (objective), but only as abstract (conceptual or ideal) unity" (Willy, 1899, p. 15).

Willy also criticized Wundt's voluntarism. The latter had recently defined his psychology as voluntaristic in an attempt to emphasize the important role of the willing process (Wundt, 1896a, p. 14). He assumed that all psychological processes are given only in a stream and that the subjective and objective elements of each process are equally important. For Willy, Wundt's empirical psychology presented nothing more than metaphysics with a dab of experience, and therefore only "mysterious vague forms of certain general principles of experience" (Willy, 1899, p. 16). In blatant irony Willy puts Wundt's theory in Leibnizian terms: "The transcendent plurality of simple interacting acts of volition is really nothing other than Leibniz's stunted philistine society of monads,

[5] Wundt was already defensive as his actuality theory had received severe critique. One frequent objection, for example, was that in the mind we also find phenomena that persist through time. Wundt argued that the fact that enduring mental processes do exist does not mean that they are not acts. Another objection was that there must be some entity supporting or unifying all experience in the mind. Wundt, however, thought that real unity is already produced by the connectedness of psychological processes. There is no need for any separate kind of unity.

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robbed of its heavenly complacency" (ibid.)[6]. Finally, the former concluded: "thus, from our point of view, we must say that except for a few marginal notes, the complete lack of experience makes Wundt's psychology probably the worst unintended irony and satire ever produced" (Willy, 1899, p. 18).

After examining several other scientific approaches, Willy returned to Wundt in the fourth part of his book focused on methodological aspects. Here he commented more on Wundt's psychology as presented in the recently published *Grundriss* (Wundt, 1896a). He dismissed Wundt's psychology as a "mixture of empirics and metaphysics", finding fault with its theory of space and time, theory of psychical causation, analysis of emotions, and psychological experimentation as practiced at the Leipzig laboratory in general. I will concentrate on Willy's critique of the latter two that are more empirical and therefore more complementary to the first part of his critique.

Wundt understood as basic emotional elements the emotions that accompany sensations like that of light, sound, heat, and pain (Wundt, 1896a). Despite starting with the elemental aspects of emotions his theory immediately turns out to be extremely complex when he includes into this category of basic emotion also the emotions accompanying tone-harmony (*Tonharmonie*). This is where Willy began his critique. He was against any analysis of emotions and found Wundt's observations completely artificial. Therefore he accused the latter of working out extremely complicated (and highly hypothetical) conceptual classifications.

For example, hearing a triad (three notes, a, b, and c) may prompt a certain harmonic emotion, called by Wundt a "total emotion", composed of "partial emotions" related to certain simple tones (a, b, c), as well as "partial emotions" related to all subsets (ab, bc, ac). According to Wundt, any change of intensity or quality of the acoustic stimulus would also alter the sensation. Add to this the fact that emotions are effected by how stimuli are presented in space and time and the result becomes a confounding arrangement of classes, subclasses and dimensions of emotions. Reaching Wundt's three-dimensional theory Willy capitulated: "The further the analysis proceeds, the more it becomes an abstract scheme of affects that has nothing particular to offer" (Willy, 1899, p. 190) and calls this a tremendous *embarrass de richesse*[7] (ibid, p. 188).

In contrast Willy thought that emotions are part of the human being as a whole and part of a certain social environment. Emotions themselves cannot to be divided or analyzed into further parts. For him emotions are a "companion connected and dependent on vitality or an indivisible medium of our mental life" (ibid, p. 186).

Regarding the experimental results of psychological measurements, Willy found that the new experimental method neither made observation more accurate nor did it produce tremendously novel insights. Furthermore, the experiments presupposed cooperation of two persons, the experimenter and the subject. Thus, if one neglects the model character of experiments and takes the outcome for biological fact, "one confuses a shadow produced by a skilled experimenter with nature itself" (ibid, p. 195). Thus for him, emotions and affects produced in the experimental context are merely simulated, more precisely they are "extremely lame, albeit socially entertaining affects" (ibid., p. 201). After developing his critique he concluded: "Trying to express the higher life of emotions and mental images numerically leaves us only with symbolic, or arbitrary, or in the end conceptually fortuitous and scholastic meaning" (ibid., p. 196).

