

The Continuing Relevance of 19th-Century Philosophy of Psychology: Brentano and the Autonomy of Psychological Methods

Uljana Feest

This paper provides an analysis of Franz Brentano's thesis that psychology employs a distinctive method, which sets it apart from physiology. The aim of the paper is two-fold: First, I situate Brentano's thesis (and the broader metaphysical system that underwrites it) within the context of specific debates about the nature and status of psychology, arguing that we regard him as engaging in a form of *boundary work*. Second, I explore the relevance of Brentano's considerations to more recent debates about autonomy on the one hand and theoretical and/or methodological integration on the other. I argue that Brentano puts his finger on the idea that an integrated research process presupposes the existence of distinct methods and approaches, and that he highlights the philosophical challenge of accounting for such distinct methods. I suggest that Brentano's ideas offer unconventional perspectives on current debates, in particular regarding first-person methods and the investigative process in cognitive science.

1. Introduction

One prominent theme in the philosophy of psychology concerns the status of psychology vis-à-vis neighboring disciplines, such as neurophysiology. While much of the literature revolves around the question of whether psychological *explanations* are reducible to neuroscientific explanations, this issue can be distinguished from another question, i.e., whether psychological *research* can proceed in a manner that is independent of research conducted in neuroscience. In a rough-and-ready fashion, we may say that the former question is about a 'static' state of affairs, i.e., what is the relationship between the explanations provided by psychology and neuroscience, whereas the latter address a *dynamic process*, i.e., the process of research. We may refer to the former issue as concerning "explanatory autonomy," whereas the latter concerns "methodological autonomy."¹

I have maintained in the past that these two issues can be separated, and I argued against methodological autonomy (Feest 2003). The basic gist of this argument was to say that in the process of forming their taxonomies, 'higher' and 'lower' level sciences mutually inform one another. This argument is similar to some in the recent literature in the philosophy of psychology and neuroscience (Bechtel and Richardson 1993; Craver 2007), which have also pointed out that there is often a dynamic interaction between psychological and neuroscientific research. My claim (and that of others) that psychology is not (and cannot be) methodologically autonomous can also be cast in a more positive fashion, as saying that psychology is (or should be) methodologically (or procedurally) *integrated* with other sciences.

¹ See Feest 2003. Retrospectively, it seems to me that a more accurate term for what I had in mind would have been "procedural autonomy."

Shifting the emphasis away from a negative thesis (against autonomy) and towards a positive thesis (for integration), brings to the fore the question of *what exactly is supposed to be integrated*. In the recent literature, it is typically assumed that the relations of psycho-neural integration are *explanations* (see for example Piccinini and Caver 2011). By contrast, and in keeping with my interest in the investigative procedure as such, I want to raise the question of whether psychology and its neighboring disciplines employ unique and distinctive *methodologies*. This question highlights the fact that we need to distinguish between *two* issues with regard to *methodological autonomy vs. integration*: One concerns the question of whether *the process of knowledge generation* in psychology can be autonomous from that of neuroscience. The other concerns the question of whether psychology contributes its own *distinctive methodology* to this process. While continuing to reject methodological autonomy in the former sense, I will tentatively adopt a version of an argument in favor of methodological autonomy in the latter sense. In this vein I will suggest that the autonomy provided by the existence of distinctive methodologies would not be an impediment, but a prerequisite for genuine integration, because it would contribute to the production of the very findings that need to be integrated in neuropsychological research.

In this paper I will focus on a class of methods that in the 19th century was by many viewed as distinctly psychological, i.e., methods that make use of first-person data. One person who explicitly linked his discussion of such methods to the issue of the autonomy of psychology was Franz Brentano (1838-1917). Brentano's views, I will argue here, are still well worth considering, in particular as he explicitly related practical questions about psychological research to underlying metaphysical commitments. I will begin with a brief overview of Brentano's vision of psychology (section 2) and then present evidence for my claim that Brentano was concerned with issues of methodological autonomy (section 3). I will outline his views about the method and subject matter of psychology as underwriting a specific response to this concern (section 4). I will then show that we can attribute to Brentano the idea that methodological integration presupposes methodological distinctiveness, and the insight that questions about the choice of methods are deeply tied to metaphysical considerations about the subject matter of psychological investigations (section 5). The paper will conclude by arguing for the continuing relevance of these considerations to more recent philosophy of psychology (section 6).

2. Brentano's Methodological Views in and out of Context

In his 1874 book *Psychology from an Empirical Standpoint* Franz Brentano distinguished between two kinds of psychology, *descriptive* and *genetic* psychology. The former had the task of providing phenomenological descriptions of mental phenomena. The latter had the task of explaining them.

However, as he emphasized in many places, for him the focus of genuinely *psychological* endeavours was

on the *description*, not the explanation, of mental phenomena. The reason for this was that according to him the explanations provided by a genetic psychology would inevitably appeal to unconscious and/or physiological states or processes, whereas a psychological explanation could only make reference to mental phenomena, which he defined as *conscious*. Thus, Brentano's rejection of the possibility of 'purely' psychological explanation rested on a very specific understanding of what such explanations, if they were to exist, would look like, i.e., they would appeal to laws connecting conscious mental states to one another. Since he did not think that many such laws were likely to be found, he focused his efforts on thinking about how to provide adequate descriptions of what we might refer to as the 'explanandum phenomena' of psychology, i.e., conscious mental states. The explanations provided by genetic psychology would then appeal to a hybrid of mental and physiological states and processes.

