

ISSN 2665-2846 (Online)

SUMMARY

A Note from the Editor

President's Corner

Section Kurt Danziger:

- **Wundt's psychology in the histories of psychology**
- **Get philosophy out of psychology! – Existence, no longer a struggle in psychology?**
- **Some mythical issues surrounding Wundt's status as the father of experimental psychology**
- **Iberoamerican psychology: past, present and perspectives. A congress on the history of psychology in Lima (Perú), march 24-26, 2022**
- **Obituary**
- **New books**
- **Events**

Wundt and the History of Psychology

The present newsletter celebrates the 150th anniversary of the publication of the work "Grundzüge der physiologischen Psychologie" [Principles of Physiological Psychology] published in 1873 by Wilhelm Wundt (1832-1920). On the recommendation of our president-elect Dr. Hugo Klappenbach, we would also like to highlight - as a counterbalance - the 160th anniversary of the Vorlesungen and the 140th anniversary of the last volume of Die Logik. This is in order to discuss the version that psychology began with the introduction of the experimental method.

In different works it has been said that the original plans of the first psychology laboratory, built in Germany, were used as a model for the construction of other laboratories in different parts of the world. This historiographical tradition points out that the emergence of psychology (in different territories of the world) has its starting point with the installation of psychology laboratories (Klappenbach, 2006).

Laboratories that made it possible for psychology to constitute itself as a "respectable" scientific field (Boring, 1950, quoted by Klappenbach, 2006, p. 58) given that these spaces were arranged with the necessary devices to experimentally investigate the "immediate experiences of consciousness, including sensations, feelings, volitions and ideas" (britannica.com). This tradition, 150 years later, remains in force in some areas of psychology that are rooted (it is their experimental habitus, in the way of understanding Bourdieu's concept but as a practice circumscribed to the laboratory space) in the use of mechanisms for measuring brain activity.

Two fundamental issues should be highlighted with this Newsletter. The first is that Wundt "never claimed the constitution of an independent discipline but, on the contrary, envisioned psychology in close relation to philosophy" (Ash, 1980; Brock, 1993; Danziger, 1979, 1980, cited by Klappenbach, 2006, p. 58). The second is that "Psychology emerged in a variety of ways in different cultural settings shaping different disciplinary matrices or different programmes of Psychology" (Canguilhem, 1958; Gondra, 1997; Klappenbach, 1994; Leahey, 1987, cited by Klappenbach, 2006, p. 58).

In this sense, and in order to invite the reader to read this interesting Newsletter, we would like to leave you with the question posed by our authors Natalie Rodax and Gerhard Benetka: Why leave philosophy out of the field of psychology? That is the purpose of this Newsletter: to point out that Wundt's most decisive legacy for psychology was not the blueprints of his laboratory but the imperative need to enrich the psychologist's thinking with the soul of philosophical research.

Reference

Klappenbach, H. (2006). Surgimiento de la psicología como ciencia natural en Estados Unidos. *Revista de Psicología*, 2(4), 57-73.

Some mythical issues surrounding Wundt's status as the father of experimental psychology

Hugo Klappenbach

Universidad Nacional de San Luis (Argentina)

Consejo Nacional de Investigaciones Científicas y Técnicas



The celebration of the 150th anniversary of the *Grundzüge der physiologischen Psychologie*, the 160th anniversary of the first edition of the *Vorlesungen über die Menschen- und Tierseele* and the 140th anniversary of the last volume of *Die Logik* requires consideration of the first major difficulty in dealing with Wundt's work: the extraordinary breadth and complexity of his writings. Wundt's own daughter, Wundt, compiled more than 490 publications totalling nearly 53,000 pages (Wundt, 1927).

Including later translations, David Robinson raised the figure to 540 (Robinson, 2001). Within this enormous amount of works, Wundt scholars tried to focus on the most outstanding works. Saulo Araujo (2016) selected about 90 fundamental works including reprints and translations, while Alan Kim (2022) highlighted about 30. At the same time, what Wundt scholars began to detect from 1980 onwards is that Wundt's work demands a multidisciplinary analysis, since philosophical, epistemological, psychological, anthropological, cultural and physiological considerations are intimately intertwined (Araujo, 2016; Danziger, 1980).

