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## Interview

# Psychology's Fragmentation and Neglect of Foundational Assumptions: An Interview With Fiona J. Hibberd

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The conceptual fragmentation of Psychology has evoked a variety of responses. Some have argued that the fragmentation should be embraced as a by-product of the diversity in psychological topics, questions, and methods (e.g., [Green, 2015](#)). Others have argued that the fragmentation can be overcome by adopting a different mode of investigation (e.g., [Hommel & Colzato, 2015](#); [Kingstone, Smilek, & Eastwood, 2008](#)). But are these worthy responses nevertheless missing a fundamental point? A recent proposal by [Hibberd \(2014a, 2014b\)](#) is that the fragmentation results, primarily, from neglecting the underlying conceptual foundation of psychology. Any attempt to unify Psychology, she argues, requires firstly recognizing how coherent theorizing, modelling, and methodology can only emerge from an understanding of first principles, i.e., metaphysics.

Fiona Hibberd is Senior Lecturer in the School of Psychology, University of Sydney. Her research addresses historical and philosophical issues in science, with particular focus on Psychology (e.g., [Hibberd, 2009, 2010, 2016](#)) and includes one of the most comprehensive critiques of social constructionism as a metatheory ([Hibberd, 2001a, 2001b, 2002, 2005](#)). Her recent work sets out what it means to say that metaphysics belongs to psychological phenomena ([Hibberd, 2014a, 2014b](#)). She begins with a set of necessary propositions about what it means (for anything) to exist and then explores the implications of this metaphysical foundation. The consequences of metaphysics to a wide range of issues, including causality, constitution, mental representation, and Psychology's misguided "measurement imperative" are unfolded. The reader can, therefore, appreciate her earlier critiques of social constructionism as embedded in this broader philosophical context. Encountering ideas relevant to such a wide range of topics is increasingly rare in contemporary psychological literature. Hibberd's work is a compelling demonstration of the fact that philosophical assumptions run through all aspects of psychology and that the discipline's ongoing disregard of this fact will only serve to perpetuate its fragmentation. In the present interview, I asked Dr. Hibberd about the role of

philosophy in psychology, why that role is often neglected, and the consequences of such neglect. The result is what I hope to be an invitation to Hibberd's work and, more generally, to a more philosophically aware Psychology.

**Davood Gozli:** Thank you for agreeing to this exchange, Dr. Hibberd. To begin with a general question, what is philosophical psychology? And is philosophical psychology simply a sub-discipline of Psychology?

**Fiona Hibberd:** My view is that philosophical psychology is a sub-discipline in the trivial sense that we make disciplinary distinctions, in part, for social and institutional reasons. But it is not a sub-discipline in the substantial sense that it involves examining the more general approaches that embrace either *all* of Psychology or large areas of it. Its aim is to resolve issues that cannot be resolved empirically and to provide psychologists with the best material for, or approaches to, their empirical work. Ideally, it will go some way to ensuring (i) that a theory is a conceptually robust candidate for explanation, (ii) that research hypotheses derived from a theory will not be asking the wrong kind of question, (iii) that the empirical testing of a theory or model is not futile, in that the data collected will not be irrelevant, (iv) that results are interpreted coherently, and (v) that the theoretical implications of empirical findings are not misconstrued. This means evaluating the conceptual or philosophical presuppositions involved in psychology's research methods, in its theories and models, and in the practice of psychology, through conceptual testing. Dan [Robinson \(1985\)](#) describes this type of research as providing "a conceptual corrective".

**Davood Gozli:** Your description clarifies the pervasive role of philosophy in empirical research, and yet many researchers (myself included) tend to neglect philosophical issues. In your view, what enables the detachment of empirical psychology from philosophy? What hides the importance of philosophy in psychology?

**Fiona Hibberd:** I think it is, for many, a case of not knowing what you don't know. Psychology's formative years as an academic discipline (let's say roughly 1850-1950) were marked by the assumption that in pursuing psychology as a science, philosophy generally and metaphysics in particular could be left behind. To a very great extent that view persists. And so generations of graduating students are none the wiser about the sense in which philosophy, and logic in particular, is *in* psychology and are, therefore, none the wiser about the importance of conceptual testing to psychology. Those that go on to gain a higher degree and become academics themselves naturally perpetuate its omission from the curriculum. It's also easy for psychologists to neglect philosophy because they are prone to psychologism, in this case fusing what is rational to believe with the science of implication, aka logic; they are prone to psychologize that which isn't psychological.

**Davood Gozli:** So given that psychological research is necessarily situated in some philosophical framework, what particular philosophy of science, if any, dominates contemporary Psychology?