Given Brentano's understanding of "mental phenomena" as conscious mental states, and given his understanding of descriptive psychology as aiming to provide phenomenological descriptions of such states, it is not surprising that he thought that psychology had to devise *specific methods* that would allow it to pursue its task. This method contained as an ineliminable component something he called "inner perception," i.e., a form of first-person access to the objects in question. Thus, Brentano thought that inner perception was a necessary (though, as we will see, not sufficient) condition of the very possibility of an empirical psychology. In addition he held that by employing inner perception, psychology differed in principle from other empirical sciences, which involved what he called "outer perception."

Returning to our earlier distinction between the issues of explanatory and methodological autonomy of psychology, it is tempting to say that Brentano rejected explanatory autonomy but endorsed methodological autonomy. This is a somewhat fair characterization, though I will suggest that his thesis is more accurately described as one about the *methodological distinctiveness* of psychology since he did not believe that psychological research could take place in complete separation from neurophysiology, but merely that it employed an irreducible and unique method, which could be applied in concert with other methods.² In other words, I argue that he viewed the existence of distinctive methods as compatible with the possibility of *methodological integration*. This may seem like a reasonable position to take, but it bears stressing that Brentano had very specific arguments for it, and that they occurred in the context of very specific debates. So, how should we evaluate Brentano's position from a contemporary perspective?

In the following, I will begin with a reconstruction of the views in question, which contextualizes them vis-à-vis Brentano's systematic philosophy of mind as well as the debates he was engaging in at the time. I

² I will explain and provide evidence for this claim in section 5 below

do this because I believe that we are in danger of missing important features of a historical writer's position if we don't understand the specific intellectual contexts in which he formulated them. However, this raises questions about the transferability of this position to contemporary debates. Differently put, if we need to contextualize a philosophical argument in order to understand it better, does this mean that the insights articulated in that argument are not applicable outside the specifics of their original formulation? While this issue will not be at the foreground of this article, we will touch on it towards the end. In general terms, I argue that questions about the transferability of specific aspects of a past system of ideas can only be asked on a case-by-case basis, and the answer will depend on the specific questions we attempt to attack by appeal to the ideas of a past thinker. In this vein, it is not the aim of this article to advocate a whole-sale revival of Brentano's philosophy of psychology. Rather, I will show that Brentano's approach offers a unique and original perspective to present-day discussions of methodological autonomy/integration and of the status of first-person data to phenomenological descriptions.

3. The Boundaries of Psychology, and Why They Mattered to Brentano

Brentano's work about the distinctiveness of psychological methods had two targets: (1) he wanted to provide the foundations of a methodological unification *within* psychology, and (2) he wanted to provide a foundation for psychology *as distinct and/or autonomous from* neighboring disciplines. In this vein, I find it helpful to think of his reflections about methodology as "boundary work." (Gieryn 1983)³ Let me be clear that while Brentano took an explicit interest in the question of boundaries between psychology and other sciences, he did not think that such boundaries were cast in stone. In this vein, he talked about the issue of "Grenzziehung" (boundary drawing) and even "Grenzstreitigkeiten" (border quarrels) between psychology and physiology (Brentano 1874, p. 7), but acknowledged that every division of scientific fields, no matter how good, will be somewhat artificial (*id.*, p. 8).⁴ Still, he claimed, even in border-disciplines, such as psychophysiology and psychophysics, it is possible to say, for specific questions, whether they are to be approached by the methods of psychology or physiology. The reasoning for this was that for Brentano the unique task of describing mental phenomena by means of inner perception delineated psychology quite clearly from other tasks.

3.1 Defending the Border to Physiology

³ While Gieryn's initial analysis was primarily aimed at the ways in which boundaries between science and pseudoscience are established, he later on argued that "[t]he utility of boundary-work is not limited to demarcations of science from non-science. The same rhetorical style is no doubt useful for ideological demarcations of disciplines, specialties or theoretical orientations within science" (Gieryn 1983, p. 792)

⁴ While I haven't researched this very thoroughly, I gather that the metaphor of borders as delineating psychology from physiology and philosophy was not uncommon at the time. In this vein, Bordogna (2008) provides evidence that both William James and Wilhelm Wundt used this terminology in the 1860s and 1870s.

In chapter 3 of *Psychology from an Empirical Standpoint*, Brentano argued that even though the ultimate aim of psychology was to determine the laws of succession of mental phenomena, it was unlikely that exceptionless laws could be found. He explained that this was due to the fact that psychological phenomena depend on a great number of physiological conditions of which we have only incomplete knowledge. However, Brentano hastened to add that by this he did not mean to suggest that the laws of mental succession could be derived from those of physiology, even if we knew those. Clearly, mental phenomena are dependent on physiological phenomena, but this does not mean that psychological categories could be derived from physiology, an assumption he attributed to Gall, Comte, and Horwicz (Brentano 1973 [1874], p. 60). Even if we acknowledge that physiology may have a role to play in psychology, Brentano argued, the genuinely psychological method was going to have an ineliminable component. Two authors were targeted in particular:

The first one was the German philosopher Adolf Horwicz (1831-1894), who had recently laid out his views in the first of two volumes of a book, entitled *Psychologische Analysen auf physiologischen Grundlagen* (1872a) and an article, “Methodologie der Seelenlehre” (1872b). There he had argued that while an introspective analysis of consciousness might well function as a heuristic device, the real work of delineating mental taxonomies and laws was ultimately going to be done by physiology. Brentano’s critique of this was two-fold. First, he questioned that the vision Horwicz had of the relationship between ‘lower’ and ‘higher’ level sciences ever held true, even outside of psychology. For example, while it is surely uncontroversial that inorganic chemistry and physics might be of help to physiology, nobody would expect to derive any knowledge of physiological structures from these other sciences. Inorganic processes are necessary for organic ones, Brentano argued, but the nature of the organic processes will have to be investigated in their own right. Second, according to Brentano, even if it *were* true for the relationship between inorganic chemistry and physiology, the analogy would break down when it came to physiology and psychology, for the simple reason that physiology dealt with external phenomena, psychology with internal phenomena (Brentano 1973 [1874], p. 64). This distinction between inner and outer phenomena is of course highly problematic as was pointed out early on by Brentano’s student Edmund Husserl (see also Feest 2012b). Nonetheless, I will argue below, Brentano pointed to an important feature of the psychological investigation of subjective experience, i.e., its reliance on *first-person methods*. The question of whether such methods are adequately described as having “inner phenomena” as their objects should not detract us from the systematic status of first-person data, including the question of how they are generated and what are the limits of their utility to scientific investigations.

Brentano’s second target was the British psychiatrist Henry Maudsley (1835-1913), who, in his 1866 *Physiology and Pathology of the Mind*, had argued that not all mental phenomena are conscious, and that

therefore physiological facts are required for any attempt to describe (let alone explain) the totality of facts about mental phenomena (Maudsley 1867). In addition, even if we succeeded in formulating laws of the succession of conscious states, Maudsley had argued, these would still require physiological explanations. In response to these arguments, Brentano (unsurprisingly) questioned Maudsley's claim that not all mental phenomena are conscious. This critique followed directly from his conception of mental phenomena as conscious. (Section 4 will give a more detailed treatment of Brentano's arguments for this conception). Furthermore, while Brentano believed it to be unlikely that there are many laws that can be established between successive conscious mental states, he granted Maudsley that if such laws were to be found they might need to be explained by appeal to physiological processes. However, he argued that in this respect psychological laws are no different than – say – the empirical laws of mechanics, and that a genuinely psychological method was still required to establish the empirical laws to begin with.

3.2 Defining Psychology Against Other Visions of Psychology

In addition to defending the boundary between psychology and physiology, Brentano also engaged in *internal fortification* by unification. In this vein, he stated in the preface to his *Psychology*, that he sought “to establish a single unified science of psychology in place of the many psychologies we now have” (Brentano 1973 [1874], p. xvi). As we just saw, Brentano drew the boundary between psychology and physiology by (a) limiting the task of psychology to that of giving empirical taxonomies and laws, and (b) arguing that these tasks could only be accomplished by means of a method based on inner perception, which is unique to psychology. In defining the scope and methods of psychology in this way, however, Brentano positioned himself vis-à-vis other approaches (“psychologies”) at the time, which took the task of psychology to be not only that of providing descriptions, but also *explanations* of conscious mental phenomena, and/or which debated different methods of gaining epistemic access to conscious mental states.

There is a sense in which it was widely held in the 19th century that consciousness was the proper subject matter of psychology. However, opinions differed over (a) whether conscious mental phenomena were to be explained or merely described by psychology, and (b) what were legitimate scientific methods for gaining access to those phenomena. To explain what I mean by these points, let me use the example of Wilhelm Wundt, whose *Grundzüge der physiologischen Psychologie* appeared in the same year as Brentano's *Psychologie von einem empirischen Standpunkt* (Wundt 1874/1973-1974). For Wundt, sensory consciousness was an important object of psychological research and he (like many others at the time) held that phenomenally conscious mental states could be explained by appeal to basic or immediate “elements” of consciousness and some mental processes (e.g., association, or – in his case – apperception), which constructed conscious experiences out of the elements. As indicated above, Brentano

did not find this type of explanatory approach promising. One major reason for this was that we are typically not conscious of the supposed elements in question, and hence it was not clear that these explanations were really appealing to mental phenomena, and that they were psychological explanations at all.

The question, then, was what kind of evidence someone like Wundt could produce in support of his research program. As Wundt was going to spell out in a later publication (Wundt 1888), he realized that under ordinary circumstances we do not have introspective access to the basic elements of sensations posited by his explanatory approach (i.e., he knew that the units of our ordinary conscious experience are typically ‘larger’ and more complex). However, he believed that it was possible to create highly controlled experimental conditions under which the supposed basic elements could be made accessible and introspectively reported (Hatfield 2005). As will be explained more fully in the following section, Brentano did not believe concurrent introspection to be a viable method, so this would have been a clear point of disagreement between them. While I cannot provide a detailed discussion of this here, I claim that the disagreements at hand were representative of a divide that pervaded late 19th-century German psychology more generally, thus underwriting my thesis that the (broadly) Wundtian and elementist approach to psychology was one of Brentano’s targets when aiming “to establish a single unified science of psychology”.