In the 1890s Wundt had made an effort to organize the whole field of philosophy, presenting a coherent and unified world view (*Weltanschauung*) that reserved a privileged place for psychology as the fundamental discipline of the *Geisteswissenschaften* (Wundt, 1874, 1880/83, 1889, 1896a). Over thousands of pages he explained and defended his project based on the idea that "objective science aims to construct a conceptual world based on the originally perceived world, in a way that the former produces a coherent connectiveness of experience" (Wundt, 1896c, p. 329). Araujo (2010) has shown recently the circular relation between Wundt's psychology and philosophy. The Leipzig scholar started from an inductivist theory of knowledge in order to develop empirical psychological science, which then needs conceptual coherence through philosophy (metaphysics), based on its scientific results. Influenced by Leibniz, Fechner, and Helmholtz, he tried to develop what he defined as "empirical psychology", while always eager to do justice to the "real" complexity of human inner life.

But he could not convince his contemporaries. Although he advocated "pure" empirical observation as the only valid basis for all psychological theorizing, as soon as he sought to *explain* experience looking for causal relations, his concepts postulating "activities", "willing acts", "psychical causality" and "creative synthesis", were too metaphysical for those philosophical times dominated by realism and criticism. Although he was able to spread psychological experimentation, many contemporaries used his postulates as an antipode for developing their own stance.

Therefore, in his attack Willy more than once rubbed salt into Wundt's wounds. For example, his remark that the technical sophistication of the experimental method in psychology had produced numbers and quantifications: but what do these numbers really stand for? Did the experimental method offer sufficient new insights that would make the invested work and effort worthwhile? What empirical basis underlies Wundt's concepts like voluntarism or his sophisticated theory about feelings? Willy's criticism was, to a certain extent in line with criticism put forward by other authors like Franz Brentano, Theodor Lipps, William James, and, especially Richard Wahle (1898).

3. Reactions to Willy's crisis declaration

3.1. Wundt's reactions to Avenarius's and Willy's empiriocriticism

Although in his *Critique* Avenarius deliberately avoided confrontation or alignment with other philosophies, he took care to cite Wundt as a scholar who had positively influenced his thinking. He may have felt in Wundt's debt, as he had habilitated under his direction in Leipzig and received the call to Zürich on Wundt's recommendation. The Leipzig scholar had spent a year in Zürich, teaching, in 1874. The connection between Zürich and Leipzig is evident in Avenarius's journal (*Vierteljahrsschrift*) where Wundt acted as a member of the editorial board and contributor. Nevertheless, their personal acquaintance did not prevent Wundt from writing a vehement and thorough critique of Avenarius's philosophy and other similar philosophical approaches (Wundt, 1896c, 1898a, 1898b).

Wundt was clearly opposed to empiriocriticism. While for Avenarius and Willy there existed only one way to capture reality which is experience, Wundt established two ways to approach reality, as we have seen: directly and indirectly. Due to the latter, the natural scientist can work on the perceived objects without necessarily being conscious of himself as a human being. The director of the psychological laboratory at Leipzig argues on the basis of his professional experience as an experimental psychologist assert-

[6] "*Die (transzendente) and substitute after "Willhensthätigkeit" for the same sign Vielheit einfacher in Wechselwirkung stehender Willensthätigkeiten" ist doch augenscheinlich nichts anderes als eine spießbürgerlich verkümmerte und ihrer himmlischen Selbstgenügsamkeit beraubte Gesellschaft LEIBNIZischer Monaden*".

[7] Interestingly, exactly the same expression appears again about thirty years later in Bühler's crisis diagnosis without citing Willy.