In 1979, on the 100th anniversary of Wundt's founding of the famous Experimental Psychology Laboratory at Leipzig, a series of tributes were paid, and several works were published that, in some way, showed this complexity. At the same time, those works opened up questions about the traditional characterization of Wundt simply as an experimental psychologist as well as other mythical issues (Blumenthal, 1980; Bringmann & Tweney, 1980; Bringmann & Ungerer, 1980; Danziger, 1979a, 1980; Robinson, 1982).

But there is a second difficulty. An important part of this work is only in German, and even with all the progress in the compilation of archival documents, there are still unexploited materials and missing documents

and correspondence. In that direction, the famous Wundt collection, which had been bought in Japan, has lost many books, some of which were donated to the Leipzig Institute itself (Takasuna, 2001). On the other hand, part of Wundt's original laboratory was destroyed during the Second World War, resulting in the loss of documents, texts and apparatus (Maximilian Wontorra, 2008, personal communication).

In 1912, in an almost forgotten book, three main sources for the analysis of Wundt's work were pointed out (Passkönig, 1912). From the standpoint of individual psychology, the author emphasized the importance of "*Grundzüge der physiologischen Psychologie*" (Wundt, 1874); from the perspective of animal psychology, "*Vorlesungen über die Menschen- und Tierseele*" (Wundt, 1863); and regarding cultural psychology or the psychology of peoples, "*Elemente der Völkerpsychologie*" (Wundt, 1912).

Wilhelm Wundt himself, in the preface to his "*Grundriss der Psychologie*" (Wundt, 1896a), also highlighted the significance of the first two works, albeit with slight differences from Passkönig's statements:

The relation in which this book stands to my earlier psychological works will be apparent after what has been said. The "*Grundzüge der physiologischen Psychologie*" aims to bring the means employed by the natural sciences, especially by physiology, into the service of psychology, and to give a critical presentation of the experimental methods of

psychology, which have developed in the last few decades together with their chief results. This special problem rendered necessary a relative subordination of the general psychology points of view. The second, revised edition of the “Vorlesungen über die Menschen- und Tierseele” (the first edition has long been out of date) seeks to give a more popular account of the character and purpose of experimental psychology, and to discuss from the position thus defined those psychological questions which are also of more general philosophical importance. While the treatment in the “Grundzüge” is, accordingly, determined, in the main, by the relations of psychology to physiology, and the treatment in the “Vorlesungen” by philosophical interests, this *Outlines* aims to present psychology in its own proper coherency, and in the systematic order that the nature of the subject-matter seems to me to require. In doing this, however, it takes up only what is most important and essential. It is my hope that this book will not be an entirely unwelcome addition even for those readers who are familiar with my earlier works as well as with the discussion of the “Logik der Psychologie” in my “Logik der Geisteswissenschaften” (Wundt, 1896/1897, pp. V-VI).

On this occasion I am interested in commemorating the 150th anniversary of the first edition of the *Grundzüge*. However, as Blumenthal and Araujo have pointed out, the first edition is evidence of a work in transition and it is only in the second edition of 1880 that certain concepts begin to mature. Moreover, it has also been argued that it is only after formalizing his entire philosophical system that Wundt fully matures his conception of psychology (Araujo, 2016). This can be seen in the *Grundriss der Psychologie*, the first edition of which dates from 1896, that is, after the *Logik* (Wundt, 1883), the *Ethik* (Wundt 1886) and the *System der Philosophie* (Wundt, 1889).

WUNDTIAN PSYCHOLOGY AS THE STUDY OF THE SUBJECT OF KNOWLEDGE

A first mythical issue that I am interested in questioning concerns the consideration of Wundt as the father of a new science, the Experimental Psychology (Boring, 1950; Cattell, 1888; Titchener, 1921). Of course, it is clear that in 1879 Wundt established a Laboratory of Experimental Psychology. However, it is not always considered that this laboratory was attached to one of the chairs of Philosophy at the University of Leipzig. For this reason, far from the image of the birth of an independent discipline, this experimental psychology was a preparatory discipline for philosophy, and it was focused on the problem of knowledge.

Indeed, the initial problem that worried such experimental psychology, and which guided its main research, was the problem of the errors of perception observed in astronomical observatories:

Astronomers had noticed certain sources of error in the temporal determination of movements of the heavenly

bodies which, while they tended to invalidate the objective value of an observation, cast at the same time a most instructive light upon the subjective peculiarities of the observer (Wundt, 1896b, p. 267).