4. Method and Subject Matter: The Place of Inner Perception

In the previous section I argued that Brentano’s writings about the methods of psychology had specific contexts, and that they have to be understood as *boundary work* that simultaneously aimed to unify psychology from within and demarcate it from other pursuits, such as physiology. Brentano did the latter by highlighting an aspect of psychological methodology that he deemed to be unique, namely the reliance on inner perception: “[I]nner perception of our own mental phenomenon ... is the primary source of the experiences essential to psychological investigations” (Brentano 1973 [1874], p. 34). However, up to now I have not explained what he meant by “inner perception”, how it was to figure in his methodology, and how this methodology was anchored in Brentano’s theory of mind.

4.1 Inner Perception, Inner Observation, and Retrospective Inner Observation

It is important to understand that Brentano did not think that inner perception, taken by itself, constituted a *method*. Instead, he only held that it would contribute the ‘raw material’ for a psychological method. Moreover, he explicitly distinguished *inner perception* from *introspection*: “Note ... that we said that inner perception [Wahrnehmung] and not introspection, i.e., inner observation [Beobachtung] constitutes this primary and essential source of psychology” (Brentano 1973 [1874], p. 29). Indeed, he thought that

whereas inner perception constituted the “primary source” of psychology, introspection (understood as *concurrent* introspection of the material present in inner perception) was highly problematic as a method since it would distort what was being observed: the perceptual state in question. But if concurrent introspection was inadmissible as a psychological method, what would an adequate psychological method look like that contained inner perception as an essential component?

Brentano’s answer was that we can have access to the mental states revealed by inner perception by *retrospective* inner observation. In other words, he thought that they could be observed *in memory*. This followed from Brentano’s conceptions of *inner perception* and *scientific observation*, respectively. According to Brentano, the difference between inner perception and any kind of scientific observation was that inner perception was immediate and infallible, whereas scientific observations are detached and fallible. This disqualified inner perception from ever counting as inner observation since it was by definition infallible. Having argued that concurrent inner observations were not suitable, this left retrospective observations of inner perceptions as the method of choice. In practical terms, therefore, the recommendation was to conduct experiments and question subjects about their experiences after the experiment. Brentano realized of course that memory can distort and misrepresent what the experience was really like: “As everyone knows, memory is, to a great extent, subject to illusion, while inner perception is infallible and does not admit of doubt” (*id.*, p. 35). Hence, he saw a trade-off between the immediacy and infallibility of inner perception and the observability of the mental phenomena in memory, but argued that it is better to have fallible observations than no observations at all, noting that fallibility is a feature of scientific observations in general

4.2 Mental States as Conscious Phenomena and Only as Conscious Phenomena

Brentano’s vision of the necessity of inner perception depended crucially on the assumption that this method had full access to *all* mental phenomena. Justifying this assumption required spelling out his notion of *mental phenomenon*. Brentano did so in Book II of his *Psychology from an Empirical Standpoint*, entitled “Mental Phenomena in General.” It is in this context that Brentano famously introduced the notion of the *intentionality of mental phenomena*, defining a mental phenomenon as “consciousness of an object.” He went on, however, to acknowledge that this formulation did not in and of itself guarantee that all mental states were accessible to inner perception (and ultimately to retrospective inner observation), since it was after all possible to be conscious of an object but not to have conscious access to this intentional mental state:

“We have seen that no mental phenomenon exists which is not ... consciousness of an object. However, another question arises, namely, whether there are any mental phenomena which are not objects of consciousness. All mental phenomena are states of consciousness; but are

all mental phenomena conscious, or might there also be unconscious mental acts [?]”

(Brentano 1973 [1874], p. 102)

As he put it further down on the same page: Might there be an “unconscious conscious”? The issue at stake was whether there could be intentional states (consciousness of an object), which were in principle inaccessible to what is today sometimes referred to as “higher-order consciousness.”⁵ Brentano rejected the very distinction between higher- and lower-order consciousness, and as we will see in a moment, his reasoning for this underwrote his views about *inner perception* vs. *inner observation*. At the same time, however, he did not reject questions about an “unconscious conscious” out of hand, remarking that different versions of it had been around for some time (Aquinas, Leibniz, Kant, Mill, Herbart, Helmholtz and others). In trying to refute these, Brentano acknowledged that since the hypothesis he was attacking was that there are (at least) some unconscious mental phenomena, it could not be refuted simply by showing that there is no introspective experiential evidence for it. Still, Brentano thought that the very notion of unconsciously conscious phenomena was misguided, and he put forward several arguments in support of this conviction. We will only briefly outline them here, in order to highlight the extent to which his methodological reflections on this point were entangled with his philosophy of mind.

Brentano’s first strategy was to formulate, and then refute, several possible reasons for the thesis of the existence of unconscious mental processes. I will only gesture at the general strategy adopted here. Essentially, Brentano argued that before we appeal to unconscious mental phenomena as explanatory of conscious mental phenomena, we need to establish (a) that the phenomenon that is explained by appeal to unconscious phenomena in fact exists, and (b) that there is no better explanation for it. For example, when someone says that they have suddenly become conscious of a feeling of love that they have unconsciously harboured for some time, this might be considered a phenomenon that calls for a notion of unconscious mental acts. However, Brentano disagreed with this description and stated “The truth is that we were conscious of each individual act when we were performing it, but that we did not reflect upon it in a way that allowed us to recognize the similarity between the mental phenomenon in question and those which are commonly called by its name” (Brentano 1973 [1874], p. 115). Hence, Brentano introduced an important conceptual clarification by arguing that if a given feeling can in principle be brought into consciousness it was conscious all along. For Brentano, a mental state was genuinely unconscious only if we could not make it conscious by directing one’s attention to it. But if it was genuinely unconscious in this sense, he maintained, it had to be regarded as a physiological rather than a mental phenomenon.