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ing that "psychologically it is wrong [to assume] that the individual thinks of himself while he perceives an object" (Wundt, 1898a, p. 43–44). In his text on realism (Wundt, 1898b) it becomes clear that he hoped that natural scientists would reject the empiriocriticist approach.

The main idea of Wundt's criticism resembles Willy's accusation. He accused empiriocriticism of working with much more hypothetical assumption and conceptual (dialectical) reasoning, than expected. To the two axioms initially permitted by Avenarius he added, for example, the principle of reducing all qualitative variations to quantitative variations and an acceptance of the law of conservation of energy. With regard to the method used, Wundt accused the empiriocriticists of falling back to a kind of dialectical speculative method (Wundt, 1898a, p. 70). In the end Wundt concluded that from the efforts of the empiriocriticists nothing fruitful or valuable is gained for understanding either physiological cerebral processes or the mental life (for a more detailed discussion of Wundt's arguments against empiriocriticism see Carstanjen, 1898).

In his early publications Willy had presented empiriocriticism as if it were the only reasonable philosophy, the only practicable or truly philosophical stance. Wundt's personal offense at this presumptuousness is clear. Several times he denounced Willy's attitude: "Now the empiriocriticist looks at all previous philosophy with the same sovereign contempt with which once the real Hegelians considered the activity of the positive sciences"(ibid, p. 72). Referring to Willy he went on complaining: "With expressions like 'nonsense', 'febrile delirium', 'inclination towards craziness' and such he expresses his appreciation for other philosophical tendencies" (ibid, p. 72). Wundt was eager to show an influence of Spinoza, Herbart and Hegel on the "new" empiriocriticist approach to disqualify this view as outdated.

But what did Wundt criticize more specifically about Willy's empiriocriticist conception? Wundt distinguished his empiriocriticism from that of Avenarius by calling it "biological". He focused on Willy's assumption that the extension of mental life (Willy, 1896, p. 73) expands human experience, including the animal world. The latter had stated that "If we consider animal life in connection with the most general experience, as we do here, then the animal world—even the tiniest worm must be seen as a *primitive* fellow man"[8] (Willy, 1896, p. 73–74).

For Wundt there is no question that Willy's hypothesis is neither empirical nor critical and moreover a dreadful thought. In tune with his *Völkerpsychologie* he asks: "what good is all descent (...) if no tradition unites, if not every single content of experience is passed from generation to generation, enhancing at least a certain continuity of experience?"[9] (Wundt, 1898b, p. 380).

3.2. Wundt's attempt to Ignore Willy's crisis declaration

Now it is time to take a look at some reactions to Willy's crisis texts. Fritsche (1980, p. 49) claimed that Willy's crisis declaration was widely discussed in circles interested in topics at the intersection of philosophy and psychology. I disagree. Although Willy was not unknown and probably many psychologists were acquainted with his polemics, pertinent German circles in psychology, probably willingly, took surprisingly little notice. Neither Wundt's journal (*Philosophische Studien*) nor the *Zeitschrift für Psychologie und Physiologie der Sinnesorgane* (*Journal of Psychology and Physiology of the Sensitive Organs*) reviewed the book.

Despite the fact that Willy's book failed to stir much discussion of any crisis, a few reactions are to be found. A short neutral comment appeared in *The Philosophical Review* (Talbot, 1897a, 1897b, 1897c). As mentioned earlier, Ernst Mach cited Willy's book on crisis in the prologue to the second edition of his *Analysis of Sensations* (Mach, 1900). His comment is short, stating merely that he considers Willy's point of view to be similar to his own. Thiele (1970) has published the contents of two letters from Willy to Mach (dated 1903 and 1905). We therefore know that the two were acquainted, that the former followed Mach's invitation to visit him in Vienna in 1904. The letters also evidence Willy's enthusiasm about some of Mach's recent articles (Mach, 1903; Mach & Mach, 1904). In his book *Gegen die Schulweisheit* (Against Scholastic Wisdom, Willy, 1905) his appreciation of Mach is evident.