Bessel compared his own results with those of other astronomers, and came to the surprising conclusion that it is hardly possible to find two observers who put the passage of a star at precisely the same time, and that the personal differences may amount to a whole second. These observations were confirmed at all observatories, and in the course of the experiments many other interesting facts came to light. It was found, for instance, that the personal difference between two observers is a variable quantity, fluctuating, as a rule, but little in short periods of time, but showing larger variations in the course of months and years (Wundt, 1896b, p. 268).

These errors of perception were due to personal differences. Wundt emphasized that it was not possible to eliminate these errors in astronomical observations. But it was possible “by artificial means under circumstances ... a comparison of actual and estimated times” (Wundt, 1896b, p. 270). Interestingly, the errors of perception and the personal differences discovered in astronomy, beyond the particularity of the measurement of the stars in astronomy, were of relevance for the type of university characteristic of Germany, centered on the processes of knowledge production (Dobson & Bruce, 1972). It has been pointed out that the higher education system in the states that were part of Germany was oriented towards research.

Thus, when the University of Berlin was established in 1810, “this new university was intended primarily to further knowledge and only secondarily to train students for professional, political, or civil service careers” (Dobson & Bruce, 1972, p. 204; emphasis added). In an analogous direction, at the end of the 19th century Paulsen stressed: “according to the German conception the university professor is at once teacher and scientific investigator, and the latter feature is the more prominent” (Paulsen, 1895, p. 6). On the other hand, university professors and researchers, like all university graduates in general, were highly prestigious in society, true mandarins (Ringer, 1969).

That is, errors of perception implied admitting that different subjects of knowledge - not only astronomers - responded uniquely and differently to identical stimuli. This was a matter of concern in view of the aims of the German university. For this reason, an attempt was made to scientifically understand this personal difference in order to give scientific knowledge back its full validity. Various sciences, from physiological optics to physiology and from physiological psychology to psychology, tried to answer this question. Indeed, two of the most important fields of research in the famous Experimental Psychology Laboratory at Leipzig, especially in the early years, were those of reaction time and psychophysiology of the senses, especially visual and auditory sensation (Saiz, Saiz &

Mulberger, 1990). Wundt himself emphasized in a report on the laboratory:

There are major works on the intensity of sensations (the questions of "psychophysics" in the narrower sense) 14, on tactile sensations 7, sound psychology 12, light sensations 16, sense of taste 4, sense of smell 1, spatial visual perceptions 6, the course of ideas and concepts of time (sense of time) 15, experimental aesthetics 3, attentional processes 10, feelings and affects 7, associative and memory processes 8 (Wundt, 1909, p. 133, translation is mine).

Es beziehen sich auf die Intensität der Empfindungen (die Fragen der "Psychophysik" im engeren Sinne) 14, auf die Tastempfindungen 7, Tonpsychologie 12, Lichtempfindungen 16, Geschmackssinn 4, Geruchssinn 1, räumliche Gesichtswahrnehmungen 6, Verlauf der Vorstellungen und Zeitvorstellungen (Zeitsinn) 15, experimentelle Ästhetik 3, Aufmerksamkeitsvorgänge 10, Gefühle und Affekte 7, Assoziations- und Erinnerungsvorgänge 8 größere Arbeiten (Wundt, 1909, p. 133)

The problem studied in the reaction time experiments was precisely the one mentioned above. It was a question of determining the temporal magnitude of the response to a stimulus perceived by the external senses. And the studies devoted to the psychophysiology of the senses were part of a similar problem, as they tried to determine the transformation and the representative course of the data originating from certain external stimuli. It is necessary to make it clear, then, that this experimental psychology was no longer concerned with the study of any hypothetical internal sense, as criticized by Kant, but that the basis of mental processes originated in the external senses (Klappenbach, 1994).

One hundred years after Newton wrote *The Mathematical Principles of Natural Philosophy*, Kant, an admirer of Newton, published his *Metaphysical Foundations of Natural Science*. In this work, Kant asserted that "in any special doctrine of nature there can be only as much proper science as there is mathematics therein" (Kant, 1786/2004, p. 6), thus philosophically consolidating Newtonian science. In this sense, the *Metaphysical Foundations of Natural Science* constituted the Kantian programme for the development of scientific knowledge, universalising and generalising an already existing and well-known scientific model: that of mechanical physics. In this text Kant distinguished two kinds of science: that of the external senses and that of the internal senses. However, this distinction was only formal, for in fact, the only one capable of becoming a proper science was the science of the outer senses ("doctrine of body"). Such a distinction was derived from Cartesian dualism, which, as is well known, recognized only the phenomenon of extension in bodies. If the soul, by definition, lacked extension, no mathematical analysis would be possible, since measurement, order, proportion, quantification, in