⁵ I am thinking here of the positions of philosophers such as David Armstrong; William Lycan and David Rosenthal

Brentano's second strategy was to cast doubt on the existence of an epistemic gap between mental phenomena and our perception of them. Essentially, he suggested that if it were the case that some conscious mental states were inaccessible, or only partially or incorrectly accessible to higher-order conscious mental states, this would imply that we can be wrong about our conscious mental states, and this would go against Brentano's dictum of the infallibility of inner perception. In turn, this dictum was explained in his third argument against the possibility of unconscious mental states. There he cast doubt on what might at first glance appear to be a reasonable construal of how inner perception works, i.e., that inner perception gives rise to a higher-order mental state that has as its intentional object a lower-level perception. As Brentano pointed out, this model has the paradoxical consequence that the object in question (for example, a sound) is presented twice. To this he answered that it just does not square with our experience, and that therefore the distinction between a presentation and a presentation of a presentation is at best analytically useful. For example, "[t]he presentation of the sound and the presentation of the presentation of the sound form a single mental phenomenon" (*id.*, p. 127).

Notice, however, that this argument was begging the question since Brentano had already acknowledged that appeal to experience will not satisfy those who believe that not all conscious mental states are accessible to experience. Nonetheless, his argument is useful in highlighting the extent to which his views about the methods of psychology were intertwined with his philosophy of mind: For him, inner *perceptions* were infallible, because they were intrinsically tied to their objects (hence no epistemic gap), whereas inner *observations* were conceptually impossible, because the mental state of the observer and the observed mental state are literally the same.

5. Brentano's Argument for Methodological Distinctiveness did not Rule out Integration!

In the previous two sections I laid out two contexts for Brentano's thesis of the methodological distinctiveness of psychology: (1) Existing debates at the time about the methods and boundaries of psychology and (2) the metaphysical underpinnings of Brentano's own specific contribution to those debates. As we saw, Brentano had a very specific vision of the subject matter of psychology (phenomenally conscious mental states). In turn, this specific vision also motivated his argument in favour of a *distinctly psychological method*, namely one that relied on first-person access to phenomenally conscious mental states. In addition, his philosophy of mind placed constraints on the form that this method could take: Both the infallibility of *inner perception* and the impossibility of *inner observation* were sophisticated implications of Brentano's theory of mind with its central thesis of the intentionality of mental states. As a result, his proposed *distinctive method of psychology* (retrospective inner observation) was deeply and systematically tied to his philosophy of mind.

In this section, I want to substantiate my claim that Brentano's thesis of the *methodological distinctiveness* of psychology did not imply the *methodological autonomy* of psychology. I have argued that Brentano endorsed the view that (a) there is a method that distinguishes psychology from other sciences, and (b) this method is, ultimately, not eliminable from the study of the mind. However, he (c) did not think that this method was generally to be employed *in isolation from* other methods.

“[T]he experimental foundation of psychology [...] would always remain insufficient and unreliable, if this science were to confine itself to the inner perception of our own mental phenomena and to their observation in memory. This is not the case, however. In addition to direct perception of our own mental phenomena we have an indirect knowledge of the mental phenomena of others. The phenomena of inner life usually express themselves, so to speak, i.e., they cause externally perceivable changes”. (Brentano 1973 [1874], 37)

Brentano went on to explain that such “externally perceivable changes” included words and nonverbal forms of communications, as well as involuntary behaviors that indicate mental phenomena. Indeed, the very fact that verbal and nonverbal communication about our mental phenomena is possible, he argued, is evidence for the presupposition that the subjective experiences of individuals are not so different from one another, making it possible to treat individual retrospectively introspective data as representative of human mental phenomena more generally. Brentano emphasized, however, that “externally perceivable” data could never in of themselves be sufficient for a science of psychology. “It is not possible ... that this external ... observation of mental states could become a source of psychological knowledge, quite independently of inner ‘subjective’ observation” (*id.*, p. 40). If we add neurophysiological processes to Brentano's list of externally perceivable changes (and I see no reason why he would have objected to this), I suggest that we classify his position not as one that favours methodological *autonomy*, but rather as one that allows for methodological *integration*. In other words, he thought that a distinctly psychological method (retrospective inner observation) was an ineliminable component for the study of mental phenomena that would benefit from integrating methods of other fields as well.