Wundt himself reacted to Willy's crisis text only marginally in a footnote to his lengthy critique of Avenarius's empiriocriticism (Wundt, 1898a), stating mainly his unwillingness to react: "I find it unnecessary to respond to the criticism of my 'Definition of Psychology' by R. Willy in his article on the crisis of psychology" (Wundt, 1898a, p. 411). Whereas Avenarius was a serious philosopher that Wundt considered worthy of discussion, his student Willy was not. Nevertheless, he could not refrain from adding a comment indicating that the author of the crisis book (Willy, 1899) had misinterpreted his standpoint and that a purely physiological approach, as he understood Willy's perspective, would be of little use to psychology.

3.3. The priest Constantin Guberlet's reaction to Willy's crisis declaration

The only in-depth discussion of Willy's declaration of crisis in psychology came from a different source. The priest Constantin Gutberlet (1837–1928) from Fulda (Germany), editor of the journal *Philosophisches Jahrbuch* issued by the *Görres Society*, published an article titled "The Crisis in Psychology" one year after Willy's first article had appeared (Gutberlet, 1898[10]). This philosopher and theologian, who was to become influential within the Catholic Church,[11] was very interested in psychology and made some contributions to this field (for example, Gutberlet, 1905, 1908, see also Kusch, 1999).

While Gutberlet recognized psychology's exciting social success, he was also aware of psychology's problems. Like Willy and Stern he detected a pattern of "branching out" into different specialties and an inner fragmentation of psychology. He summed up the level of divergence and specialization attained by psychology saying: "the various research areas have differentiated themselves so much and have come to such a microscopic level, that it is impossible to integrate them into a unitary whole or overall result" (Gutberlet, 1898, p. 135). And, what is more, "...there exists no single result in experimental observation that would be recognized universally by all the schools working in that field. Even among members of the same school or group there is no coincidence to be found" (ibid. p. 124).

Thus, Gutberlet agreed with Willy that the direction psychology had been taking was scattered and fragmented; no common goal, no consensus was in sight. But Willy and Gutberlet differed on

[8] "*Denn die Tierwelt—und wäre es der geringste Wurm—müssen wir, wenn wir, wie hier geschieht, das tierische Leben nur im Zusammenhange der allgemeinsten Erfahrung betrachten, einfach als primitive Mitmenschen ansehen*".

[9] "*was hilft uns alle Descendenz (...) so lange sie diese Descendenz nicht mit einer Tradition verbindet, die, wenn nicht jeden einzelnen Erfahrungsinhalt von Generation zu Generation fortpflanzt, so doch im ganzen eine gewisse Continuität der Erfahrung verbürgt*?

[10] His thoughts on psychology and Willy's crisis declaration are repeated later in a talk published as first chapter in his book *Der Kampf um die Seele* edited for the first time in 1899 (Gutberlet, 1903). It is an enriched version of his former crisis article, with a new bibliography and some additional comments.

[11] Pope Leo XIII named him prelate in 1900 and Pope Pius X. 1907 apostolic pro-notary (see http://www.bautz.de/bbkl/g/gutberlet_k.shtml).

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the details of their diagnosis. The Swiss philosopher held responsible for this inner division the continued use of metaphysical concepts and spiritualist reasoning (which he saw in Wundt's psychology), while the German Catholic priest thought the main reason for psychology's crisis lay in an abuse of empiricism and an obsession with careful observation. In these times, he explained, "the confusion caused by empiricism and exact observation is greater than ever, much more generalized now than it was in the past" (Gutberlet, 1898, p. 121).

