

THE EMERGENCE OF PSYCHOLOGY AS A SCIENCE: HOW AMERICAN HISTORY WRITING CREATED AN ILLUSION OF PSYCHOLOGY SCHOOLS AT WAR WITH EACH OTHER ¹

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¹ This text is partly based on excerpts from Brysbaert, M. & Rastle, K. (2013). Historical and Conceptual Issues in Psychology (2nd edition). Harlow: Pearson Education.

The standard textbook introduction to the history of psychology

The standard textbook introduction to the history of psychology reads as follows:

Psychology started in 1879 when Wilhelm Wundt established the first laboratory of experimental psychology at the University of Leipzig. Wundt was a proponent of structuralism, a school that tried to understand the conscious mind by means of introspection. Wundt had many American PhD students, who returned to the US but were more interested in practical applications than in the structure of the mind. Together with William James, they created the functionalist school. In 1913, John B. Watson published a manifesto, which introduced behaviorism and was the end of functionalism in America. Meanwhile in Europe, Gestalt psychologists started to question the structuralist assumption that one can understand the human mind by breaking it down to basic elements. According to them, the whole was something else than the sum of the parts. They started a new school: Gestalt Psychology. Alongside these four schools in experimental psychology, there was fifth school, psychoanalysis, which was predominant in clinical psychology.

Problems with the standard account

The standard account is the received wisdom I learned when I was a student and which I propagated in two new psychology textbooks (Roediger, Capaldi, Paris, Polivy, Herman, & Brysbaert, 1998; Brysbaert, 2006). However, when I was delving deeper into the matter for a historical textbook (Brysbaert & Rastle, 2009), I discovered a lot was wrong with the account. To give but a few examples:

- Psychology was already a well-established subject at universities before 1879.
- Wilhelm Wundt had many more interests than introspection and would probably have abhorred the description of him as a structuralist.
- Almost all research in applied psychology is overlooked (e.g., the publication of the first intelligence test by Binet and Simon in 1907).
- Almost all experimental research done in Europe in the 19th century and early 20th century is ignored (see, e.g., Levelt, 2014, for a description of language-related research).
- A case probably can be made to claim that the influence of behaviorism was smaller than claimed by the standard account. Although behaviorism was strong in American experimental psychology (particularly in the psychology of learning, where it remains a big influence), it was much less influential in other parts of the world and in other research areas (e.g., developmental and social psychology).

Even worse, when one looks at the titles of talks given at scientific conferences, very few of these titles referred to topics at the core of the various schools (see, for instance, the talks

presented at the British Psychological Society, listed in Brysbaert & Rastle, 2013). Even the primary textbook on schools in psychology (Woodworth, eight editions between 1931 and 1948) ended with a surprising chapter, in which the importance of schools was toned down, as can be seen in the following excerpts:

“In view of all the divergent movements that we have surveyed, all these ‘warring schools’ of contemporary psychology, the reader may easily carry away the impression that we psychologists are anything but a harmonious body of scientific workers. Looked at from outside, our fraternity has seemed to be a house divided against itself ... You would get a very different impression from attending one of the International Congresses of Psychology or a meeting of one of the national societies such as the American Psychological Association. You would hear papers read on various psychological topics, with very little mention of any of the schools and with discussions of the usual scientific type, free from acrimony though not of course from the give and take of doubt and criticism ...

Another reason for the continued unity of psychology is found in the fact that only a minority of psychologists have become active adherents of any of the schools. Some may lean toward one school and some toward another, but on the whole the psychologists of the present time are proceeding on their way in the middle of the road.”

So, what was going on?

Origins of the distortions in the standard account

Gradually it became clear that the standard history of psychology in textbooks as “warring schools” was a primary example of how history writing can lead to simplification that no longer represents reality. This is what I think happened.²

For a start, philosophers were used to talking about schools, referring to a teacher or a small group of teachers and their students. This practice was continued by the first psychology writers. For instance, James (1890) mentioned the following schools in “Principles of Psychology” (among many others): The associationist schools of Herbart in Germany and of Hume the Mills and Bain in Britain, Charcot’s school, the Hegelizer school, the analytic school, ... Also, Woodworth discerned more than the ‘traditional’ five schools. He included associationism, Soviet psychology, analytical schools, hormic psychology, organismic psychology, and personalistic psychology.

² Like all history writing, my account is personal and simplified, although I hope to have done better than the situation I’m addressing. If not, I’ll be happy to be corrected.

Gradually, the idea of a school as a small group of people (and sometimes a single person) got lost and schools were seen as wider movements. At the same time, the number of schools was pruned to keep things understandable. An important role in this evolution was played by Edwin Boring, who wrote the influential handbook "A History of Experimental Psychology" (1929, revised edition 1950). Boring was a student of Titchener³, an Englishman working in the US who had studied with Wundt and considered himself as a structuralist and the true heir of Wundt (hence the association between Wundt and structuralism). In addition, Boring liked to present history with the dialectical method, consisting of thesis, antithesis, and synthesis. This allowed the historian to position himself as synthesis maker. So, we had thesis-antithesis examples between structuralism and functionalism (structure vs. functions of the mind), between structuralism and Gestalt psychology (elements vs. whole), between functionalism and behaviorism (introspection vs. scientific research), between behaviorism and psychoanalysis (scientific research vs. clinical case studies), and so on. A last influence of Boring arguably was that he limited his handbook to experimental psychology, thereby suggesting that applied psychology was of secondary importance.

