



The Decline and Fall of Introspection

A Review of

The Philosophical Background and Scientific Legacy of E. B. Titchener's Psychology: Understanding Introspectionism

by Christian Beenfeldt

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A commonly told story about the history of psychology goes like this. Psychology began as a science using introspection as the method for investigating the mind. However, introspection proved to be controversially inaccurate and unreliable, and it was therefore abandoned by behaviorists, who redefined psychology as the science of behavior rather than of the mind. Then, in the “cognitive revolution” of the 1960s, cognitive psychologists returned psychology to its original definition as the science of the mind. This story has been questioned (e.g., Costall, 2006; Leahey, 1992) but remains influential.

In his short book *The Philosophical Background and Scientific Legacy of E. B. Titchener's Psychology: Understanding Introspectionism*, Christian Beenfeldt contributes a fine-grained analysis of introspectionism, arguing that the fault of early introspective psychology—especially that of Edward Bradford Titchener (1867–1927)—lay not in the method as such, but in the British empiricist–associationist philosophy of mind that provided the theoretical framework within which Titchener worked. Beenfeldt's first two chapters comprise a brief but incisive account of the development of British associationism from Thomas Hobbes (1588–1689) and John Locke (1632–1704) to James Mill (1773–1836) and his son, John Stuart Mill (1806–1873).

While acknowledging some differences among these philosophers of mind, Beenfeldt concludes that British associationism was committed to four key doctrines that constitute what he usefully dubs “a physical science of the mental” (p. 20), stressing the influence of the growing atomic theory of matter on thinking about consciousness. The first was *elementism*, the proposal that any system is made up of basic, irreducible, atomic parts. This naturally leads to the second doctrine, *decompositional reductionism*, the idea that a system can be best explained in terms of interactions among its atomic parts. Applied to psychology, these metaphysical theses about the world in general lead to the doctrine of *sensationism*, the proposal that consciousness is an assemblage of simple atomic sensations glued together by a mental form of gravity called *association of ideas* (the fourth doctrine, the positing of a small number of laws of association).

In his middle chapters, Beenfeldt argues that in Titchener's hands, these theses became constraining dogmas that severely distorted his project to investigate consciousness by the method of introspection. Beenfeldt closely reads Titchener's key texts, including his influential laboratory manuals that were widely used to train the first generation of American psychologists, to show that Titchener's fanatical devotion to breaking analysis into component parts produced a picture of consciousness that represented "the Titchenerian destruction of actual lived experience" (Danziger, 1990, p. 47, quoted by Beenfeldt, p. 64). Beenfeldt also points out that, contrary to common belief at the time, Titchener's introspective practice, rooted as it was in British associationism, was profoundly different from his teacher Wundt's use of introspection (Leahey, 1981).

The remaining chapters of the book discuss the famous imageless thought controversy, summarize apt criticisms of Titchener's psychology by Gestalt psychologists, and consider the use by early behaviorists of the failings of Titchenerian introspection to advance their redefinition of psychology as the science of behavior rather than of consciousness. Beenfeldt concludes, however, that Titchener's system did not implode because of the flaws of introspection but because of the "speculative associationist assumptions upon which the system rested" (p. 72).

Beenfeldt's exposition and argument are admirably clear and concise. His book also represents an old-fashioned approach to history of psychology that focuses on the published record of scientific papers and books rather than letters and other archival sources. Historians of psychology and modern philosophy of mind will profit from Beenfeldt's compact treatment of a central episode in the attempt to study consciousness scientifically.

Nevertheless, I think that Beenfeldt misses an important aspect of the abandonment of introspection by psychologists in the early 20th century, which also casts light on the recovery of cognitive psychology in the 1970s, which Beenfeldt alludes to but does not discuss. Philosopher of mind David Chalmers (1996) distinguished two concepts of the mind: the causal concept and the conscious concept. The causal concept of the mind is about mental states or processes that cause behavior. Thus, my rummaging in the fridge is caused by my belief that there's a soda inside that will quench my thirst. The conscious conception of the mind equates mind and consciousness.

Chalmers (1996) pointed out that although these two concepts overlap, they are not coextensive. My belief that there's a soda in my fridge is both causal and conscious because I'm aware of what I'm looking for. On the other hand, a mental state can be causal but not conscious. As I feed \$1.50 into a vending machine to get a soda while talking to a colleague about departmental politics, I'm not likely to be consciously thinking, "There's a soda in the machine," even though I have that belief and it is causing my behavior.

Finally, a conscious experience can be epiphenomenal, accompanying behavior but not causing it. If I ask you, "What's the capital of France?" you may, as you answer "Paris," experience a memory of visiting the Eiffel Tower, but it is unlikely that your conscious image of the tower caused you to retrieve the fact that Paris is the capital of France.

Chalmers further proposed that because both concepts use the same word, *mind*, many controversies in philosophy and psychology have been caused by equivocation, theorists thinking they are arguing about the nature of *the* mind when in fact they are talking about two different things altogether. Both conceptions were present, without the difference being acknowledged, from the earliest days of scientific psychology. Fechner's psychophysics

investigated mind as consciousness, measuring how physical stimulus strength mapped onto subjective sensation. On the other hand, Donders's mental chronometry was about measuring the speed of mental processes that caused judgments about which of several stimuli had been presented.

Beenfeldt follows Kusch (1995, 1999) in seeing the imageless thought controversy as a key episode in the history of psychology. Different psychological laboratories, most importantly those at the University of Würzburg led by Oswald Külpe (1862–1915) and at Titchener's Cornell laboratory, asked participants to report the mental processes evoked by solving mental problems but reported very different introspective results. Note that the Würzburg psychologists began by asking a causal question about the mind, "How does thinking work?," but that after Titchener entered the fray the question shifted to an issue about conscious content: "Are there imageless thoughts or not?"

As Beenfeldt observes, the fact that introspection laboratories reported conflicting results casts doubt on the reliability of introspective methods, and the controversy was cited by psychologists wanting to replace introspection with behavior study. Because the accuracy of introspective reports was thrown in doubt, psychologists abandoned them, not realizing, according to Beenfeldt, that it wasn't introspection that should have been thrown in doubt, it should have been Titchener's British analytical associationism and his relentless quest to reduce consciousness to meaningless bits of sensation.

However, once we recognize the existence of epiphenomenal experience and the drift of American psychology to functional and Darwinian views of the mind (Leahey, 2013), the accuracy and reliability of introspection become beside the point. In contrasting Titchener's structural psychology with Darwinian functional psychology, Angell (1907, pp. 62–63) wrote, "[F]unctional psychology [tries] . . . to discern and portray the typical operations of consciousness under actual life conditions [the causal concept of mind], as over against the attempt to analyze and describe its elementary and complex contents [the conscious concept of mind]." An epiphenomenal experience such as thinking of the Eiffel Tower might be reported thoroughly and with complete fidelity to the experience without revealing anything about the mental process that produced the answer "Paris." From the perspective of building a psychological science that is about the causes of behavior, the problem with introspection is less that it is subject to bias and suggestion, but that even if it were not, it rarely reveals the springs of human thought or action (Wilson, 2004).

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