The priest observed the confrontation between the empiriocriticists and Wundt. From his texts it is clear that he had no understanding for the former but deep respect for the latter (see also Gutberlet, 1891), while criticizing both. By leaning towards metaphysics, the neo-scholastic Gutberlet was clearly going against the grain. He argued that although psychologists develop an aversion to metaphysics, their conceptual treatment of data always implies the use of some theoretical and metaphysical pre-conceptions, either explicitly or implicitly: "The aim of science", he argues, "is not to present individual facts or objects, but general laws and a system of connected objects and events; experience alone does not offer this" (Gutberlet, 1898, p. 18). Also in the case of psychology these "empiricist psychologists" try to discover universal laws and to bring unity and connectedness to a fancy collection of psychical phenomena. But reason and law-like thinking is something that transcends the empirical. An empiricist cannot even say a sentence without metaphysics as words like "is" already include metaphysics. "That is why 'experience by itself' is just empty talk" (ibid.).

4. Discussion

4.1. Psychology in a crisis of success

In Europe it was in general a time of demographic growth characterized by sturdy urbanization and industrialization. The episode examined above happened during the *Kaiserreich*, the rule of Wilhelm II. Towards the second half of the nineteenth century the thirty-nine German states had been integrated to a certain extent to become what was now called the German Reich. At that time the Reich worked out a political program, based on customs policy, naval expansion, international politics, and royal rule in order to unify the bourgeoisie against social democrats. Meanwhile, after the revision of the constitution in 1891, the federal state of Switzerland was ruled by direct democracy.

Psychology was a great social success but had no emperor, no unifying policy. I want to argue that it was precisely psychology's success in the nineteenth century that motored the tendency towards fragmentation, producing a sensation of chaos or crisis. Not few physiologists and philosophers became interested in psychology, but also a large part of society.

The Third international Congress of Psychology is good proof for the field's attractiveness. After two international meetings with tough thematic restrictions, the third meeting, under the direction of Carl Stumpf (as first president), Theodor Lipps (second president) and Albert v. Schrenck-Notzing (secretary), decided to open discussion to a wider range of topics (Von Schrenk-Notzing, 1897). The program shows the variety of "professionals" that were interested in psychological topics: philosophers, physiologists, practicing physicians, theologians, secondary school teachers, anatomists, psychiatrists, spiritualists, jurists, criminologists, pedagogues, linguists, ethnologists, zoologists, and more. All had something to say about mental life, and each had a different point of view, a different personal and professional background. But the congress involved more than the speakers.

Support was received from the highest local political instances like the Bavarian prince and the minister of culture. The number of participants had doubled that of the previous meetings, reaching an impressive six hundred. One of them was the priest C. Gutberlet who recognized the social relevance attained by psychology, asking: "...what other philosophical discipline could organize such an international congress?" (Gutberlet, 1898, p. 1). To him the sheer size of the congress demonstrated how useful and significant psychology had become, dominating other fields and even reaching what he called philosophy's "inner sanctuary", of logic, metaphysics, and ethics.

While Willy was writing his crisis declaration he did not know about the congress, but once the reports were published he immediately aligned his thoughts with that event (Willy, 1897b) because "even at a glance the congress program gave us the impression of an undirected army recruiting people by chance from the street" (ibid, p. 97). As a consequence of this widespread interest in psychology theologians like Gutberlet, philosophers like Avenarius and Willy (and many others) took a psychological stance in their thinking, promoting themselves as psychological experts.[12] How could this ever produce a coherent research programme?

Of course there were attempts to establish a unifying policy and the hegemony of a certain approach within the psychological scene. One was Wundt's project and another was that of empiriocriticism.

4.2. Egalitarianism versus elitism

During the last decades of the nineteenth century empiriocriticism emerged, representing a real threat for Wundt's project. The reasons are twofold: first, because the movement achieved a certain influence. Stern stated in 1898 that "we deal here with a philosophical approach that has meanwhile found followers surprisingly well" (Stern, 1898, p. 313). Second, because Willy's epistemology automatically implied dissolution of psychology as science. His call was to return to the original, natural, simple experience or what he termed the "natural world experience". From the empiriocriticist point of view there is no boundary between psychology and philosophy or other sciences. All human knowledge is somehow "psychological" inasmuch as it is based on human experience. This is why the empiriocriticists automatically considered themselves psychologists (see Willy, 1905, p. 40).