One crucial insight I would like to draw from Brentano's considerations is that in order for there to be methodological integration, there have to be *distinct methods* in the first place. As such, it strikes me that Brentano's philosophy of psychology certainly has some systematic suggestions to offer that promise to be fruitful to questions and debates of more recent philosophy of science, especially regarding the nature of *integration*. Without going into much detail here, let me just briefly indicate what debates I have in mind: The past 20 or so years have seen some interest in the *disunity of science* both as an empirical fact and as a philosophical challenge (e.g., Galison and Stump 1996). In turn, this has

given rise to attempts to give philosophical accounts of how the *plurality* of approaches and phenomena might be *integrated*. In many cases, such attempts have radically questioned traditional accounts of the unity of science, both by starting with detailed investigations of scientific practice and by rejecting the traditional assumption that integration necessarily implies reduction (e.g., Mitchell 2003). More recently, there has also been significant interest in analyzing the nature of *interdisciplinarity* as well as the challenges of and inter- and multidisciplinary collaborations (see Andersen & Wagenknecht 2012 for an overview). I argue that Brentano's reflections can be treated as highlighting one aspect of this question insofar as he not only draws attention to the issue of methodological distinctiveness, but also highlights the difficulties of providing a philosophical justification for it.

Now, beyond such general points about (inter)disciplinarity and integration, can we also gain systematic insights from Brentano's more specific reflections about psychology in its relation to neuroscience? As we saw, Brentano's views about a distinctively psychological method rested on specific assumptions about subject matter and explanatory principles of psychology, i.e., (a) that only conscious mental states could be the subject matter of a 'pure,' *descriptive psychology*, and (b) that *genetic psychology* would inevitably involve appeal to non-psychological (i.e., physiological) processes. Since neither of these two positions are common in current debates, this raises the question of whether Brentano's views have any relevance today. In the following section, I will address this question, arguing that some of Brentano's views are compatible with more mainstream debates, whereas others fruitfully challenge fundamental assumptions underlying those debates.

6. Continuing Relevance?

The idea that consciousness is the subject matter of psychology was radically questioned by early to mid-20th century behaviorism in psychology. This concerned both the very project of providing phenomenological analyses of conscious mental states and the project of explaining behavior by appeal to such states (or any intervening states, for that matter!). With that in mind, it is clear why Brentano's vision of psychology might have seemed rather bizarre to psychologists in the first half of the 20th century. How has the intellectual landscape changed since then? A first significant shift, surely, was the return of 'cognitive' explanations (in germinal form already in certain forms of neo-behaviorism, but certainly with the rise of information-theoretic vocabulary in psychology in the 1950s and 1960s). A second shift was the rise of consciousness-studies as a multidisciplinary field, and with it the return of introspection as a subject of serious philosophical and methodological reflections.

6.1 Questioning the Emphasis on Psychological Explanation

Notice that while the rise of cognitivism was marked by a comeback of appeal to intervening variables as explanatory of behavior, such intervening variables were typically defined functionally, and were not conceived of as requiring conscious awareness.⁶ As such, Brentano's account would have seemed alien to cognitive psychology on two counts: Because he viewed mental phenomena as essentially conscious, and, consequently, because he did not believe that an explanation of behavior that appealed to unconscious states was appealing to mental states at all. By contrast, cognitive psychology as it emerged in the 1950s and 1960s (a) viewed mental states or processes as not necessarily conscious (or even consciously accessible), and (b) viewed such states or processes as explanatory in their own right. As such, Brentano's psychology is orthogonal to received views in psychology and cognitive science.

I argue that one important purpose that can be served by seriously considering Brentano's position is that of unsettling received notions in philosophy of psychology. One such received notion is that psychology aims at, and perhaps even succeeds in providing, *explanations*. It is not my aim in this article to argue that this view is false. Rather, my aim is to draw attention to the fact that its truth is not self-evident! Nor is it self-evident what hangs on it. This is brought out when we consider Brentano's argument in its historical and intellectual contexts. I have argued that Brentano's case for methodological distinctiveness has to be seen in the context of boundary work, in the course of which he wanted to provide a rationale both for the internal unity of psychology and for its separateness from neurophysiology. The notion of *boundary work* draws attention to the fact that the lines between scientific disciplines as we know them are the results of historical processes. One thing that the Brentano case brings out is that there are different conceivable ways of drawing the boundaries around psychology, and they come with different visions about the aim and subject matter of psychology. Moreover, each of them is closely tied up with metaphysical accounts of the mental. By describing Brentano as engaged in boundary work, I do not mean to suggest that his philosophical ideas can be treated as *mere* responses to boundary quarrels at the time. I do, however, want to use this case to press the question why contemporary philosophers of psychology should be invested in specific ways of drawing the boundaries around psychology.

In the wake of functionalist arguments against mind/brain identity (and the simultaneous rise of cognitive psychology as a field of research), the thesis of explanatory autonomy was very compelling to philosophers of mind and psychology. It is still being pursued by some philosophers of psychology today, typically in relation to debates about multiple realizability (e.g., Aizawa and Gillett 2009), but others have abandoned it in favor of arguments for explanatory integration (e.g., Piccinini and Craver 2011). Both of

⁶ I have in mind explanatory concepts like encoding, storage, retrieval, etc...

these approaches seem to agree, however, that the central business of psychology is that of providing *explanations*. Brentano's work draws our philosophical attention to the investigative process as such, specifically raising questions about the methods that do (or should) guide this process. His specific answer, furthermore, brings to the fore the question of whether an argument for the autonomy of different disciplines can be made on the basis of the specific *methods* they use, and what kinds of metaphysical commitments need to be in place to justify the use of these methods. While Brentano himself viewed the distinctiveness of psychological methods as coming in a package with a rejection of purely psychological explanations, it strikes me that the question of methodological distinctiveness and integration can be debated regardless of where one stands with respect to that of explanatory autonomy vs. integration.