short, mathematics, was only applicable to extensive phenomena, that is, to those phenomena that originated in objects occupying a place in space, and for that reason, benefited from the three dimensions of every extensive body. In such perspective, when Kant asserted that psychology could not become a science proper, he was confirming that the soul, the inner sense, had only one dimension and therefore mathematical processes were not applicable to it. Kant, in fact, does nothing more than consolidate epistemologically what he had already anticipated in Cartesian dualism: if the science we know (Newtonian science) deals mathematically with large bodies, and psychology deals with the soul, which is definitely inextensive, psychology is not a science. Thus, the opposition between internal sense and external senses is the translation in terms of transcendental aesthetics (that is, pure theory of sensibility) of metaphysical dualism. If through the external senses, we have access to the knowledge of the extensive bodies located in space, the internal sense grants the immediate intuition of the thinking substance, which can only be located in time, as developed in the Second Section of the *Transcendental aesthetic of the Critique of Pure Reason* (Kant, 1781/1998). Wundt, on the other hand, made it clear that the object of study of psychology was not the inner sense but the experience of knowledge itself, which begins with the external senses. But while natural science ignores the subject and only studies mediated experience, psychology focuses precisely on the subject of knowledge, that is, immediate experience:

[psychology as the science of immediate experience] recognizes no real difference between inner and outer experience, but finds the distinction only in the different points of view from which unitary experience is considered in the two cases (Wundt, 1896/1897, p. 8).

[...] The experience dealt with in the natural sciences and in psychology are nothing but components of one experience regarded from different points of view: in the natural sciences as an interconnection of objective phenomena and, in consequence of the abstraction from the knowing subject, as mediate experience; in psychology as immediate and underived experience (Wundt, 1896/1897, p. 314).

In other words, Wundt started from Kant's phenomenological monism (it is possible to know only the phenomena of knowledge) but introduced a dualism in the nature of the experience of knowledge (not in the nature of the senses). From his perspective, the experience of knowledge was split into two points of view: if the study was about phenomena perceived through the external senses, abstracting from the subject of knowledge, it is about the study of mediated experience. In this case, the experience is mediated by the subject, but the study of the subject is ignored, which is proper to the field of the natural sciences. If, on the other hand, the study is concerned precisely within the subject of knowledge, it is the study of

immediate experience, and this is proper to psychology. Wundt modified the object of study of psychology from the internal sense to the immediate experience of knowledge obtained by the external senses. I dare say that this modification was much more important than the creation of the laboratory of experimental psychology and with it the introduction of the experimental method in psychology. Again, the intimate relationship of Wundt's psychology to philosophy and to Kant's programme can be seen, even if it was necessary to question some aspects of Kantian postulates. The problems that Wundt faced in his laboratory were typically philosophical problems. Psychology studied what the subject of knowledge feels, perceives, and the affects that accompany the sensations. Both the natural sciences and psychology depend on the observation of phenomena through the external senses, and it is this experience that Wundt divides into an immediate aspect that studies what is perceived and affects the knowing subject; and on the other hand, the mediate experience that bypasses the subject. That is why Wundt affirmed that psychology can be considered the most empirical science of all (Wundt, 1896). Psychology is even more empirical than physics, since physics elaborates all its theory by abstracting from the knowing subject.

It can be seen, then, that the laboratory of experimental psychology founded by Wundt investigated the immediate experience of knowledge. That is, what the subject experienced in his own experience of knowledge from the stimuli originating in the external senses and the relations they produced in mental representations. It is not by chance that a classic text of the French historical-epistemological tradition, Georges Canguilhem (1958) referred to a psychology as a science of the subjectivity of the external sense. But at the same time as Wundt was conducting research in the laboratory to study the simplest phenomena of mental life, namely the simple sensations produced by the external senses, Wundt argued that the experimental method could only be used in the study of the simplest phenomena of mental life; more complex phenomena, on the other hand, required the method of observation of cultural products:

Psychology has, like natural science, two exact methods: the experimental method, serving for the analysis of simpler psychical processes, and the observation of general mental products, serving for the investigation of the higher psychical processes and developments (Wundt, 1896/1897, pp. 23-24; emphasis is mine).