But it is a psychology based on a description (not explanation!) of anyone's concrete day-to-day experience. Willy took one possible direction implicit in Avenarius's empiriocriticism to its last consequence. He realized that as soon as we define psychology as being based on concrete experience, no general laws such as those positive science demands can be pursued. Psychology can only aim for a "more profound knowledge of the individual" by collecting all kind of descriptions of experiences" (Willy, 1905, p. 46).

To follow the call of the empiriocriticists in the way Willy proposed would mean to open the door of psychology as basic epistemology (*Erkenntnislehre*) to all individuals, no matter where they come from. It leaves no place for expert research in psychology done with certain trained experimental subjects like the research Wundt was promoting (see also Danziger, 1990). Willy went even further: experience is shared not only between all human beings but can be found as seed in all kinds of animals. "This way", he stated, "we can simplify the issue by including in our point of view all animals, together with the human being, as if they were forming one big family whose members live simultaneously" (Willy, 1896, p. 74). His proposal was grounded on what could be called an egalitarian concept of psychology: the living organism as far

[12] In his book published 1908 Willy defines himself clearly as a psychologist.

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as it experiences anything, has therefore direct access to psychological knowledge. No need for any professionalization. Such a position perfectly fits an anarchist political stance like Kropotkin's, for which Willy felt great sympathy. He must have liked the attempt of the Russian anarchist to confer moral value to animals and "savage" people (Kropotkin, 1904) and agreed with the idea to eliminate social boundaries and hierarchies in the access to knowledge and power (see Willy, 1908b, 1908c, 1909).

Willy had been one of five unmarried men who in 1906 started editing the Swiss monthly journal *Polis*.[13] In this journal, dedicated to a "social-psychological perspective" (as the subtitle indicates), he expressed his admiration for Kropotkin and reflected critically on the social problems of his time and their solution in relation to an anarchist utopia.

Collaboration at the journal links Willy to Fritz Brupbacher, who was a well-known physician and intellectual, influenced by empiriocritic. He defended an anarchist kind of liberal socialism, changing afterwards to the Swiss communist party (Bürgi, 2004). Willy shared such social and political interest (see also Willy, 1909), although he did not embrace anarchism uncritically.

Willy's psychological project challenged both Wundt's conception and the idea of psychology as an autonomous discipline as well. The Leipzig scholar and his colleagues immediately recognized this potential danger. Stern said: "the psychological standpoint of empiriocriticism invalids psychology as an independent science" (Stern, 1898, p. 315). The empiriocritic approach clashed with what could be called *Bildungsbürge*r Wundt's "elitist concept": for the latter psychological knowledge must be gained under certain scientific conditions (see Wundt, 1898a). He claimed that neither philosophers nor lay persons have direct access to knowledge about the naive consciousness and that "what constitutes the real content of naive knowledge is a question that is very easy to get wrong because a reflective person is in reality no longer able to revert to a state of naive consciousness. And if we wanted to investigate a really naive person, and find out how he really thinks, that, too, would only lead to error, because every question of that kind eliminates precisely the condition [in him] that we are trying to study" (Wundt, 1896c, p. 315).

Wilhelm Wundt's political position differed greatly from that of Willy. The fact that the latter associates Wundt's psychology with that of the *Spiessbürger*[14] already reveals his opinion of the protestant Leipzig scholar as being narrow-minded, inflexible, and outdated. Wundt's previous social and political engagement had already demonstrated his liberal and elitist attitude, for which Bringmann, Ungerer, and Bringmann (1994, p. 241) had called him a "truly old-fashioned liberal" (see also Kusch (1999) who tagged Wundt "recluse", "collectivist", "protestant", and "purist"). His *Völkerpsychologie* was informed by a continuous interest in politics which was integrated into his scientific work.