6.2 First-Person Reports in Cognitive Neuroscience

Let us turn to a currently active field of research where Brentano's methodological views about descriptive psychology are highly relevant, namely the field of cognitive neuroscience, specifically research that attempts to uncover the neural substrates of conscious mental states. I have in mind research that uses brain imaging techniques in conjunction with specific cognitive tasks and first-person reports. This field of research has also rehabilitated as scientifically respectable the question of how introspective (or first-person) reports can figure in this research. It is here that the relevance of Brentano's views is immediately obvious since he explicitly addresses questions about both scope and problems of first-person reports. Both of these topics have received some attention in the recent literature.

Regarding the question of scope, there are two questions: First, whether all phenomenally conscious mental states are accessible to first-person experiences. Second, whether first person reports provide accurate data about phenomenally consciousness mental states. Cutting across these two issues is another question namely whether there are other, more objective, methods of studying subjective phenomenology, either because not all phenomenological states are accessible, or because not all accessible phenomenal mental states can be accurately reported. All of these questions are subject to current debate within current cognitive neuroscience (e.g., Schmieking and Gallagher 2010).

As we saw, Brentano's opinions about these issues were clear and principled: Phenomenally conscious mental states (that is, all mental states) were by definition accessible to the first person. However, immediate first-person experiences ("inner perceptions") did not automatically constitute scientifically admissible first-person data. In this vein, his theory of mind made it possible to distinguish conceptually between concurrent and retrospective self-observation. Consequently, he also distinguished between two sources of errors that could occur when employing first-person methods: (1) errors that resulted from the very act of inner observation (it was because of the inevitability of such errors that he ruled out concurrent

inner observation as a legitimate method), and (2) errors that could result from faulty recollections of past experiences. He deemed the latter types of error as less fatal and argued for a psychological methodology of retrospective introspection. Finally, with respect to questions about ‘objective’ (behavioural, neurological) indicators of mental states, we have seen that he thought that they could at supplement, but never replace first-person methods.

Let me outline two reasons for my claim that Brentano’s views are still relevant here: one concerns the accuracy and one concerns the scope of first-person data. We will begin with the first problem: The literature about how to validate first-person methods has been vexed with the following difficulty: On the one hand, it would seem obvious that it makes sense to correlate different modes of first person access; e.g., immediate and retrospective (Jack and Roepstorff 2003), or direct vs. indirect (Overgaard and Sorensen 2004). On the other hand, there is plenty of evidence that points to functional dissociations between the empirical data generated by these different methods (e.g., Marcel 1993). In the light of Brentano’s theory of mind, such dissociations are not too surprising. For example, his theory of mind predicts dissociations between data generated by immediate self-observations and data generated by retrospective self-observations. This does not mean that the findings confirm his theory of mind, but it certainly suggests that it might be of value to bring Brentano’s specific mix of methodological and theoretical considerations to bear on this topic.

Let us turn to the second issue: the *scope* of first-person methods. Here the question is whether objective (e.g., behavioural) methods provide a means of detecting phenomenally conscious mental states that are not accessible to phenomenal consciousness (Block 2007). That these debates are not mere philosophical fantasies becomes quite clear when we look at some of the scientific literature, dealing with the implications of phenomena like *blindsight* for methodological choices in the study of the mind/brain. Essentially, there are two interpretations of this phenomenon: One reading is that it is possible to make sensory discriminations in the absence of phenomenally conscious sensory experiences. On the other reading, it is possible to have conscious sensory experiences without first-person access to those experiences (See, for example, Busch et al. 2009 vs. Overgaard et al 2009 for a dispute along those lines, and Lamme 2010 vs. Overgaard 2010). The implication of the latter reading would be that phenomenal sensory experience can be outside the scope of first-person methods. Notice that this position is not dissimilar to one rejected by Brentano in 1874, i.e., that there can be “unconsciously conscious” mental states. And hence, I argue, it is well worth reviewing his specific reasons since they point to the ways in which methodological disagreements can be tied to deeper metaphysical disagreements (see also Feest 2012a).

7. Conclusion

In this paper I have argued that we read Brentano's philosophy of psychology as (a) arguing for the methodological distinctiveness of psychology, while (b) at the same time suggesting that such distinctiveness was in fact a prerequisite for the integration of psychological and neurophysiological findings in the ongoing process of research. I backed up my thesis by a detailed textual analysis, and I discussed the relevance of the analysis to current issues and debates within the philosophy of psychology.

As I hope to have shown, Brentano's philosophy of psychology is both deeply metaphysical and practice-oriented. As such, I have argued, it has a number of important insights to offer, not only to contemporary philosophical discussions, but also to contemporary research. By construing Brentano's position in the context of boundary debates, I highlighted that it is not self-evident precisely what psychology is and what makes it special vis-a-vis neighbouring disciplines. While it was not my aim to argue for an adoption of Brentano's specific way of drawing the boundaries, I suggested that his emphasis on the question of methodological distinctiveness introduces an important theme into the recent literature about autonomy and integration. Second, I argued that Brentano draws our attention to the fact that psychological *explanation* has received an extraordinary amount of attention, and I have suggested that a shift of focus towards psychological *investigation* might be fruitful. Lastly, I pointed out that Brentano's methodological and metaphysical position is highly relevant to recent and current research in consciousness studies and cognitive neuroscience.⁷

In conclusion, let me emphasize that whereas Brentano specifically focused on first-person reports as an ineliminable component of distinctively psychological methods, I am not committed to the idea that these are the only distinctive and unique methods psychology has to offer. Thus, I would suggest that his point – to think about distinctive methodological contributions that psychology makes to an interdisciplinary cognitive science – is well taken, regardless of where one stands with respect to Brentano's philosophy of psychology.