Costall (2006) argued that another dialectical triad explains the continuing attraction of the simplified historical view for scientific psychologists. It goes as follows. At first, psychologists examined the right subject (the human mind) but with the wrong method (introspection). In reaction to this, Watson proposed to use the right method (scientific experiment) but applied it to the wrong subject (human behavior). Finally, synthesis was achieved when cognitive psychologists proposed to study the right subject (mind) with the right method (experiment).

Another person who undoubtedly contributed to the simplification of early psychology was Watson, who in his 1913 manifesto reduced all existing psychological research to structuralism (Europe) and functionalism (America). This considerably simplified matters and increased the impact of Watson's new behavioristic approach.

What is the alternative?

If the standard account of the history of psychology is a biased (even wrong) representation of what happened, what is the alternative? This is the question we were confronted with when we wrote our history book. As it happened, the alternative did not turn out to be so difficult. All we had to do, was to describe the developments in a few countries (e.g., Germany, France, US) to give a rather vivid account of how psychology sought itself a place at universities. For instance, in France the emergence of psychology as an independent discipline was hindered because Auguste Comte (the founder of sociology) had declared psychology unscientific, a branch of philosophy (metaphysics). Ribot tried to change this view by writing books about how successful scientific psychology was in Germany and the

³ The history book was dedicated to Titchener.

UK⁴, and by helping Beaunis to establish the first laboratory for experimental psychology in France. Another input came from Charcot's work on hysteria. One of Charcot's assistants was Binet. Charcot and Binet were heavily criticized by the Belgian academic Delboeuf, who questioned their research methods. In particular, Delboeuf feared that many of the findings reported by Charcot were due to the fact that the hysteric patients could hear what the experimenter expected from them. As such, this is one of the first examples of the negative influences demand characteristics can have in psychological research (Wolf, 1964). Delboeuf's criticisms arguably contributed to the fact that Binet left Charcot's lab and sought to improve the scientific quality of his research (which eventually led to the IQ test).

The alternative account of the emergence of psychology is less centered on American psychology⁵, but to our delight turned out to work even better than the standard account. It gave a much more vivid account of how psychology emerged as an independent discipline (Brysbart & Rastle, 2013).

Are there no schools at all?

Attentive readers may have noticed that the discussion so far was about structuralism, functionalism, behaviorism, and Gestalt psychology. What about the fifth school: psychoanalysis?

C.P. Snow made a perceptive distinction in a lecture given in 1959. He noticed that before the arrival of the natural sciences, education was centered on subjects from the Greek and Latin civilizations. They consisted of languages, philosophy, mathematics, history, culture, arts, and sports. As the natural sciences grew in power, the classic subjects became beset by the science curriculum. However, they did not yield (completely). What happened was a fractioning of education, with some streams remaining within the traditional curriculum (Snow called them the humanities) and others focused on the new sciences. As a result, Snow argued, society became divided in two cultures, which vie for power but for the rest largely ignore each other.

By its nature, psychology fell right on the border between the two cultures. Its subject was part of the humanities, but its methods (and indeed its claim for existence as an independent branch of learning) came from the natural sciences. Although psychology's position could have turned it into a bridge between the humanities and the sciences, reality forces us to admit that this is not quite what happened (e.g., Kagan, 2009). Instead, the schism between the two cultures has resulted in a schism within psychology, with one part defending the scientific approach and the other defending the humanities approach. According to the former, psychology must investigate human functioning quantitatively

⁴ Which for the UK actually was not the case, but that is a topic for another manuscript.

⁵ It may be good to remember that the standard account of the history of psychology came to us via the American textbooks that were consulted by lecturers all over the world.

making use of experimental manipulations and statistical techniques to understand the relations between phenomena. According to the latter approach, psychologists must try to understand unique persons in their context like historians try to understand past events (without the possibility to intervene and see what consequences this has). Although psychoanalysis at various times claimed to be a science, it is fair to say that it much more adhered to the humanities. In this, it was joined by other humanistic, hermeneutic, critical, and radical groups.

If any “warring” schools are to be distinguished in psychology, it is between the science-oriented school and the humanities-oriented school, a distinction that relates to a much wider divide in society (about the value of science for human well-being). Readers interested in this topic are advised to search for the terms “mainstream psychology” and “critical psychology”.

In search of a bridge

If psychology failed as a bridge between sciences and humanities, is there a substitute? Already decades before Snow, George Sarton proposed history (and in particular history of science) as the best candidate. In his own words (Sarton, 1937: 56-57):

To complete the integration [between humanities and science], each group must learn to understand the other. The educated people in general must obtain some knowledge and appreciation of science; the scientists must receive some historical training, must be taught to look backward as well as forward, and to look with reverence. These good offices may be rendered to both groups by the teaching of the history of science and of the history of civilization focused upon it... Between the old humanist and the scientist, there is but one bridge, the history of science...

Similarly, history of science and history of psychology may be the bridge between the science-oriented and the humanities-oriented schools in psychology.

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