Even in his autobiography Wundt felt the need to insist once more on his rejection of the tendency to distribute political power equally between cultivated and "non-cultivated" human beings: "to say that the primitive man, who does not have any idea of the products of culture (. . .) or a barbarian tribe should be seen as completely equal to cultural human beings at the forum of justice is either an absurd or a senseless statement" (Wundt, 1920, p. 362). There was no way he would accept a leveling between human beings or, even less, a psychological leveling between man and the simplest animals (like worms), as Willy was proposing.

5. Conclusion

Wundt adeptly captured the philosophical thought of the 1890s in terms of "realism" and "criticism" (Wundt, 1896c, 1898a, 1898b). He used the term "realism" to denote the attempt to describe phenomena exactly as they are: "to value the unaltered perception and description of reality and its empirical contexts" (Wundt, 1896c, p. 310). The concept comes close to empiricism. Wundt saw the difference in the fact that the realists permit researchers to work with hypothetical entities (*Hülfsgrössen*) like atoms while rigorous empiricists reject these as being metaphysical assumptions. By "criticism" he meant anti-dogmatic and anti-metaphysical reflection on the conditions of knowledge.

Both features dominated the philosophical discourse of the time: "Just as today hardly a philosopher does not try to do justice to the 'real facts of experience', certainly not a single one would not call himself a 'critical philosopher'" (Wundt, 1898b, p. 1). Nearly every philosopher, therefore also Wundt, tried to demonstrate that his approach is critical and realistic. But there was a lack of consensus even among the "realists". With regard to what individual philosophers understood as being realistic, the proposals diverged considerably.

Despite this common ground, the issues Wundt discussed with Avenarius and Willy were not simply philosophical details, but essential pillars of their epistemological points of view that had major consequences for psychology as science. Wundt's defence also represents an attempt to demarcate. He did not want to acknowledge Avenarius and Willy as psychologists. Instead, the Leipzig scholar disqualified the arguments of the latter repeatedly as originating in a "wrong" or "vulgar" psychology, seeing his own arguments as established on "scientific" psychological expertise.

Furthermore, it is not by accident that Willy takes as his angle of attack Wundt's definition of psychology, while Wundt himself is careful to counterattack Willy in texts on realism. With this strategy he tried to re-locate the discussion under the heading of epistemology. The Leipzig scholar redirected the discussion stating that original, naïve experience can only be found in the history of science or epistemology (Erkenntnislehre). The author of the voluminous *Völkerpsychologie*, who firmly believed in cultural and scientific progress, thereby disqualified empiriocriticism as outdated philosophy linking it to Scholasticism, Spinoza, Hegel, and all kinds of doctrines that in his view should have been overcome long ago.

Wundt's refutation of empiriocriticism received support from psychologists like Stern (1898) who in the *Zeitschrift* celebrated his exhaustive critique and hoped it would lead to "capitulation" of the "dogmatic self-certainty" of his adversaries (Stern, 1898, see also Weinmann, 1900).

Despite this occasional siding with Wundt, the problem of disunity in psychology persisted. Wundt's critics did not share a common project or point of view. There were, of course, influential figures like Avenarius, Brentano, Stumpf, and Lipps, who were more or less able to gather together some researchers. Nevertheless, psychological research pursued in various academic and non-academic realms was all of a different kind. Although Wundt ruled in his laboratory, even his students rebelled as soon as given the opportunity to express themselves freely. Following Stern (1900), the psychological map was as colorfully splotched with different psychologies as had been the previous small-state politics of his country. Thus, Bühler's contrasting between the two historical moments of the 1890s and 1920s seems inadequate. If we take into

[13] See also Eisler, 1912 and http://ur.dadaweb.de/dada-p/P0001322.shtml. Willy seems to have had many social connections because he knew personally the writer Fina Zacharias who informs that Willy never got married and that he also knew the famous painter Fidus (Hugo Reinhold Karl Johann Höppener), whom he commissioned to paint *Morgenwunder* (see FIDUS Project on http://www.fidus-projekt.ch/).

[14] See part 2.4. and note 6 of this article when Willy put Wundt's theory in Leibnizian terms using this expression.