And just as Wundt conducted research in experimental psychology for the simple phenomena mentioned above, he also undertook the study of more complex processes in his *Völkerpsychologie*. Since the work of Michael Cole, among others, the translation of *Völkerpsychologie* as cultural psychology has become common. Precisely in his book *Cultural Psychology*,

Cole pointed out: "In recent years interest has grown in Wundt's 'second psychology,' the one to which he assigned the task of understanding how culture enters into psychological processes" (Cole, 1996, p. 22).

For this reason, as a synthesis of what has been said so far, the problem that experimental psychology tried to answer was the problem of the subject of knowledge. This also explains why the subjects of the experiment were always, in the first place, human beings, and not rats or chickens or fish as in experimental research in the United States. And secondly, not just any human being either, but precisely scientists who were sufficiently trained and who were themselves subjects accustomed to the practices surrounding knowledge and research, which allowed for an exchange between the experimenter and the subject of the experiment (Danziger, 1985,1990). And such a strategic objective made psychology not only a complementary science to natural science, but also a preparatory science for philosophy (Wundt, 1896). This also explains why the first journal founded by Wundt in 1881 was entitled *Philosophische Studien* (Philosophical Studies) and why its aim was "to communicate a number of works on philosophical problems whose development seems to me to be fruitful and from a point of view that I consider scientific" (Wundt, 1882, quoted by Saiz, Saiz & Mulberger, 1990, p. 412). He also explains that during Wundt's lifetime, a psychological society was never organized in Leipzig (Danziger, 1979b).

In that direction, Barcelona-based psychology historians Milagros Saiz, Dolores Saiz and Annette Mülberger quantitatively analyzed the journal output of German psychology. They compared Wundtian psychology in Germany with other developments in German psychology that they subsume under the category of non-Wundtian psychologies (encompassing the production of scholars such as Meumann, Müller, Stumpf, Lipps, Heymans, Messer, among others). Methodological issues account for about 20% of the papers. On the other hand, when comparing certain classical topics developed by experimental psychology such as psychology of the senses, visual perception and others, a strong weight of these topics is observed in Wundtian psychology, around 32%; in the case of non-Wundtian psychology this percentage ranged between 25 and 56.8% depending on the journal (Saiz, Saiz & Mulberger, 1999). These data confirm that the problem of perception (visual, auditory, etc.) was a problem of German psychology as a whole, which is to be expected considering once again the scientific matrix of the German university.

ANOTHER MYTHICAL ISSUES AROUND WUNDT

We seem to have argued that characterizing Wundt as the father of experimental psychology implies ignoring the context of the German university that made

research such as Wundt's possible and the roots of philosophical problems in his work. It also neglects the criticisms and limits that Wundt himself recognized in experimental psychology. Similarly, there are other claims about Wundt that also need to be quickly reviewed. One of them claims that Wundt was an atomist or an elementalists, since just as physics started from atoms, Wundt relied on what he called the "minimal elements of mental processes", which were sensations and feelings. However, Wundt clearly pointed out that in psychology the researcher encounters complex phenomena and, in any case, is obliged to abstract and analyze them:

All the contents of psychical experience are of a composite character. It follows, therefore, that psychical elements, or the absolutely simple and irreducible components of psychical phenomena, **can not be found by analysis alone**, but only with the aid of abstraction. This abstraction is rendered possible by the fact that the elements are in reality united in different ways (Wundt, 1897, p. 29; emphasis added).

The actual contents of psychical experience always consist of various combinations of sensational and affective elements, so that the specific character of the simple psychical processes depends for the most part not on the nature of these elements so much as on their union into composite psychical compounds (Wundt 1897, p. 23).

The attributes of psychical compounds are never limited to those of the elements that enter into them, but new attributes, peculiar to the compounds themselves, always arise as a result of the combination of these elements (Wundt 1897, p. 91).

Contrary to the sometimes widespread image, Wundt conceived of mental processes in their true complexity. And although Wundt began his study of the Grundriss and other works by first studying the mental elements (die psychischen Elemente), he did so out of analytical necessity. It was clear to Wundt that in the immediate experience of knowledge what appears are compounds (die psychischen Gebilde) and above all the connections of these psychic formations (die Zusammenhang der psychischen Gebilde).