REFERENCES

Aizawa, K. and Gillett, C. (2009) "The (Multiple) Realization of Psychological and other Properties in the Sciences", *Mind and Language* 24 (2), 181-208.

⁷ I would like to thank Thomas Uebel for inviting me to present this paper at the workshop "New Directions in the Philosophy of Science" (Bertinoro, Italy, October 2012) and for helpful comments on a previous draft.

- Andersen, H. and Wagenknecht, S. (2012) "Epistemic Dependence in Interdisciplinary Groups",
Synthese DOI 10.1007/s11229-012-0172-1
- Bechtel, W., and Richardson, R. (1993) *Discovering Complexity: Decomposition and Localization as Scientific Research Strategies*. Princeton: Princeton University Press.
- Block, N. (2007) "Consciousness, Accessibility, and the Mesh Between Psychology and Neuroscience",
Behavioral and Brain Sciences 30, 481–98.
- Brentano, F. (1973). *Psychology from an Empirical Standpoint*. London: Routledge (first published 1874
in German: *Psychologie vom empirischen Standpunkt*)
- Busch, N., Fründ, I., and Herrmann, C. (2009) "Electrophysiological Evidence for Different Types of
Change Detection and Change Blindness". *Journal of Cognitive Neuroscience* 22, 1852–1869
- Craver, C. F. (2007) *Explaining the Brain*. Oxford: Oxford University Press.
- Feest, U. (2003) "Functional Analysis and the Autonomy of Psychology", *Philosophy of Science* 70, 937–
948.
- Feest, U. (2012a) "Introspection as a Method and Introspection as a Feature of Consciousness", *Inquiry*
55 (1), 1-16.
- Feest, U., (2012b) "Husserl's Crisis as a Crisis of Psychology", *Studies in the History and Philosophy of
Biological and Biomedical Science* 43 (2): 493-503.
- Galison, P. & Stump, D. (1996) *The Disunity of Science. Boundaries, Contexts, and Power*. Stanford, CA:
Stanford University Press.
- Gieryn, T. (1983) "Boundary-Work and the Demarcation of Science from Non-Science: Strains
and Interests in Professional Ideologies of Scientists". *American Sociological Review* 48
(6): 781–795.
- Hatfield, G. (2005) "Introspective Evidence in Psychology", in: P. Achinstein, ed. *Scientific Evidence.
Philosophical Theories and Applications*. Baltimore and London: Johns Hopkins University Press,
pp. 259-286.
- Horwicz, A. (1872a) *Psychologische Analysen auf physiologischer Grundlage. Ein Versuch Zur
Neubegründung der Seelenlehre*. Halle: C. E. M. Pfeffer.
- Horwicz, A. (1872b) "Methodologie der Seelenlehre", *Zeitschrift für Philosophie und philosophische
Kritik* 60, 163-206.
- Jack, A. and Roepstorff, A. (2003) "Why Trust the Subject?", *Journal of Consciousness Studies*
10 (9–10), pp. v–xx.

- Lamme, V. (2010) “How Neuroscience Will Change Our View of Consciousness”, *Cognitive Neuroscience* 1 (3), 204-220.
- Marcel, A. (1993) “Slippage in the unity of consciousness”, in: G. R. Bock & J. Marsh eds.
Experimental and Theoretical Studies of Consciousness. Chichester: John Wiley and Sons,
pp. 168–80.
- Maudsley, H. (1867) *Physiology and Pathology of the Mind*. New York: Appleton and Company.
- Mitchell, S. (2003) *Biological Complexity and Integrative Pluralism*. New York: Cambridge University
Press.
- Overgaard, M. (2010) “How Consciousness Will Change Our View of Neuroscienc”, *Cognitive
Neuroscience* 1 (3), 224-225.
- Overgaard, M. and Sørensen, T. A. (2004) “Introspection Distinct From First-Order
Experiences”, *Journal of Consciousness Studies* 11 (7–8), 77–95.
- Overgaard, M., Jensen, M. and Sandberg, K. (2009) “Methodological Pitfalls in the ‘Objective’
Approach to Consciousness: Comments on Busch et al. (2009)”, *Journal of Cognitive
Neuroscience* 22 (9), 1901–1902.
- Piccinini, G. & Craver, C. (2011) “Integrating Psychology and Neuroscience: Functional Analyses
as Mechanism Sketches”, *Synthese* 183, 283–311.
- Schmiecking, D. & Gallagher, S., eds. (2010) *Handbook of Phenomenology and Cognitive Science*.
Dordrecht: Springer.
- Wundt, Wilhelm (1874/1973-1974) *Grundzüge der physiologischen Psychologie*. 2 volumes.
Leipzig: Engelmann.
- Wundt, W. (1888) “Selbstbeobachtung und innere Wahrnehmung”, *Philosophische Studien* 4,
292-309.