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account testimonies of the time like that of Gutberlet, Stern, Willy or Wundt we can find psychology's "*embarass de richesse*" emerging already in the nineteenth century.

The first declaration of crisis flowed from a sense of chaos produced by this situation. It was a time of crisis and *fin de siécle* sentiments. Throughout the nineteenth century there existed a certain "awareness of crisis", a sense that profound changes were taking place not only at political, social, religious and historical levels but also on a philosophical level. Historians like Ginzo (2000) have pointed out that after Hegel's death the tensions of modernity resurfaced, followed by intense debates about essential issues linked to the Christian tradition. Influential thinkers of the nineteenth century like Marx and Nietzsche questioned the traditional dimensions of the occidental worldview. Wallat (2009) even suggests thinking of Marx and Nietzsche as sharing common ground regarding their constructive encouragement of a crisis awareness (Wallat, 2009). Willy's search for a new worldview was clearly influenced by Nietzsche's nihilism (Willy, 1904) and profoundly stimulated by Kropotkin's social and political project (Willy, 1909).

Although psychology's situation was recognized as bewildering by many, psychologists like Stern or Wundt avoided talk about a crisis. After our research we can guess at the possible reason why no academic wanted to side with such an annoying critic of the establishment as Willy. With his critique he tried to systematically deconstruct all kinds of available conceptual frameworks on which to build psychological science. His view can be interpreted as a radical kind of empiriocriticism taken to its final consequence in the sense of pursuing the original humanly lived experience as the basis of psychological knowledge.

Although the Swiss thinker advanced a kind of criticism of science that would come to gain influence during the second half of the twentieth century, for the moment it must have caused him more trouble than success. Moreover, the style of his crisis book differed entirely from that of Avenarius and Gutberlet, seeming to aim at affronting as many contemporaries as possible. His texts do not feign an "unemotional", "neutral" or "objective" point of view. Although discussions were harsh at that time, Willy was able to break the rules of a certain level of politeness still expected in scientific communication. Taking into account Ash's view of German academic politics, criticizing all relevant positions would mean to abort his academic career, even in Switzerland. His strategy surely left him with no support and would explain why in 1902 he left the university.

Willy's political affiliation explains his anti-authoritarian stance and must have contributed to the rejection of his ideas. He did not seek moral justification for academic science or construct theoretic compromises, like Wundt did. Expressing sincerely what he thought as proposed by his colleague and friend Ulrich Wilhelm Züricher (1877–1961) in his editorial note in *Polis* (Züricher, 1908), he denounced dominant characteristics of what he considered "decadent society". Social problems he interpreted as originated from the presence of dominant attitudes of egoism and servitude (Willy, 1909). His texts call for a new social life in solidarity.

In two aspects he developed his psychology accordingly. First, his psychology was no longer an academic science but based on every-day and every-man's experience, be this a scientist, a slave worker, or a poet like Byron. Second, he did not mark a boundary between the person and the environment but understood the individual as "environment that had become personalized" (*persönlich gewordene Aussenwelt*) and therefore part of the world of the human species (see Willy, 1908c, p. 5 and the beginning of this paper).

Although Willy's ideas seem to have been even more rejected than Wundt's, the revision of his texts in relation to the discussion that took place offered a new point of view. Historical texts on crisis amplify voices other than those of our well-sung (though oft misinterpreted) historical heroes. These voices testify to the variety of psychological approaches and conflicts in a given period. Willy and Gutberlet were psychologists at the periphery, situated at opposite sides, but that makes neither their observations nor their critique worthless. Although their warnings were certainly uncomfortable for scholars like Wundt and ignited further controversy, it is the authors that declare a crisis who keep the black box of science open, compelling others by their reflection and criticism to reconsider fundamental issues. They gave their fellow psychologists reason for pause from narrow laboratory practice and confronted them with fundamental, epistemological, and historical issues in the science of their choice. And fundamental issues do not expire.

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