And the last question concerns Wundt as a psychologist of consciousness, a question which is very widespread in my own country. Actually, Wundt was not unaware of the existence of unconscious processes, although he did not, of course, relate unconscious processes to repressed infantile sexuality. However, he also recognized that unconscious processes were the result of mental dynamics and that they generated dispositions for future mental processes:

So we come to distinguish grades of consciousness. The lower limit, or zero grade, is unconsciousness. This condition, which consists in an absolute absence of all psychical interconnections, is essentially different from

the disappearance of single psychical contents from consciousness. The latter is continually taking place in the flow of mental processes. Complex ideas and feelings and even single elements of these compounds may disappear, and new ones take their places..... Any psychical element that has disappeared from consciousness, is to be called unconscious in the sense that we assume the possibility of its renewal, that is, its reappearance in the actual interconnection of psychical processes (Wundt, 1897, pp. 207-208).

What I have called historiographical traditions, both Anglo-Saxon and psychoanalytic, constructed an account of Wundt's work that often turned out to be more myth than truth (Klappenbach, 2006; Schultz & Schultz, 1996). Fortunately, in recent decades the enormous complexity of Wundt's work and its philosophical substratum have been highlighted (Araujo, 2016).

References

- Araujo, S. F. (2016). *Wundt and the Philosophical Foundations of Psychology. A Reappraisal*. Cham, Heidelberg, New York, Dordrecht, London: Springer
- Blumenthal, A. (1980). Wilhelm Wundt and early American psychology: A clash of cultures. In R. Rieber & K. Salzinger (Eds.), *Psychology: Theoretical-historical perspectives* (pp. 25–42). New York: Academic Press.
- Boring, E. (1950). *A history of experimental psychology* (2nd ed.). New York: Appleton-Century-Crofts.
- Bringmann, W., & Tweney, R. (Eds.). (1980). *Wundt studies: A centennial collection*. Toronto: C. J. Hogrefe.
- Bringmann, W., & Ungerer, G. (1980). An archival journey in search of Wilhelm Wundt. In J. Brozek & L. J. Pongratz (Eds.), *Historiography of modern psychology* (pp. 201-240). Toronto: Hogrefe.
- Canguilhem, G. (1958). Qu'est-ce que la psychologie [What is Psychology]. *Revue de Métaphysique et de Moral*, 63(1), 12-25.
- Cattell, J. M. K. (1888). The Psychological Laboratory at Leipsic (sic). *Mind*, 13, 37-51.
- Cole, M. (1996). *Cultural Psychology. A once and future discipline*. Cambridge-London: Harvard University Press.
- Danziger, K. (1979a). The positivist repudiation of Wundt. *Journal of the History of the Behavioral Sciences*, 15, 205-230.
- Danziger, K. (1979b). The social origins of modern psychology. In A. R. Buss (Ed.), *Psychology in social context* (pp. 27-45). New York: Irvington Publishers.
- Danziger, K. (1980). Wundt's psychological experiment in the light of his philosophy of science. *Psychological Research*, 42, 109-122.
- Danziger, K. (1985). The origins of the psychological experiment as a social institution. *American Psychologist*, 40(2), 133-140.
- Danziger, K. (1990). *Constructing the subject. Historical origins of psychological research*. New York: Cambridge University Press.

- Kant, I. (1998). *The critique of pure reason* (P. Guyer & A. W. Wood, Trans and Ed). New York: Cambridge University Press. (Original work published 1781).
- Kant, I. (2004). *Metaphysical Foundations of Natural Science* (M. Friedman, Trans and Ed). New York: Cambridge University Press. (Original work published 1786).
- Kim, A. (2022). Wilhelm Maximilian Wundt. In E. N. Zalta, & U. Nodelman (Eds), *The Stanford Encyclopedia of Philosophy* (Winter 2022 Edition).
- Klappenbach, H. (1994). Diferentes tradiciones y problemas en la psicología del siglo XIX [Different traditions and problems in 19th century psychology]. *Idea*, 14, 63-80.
- Klappenbach, H. (2006). Construcción de tradiciones historiográficas en psicología y psicoanálisis [Constructing Historiographical Traditions in Psychology and Psychoanalysis]. *Psicologia em Estudo*, 11 (1), 3-17.
- Passkönig, O. (1912). *Die Psychologie Wilhelm Wundts. Zusammenfassende Darstellung der Individual-, Tier- und Völkerpsychologie* [The Psychology of Wilhelm Wundt. Summarising presentation of individual, animals and cultural psychology]. Leipzig: Verlag von Siegismund & Volkening.
- Paulsen, F. (1895). *The German Universities. Their character and historical development* (E. D. Perry, Trans). New York: Macmillan.
- Ringer, F. K. (1969). *The Decline of the German Mandarins. The German Academic Community, 1890-1933*. Cambridge, MA: Harvard University Press.
- Robinson, D. K. (2001). Bibliography of Wilhelm Wundt's Writings as compiled by Eleonore Wundt. In R. W. Rieber & D. K. Robinson (Eds.), *Wilhelm Wundt in History. The making of a scientific psychology* (pp. 261-295). New York: Springer Science+ Business Media.
- Robinson, D. N. (1982). *Toward a science of human nature. Essays on the psychologies of Mill, Hegel, Wundt and James*. New York: Columbia University Press.
- Sáiz-Roca, M, Sáiz-Roca, D, & Mülberger, A. (1990). La psicología alemana a través de la revista "Philosophische Studien" [German Psychology through the journal "Philosophische Studien"]. *Revista de Historia de la Psicología*, 11(3/4), 411-422.
- Sáiz, M., Sáiz, D., & Mülberger, A. (1999). La tradición de la primera psicología experimental alemana a través del estudio cuantitativo de sus revistas iniciales [The tradition of early German Experimental Psychology through the quantitative study of its early journals]. *Revista de Historia de la Psicología*, 20(4), 35-48.
- Schultz, D. P. & Schultz, S. E. (1996). *A history of modern Psychology* (6th. ed.). Fort Worth: Harcourt Brace & Co.
- Takasuna, M. (2008). Status quo of the Wundt Collection in Japan. *Revista de Historia de la Psicología*, 29(3/4), 255-259.
- Titchener, E. B. (1921). Wilhelm Wundt. *The American Journal of Psychology*, 32(2), 161-178.
- Wundt, E. (1927). *Wilhelm Wundts Werk. Ein Verzeichnis seiner sämtlichen Schriften* (Abhandlungen der sächsischen staatlichen Forschungsinstitute. Forschungsinstitute für Psychologie, Nr. 28) [Wilhelm Wundt's Work. An index of all his writings (Essays of the Saxon State Research Institutes. Research Institute for Psychology, issue 24)]. München: Beck.
- Wundt, W. (1863). *Vorlesungen über die Menschen- und Tierseele* (2 Bände) [Lectures on Human and Animal Psychology]. Leipzig: Voß.
- Wundt, W. (1874). *Grundzüge der Physiologischen Psychologie* [Principles of Physiological Psychology]. Leipzig: Engelmann.
- Wundt, W. (1883). *Logik. Eine Untersuchung der Principien der Erkenntniss und der Methoden wissenschaftlicher Forschung* (2 Vols.) [Logic. An investigation of the principles of knowledge and the methods of scientific research]. Stuttgart: Enke.
- Wundt, W. (1886). *Ethik. Eine Untersuchung der Thatsachen und Gesetze des sittlichen Lebens* [Ethics. An investigation of the facts and laws of the moral life]. Stuttgart: Enke.
- Wundt, W. (1889). *System der Philosophie* [System of Philosophy]. Leipzig: Engelmann.
- Wundt, W. (1896a). *Grundriss der Psychologie* [Outlines of Psychology]. Leipzig: Engelmann.
- Wundt, W. (1896b). *Lectures on Human and Animal Psychology* (J. E. Creighton and E. B. Titchener, Trans. from the 2nd German edition). London: Swan Sonnenschein – New York: Macmillan.
- Wundt, W. (1897). *Outlines of Psychology* (C. H. Judd, Trans.). Leipzig: Engelmann – London: Williams & Norgate - New York: Gustav E. Stechert. (Original work published 1896).
- Wundt, W. (1909). Das Institut für experimentelle Psychologie [The Institute of Experimental Psychology]. In Leipzig Universität, Rektor und Senate (hrsg), *Universität Festschrift zur Feier des 500 Jährigen Bestehens der Universität Leipzig* (4 Band 4, 1 teil, pp. 118-133). Leipzig: von S. Hirzel.
- Wundt, W. (1912). *Elemente der Völkerpsychologie. Grundlinien einer psychologischen Entwicklungsgeschichte der Menschheit* [Elements of the Cultural Psychology. Basic Lines of a Psychological History of the Development of Mankind]. Leipzig: Kröner.