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**Fiona Hibberd:** All working scientists are philosophical realists at heart. They investigate various kinds of systems, they take these systems to exist or occur independently of anyone's thinking or knowing about them, and they assume that it's possible to come to know something about those systems, i.e., objective knowledge is possible. All of this presupposes realism. In fact, it presupposes a particular set of realist metaphysical assumptions. However, when you look at what research psychologists actually do and say, their philosophical commitments are often at odds with their realism as working scientists. On certain issues, some are influenced by constructionist themes, whereas others within mainstream psychology allow positivist–empiricist ideas to hold sway. (This is one illustration of the discipline's fragmentation.) Yet, neither constructionism nor positivism–empiricism is a realist philosophy. Each has features that cohere with realism but the central tenets of both are anti-realist (Hibberd, 2005). This anti-realism manifests in the research practices and scientific output of both of both sides where certain presuppositions, although often intuitive and widely sanctioned, involve errors of logic. When, for example, measurement is treated as the task of assigning numerals to the variables of interest, or when the neo-Cartesian assumption that cognition is internal to the brain pervades their research, psychologists contradict the metaphysical assumptions that they are otherwise committed to. As a result they undermine that which they are concerned to achieve (Hibberd & Petocz, 2017).

**Davood Gozli:** Can you explain the link between one of these examples and a realist metaphysics?

**Fiona Hibberd:** Scientific psychologists have no doubt that they can discover various aspects of the psychological systems that are of interest to them. This exemplifies their commitment to realism because a central tenet of realism is that reality is not constituted, even partially, by researchers or their activities—reality exists independently of them. So, these psychologists recognize that coming to know something about a psychological system or sub-system is a cognitive achievement—that to know something about what's real is to be connected cognitively to some aspect of it. This means that they recognise that (i) connections, *aka* relations, are universal, and (ii) the items connected or related (the researcher and whatever it is that the researcher has discovered) are logically independent of one another. However, if you are also committed to the assumption that cognition is internal to the brain and involves some kind of internal psycho-semantic representation system, you are at the same time rejecting (ii). You are mistakenly treating a cognitive relation between an organism (specifically, the brain connected to its sensory apparatus) and its environment (everything external to the brain and its sensory apparatus) as a constituent of one of the items standing in that relation (*viz.*, the brain). So, you uphold (i) and you reject (ii) at the same time.

**Davood Gozli:** And yet the broad consensus is that experimental psychology is currently thriving without considering philosophical issues.

**Fiona Hibberd:** Yes, it's certainly possible for a science to thrive without consciously considering philosophical issues. This would simply require scientific research to be consistent with the realism of working scientists. But we know that alongside human cognitive achievement there is also human fallibility. There are two kinds of error that any scientist can make: empirical and logical-conceptual. Resolving logical-conceptual errors just

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does require some consideration of foundational assumptions. This can assist the science where data cannot. It can identify hypotheses that are necessarily true or necessarily false, thereby making data collection irrelevant. It can demonstrate obscurities, confusions, inconsistencies, and impossibilities, all of which may indicate error or establish falsehood. It can clarify concepts, i.e., specify the conditions necessary and sufficient for their legitimate use. In short, it can enhance the discipline's prospects of generating theories and hypotheses that are coherent and genuinely empirical, and therefore, ready to be tested empirically. Second, I don't think we should assume that all experimental psychology is thriving. There is evidence to the contrary (e.g., Bickhard, 1992; Gigerenzer, 2009; Kagan, 2012; Kukla, 1989; Machado & Silva, 2007; Michell, 1999; Reicher, 2011; Robinson, 2000; Tolman, 1992; Toomela & Valsiner, 2010). This evidence suggests a discipline out of kilter where, across many of its areas, empirical expansion has occurred at the cost of theoretical maturity and conceptual rigor. But mainstream psychology, its gatekeepers in particular, care not to consider this evidence and so perpetuate the status quo.

**Davood Gozli:** The fragmentation you mentioned between social constructionism and the mainstream's positivism–empiricism involves separating Psychology as a human science from Psychology as a natural science. This dualism, defended among others by Dilthey and Wundt, represents the largest source of disunity in our discipline. I remember being told as an undergraduate student that, as psychologists, we have to make a decision between pursuing an interesting topic, on the one hand, and having a scientifically rigorous method, on the other. So, although dualism is refuted on logical grounds, in practice, it is taken for granted and perpetuated through research methods and the structure of our discipline. In your view, what can help us come closer to overcoming dualism in the practice of psychological research?

**Fiona Hibberd:** I have a different take on what you're calling 'dualism'. I think dualism is a metaphysical thesis and that what you're alluding to is the diversity of research methods to answer different research questions. Your instructor tacitly categorized the methods as "scientific" and "not scientific" and was giving expression to the scientism and pragmatism that pervades mainstream Psychology. To overcome the latter, I think we have to keep making the point that not all research questions, problems, or issues in psychology are empirical, which means that they cannot all be answered or resolved through observation and data analysis. But these questions are still scientific in that they need to be resolved because they inform the empirical research process from beginning to end. So, a genuinely rigorous scientific, but not scientific, discipline will recognize the proper range and diversity of research activities just because not all types of questions or problems are of the same kind. Unfortunately, in certain areas of psychology, scientism is very much alive. What counts as 'science' is tied to empirical research only, and then a line of demarcation is drawn between empirical research and the logical–conceptual, as if the two types of inquiry were not intimately related. The schism wasn't always so pronounced in Europe. A 1934 article published in *The Psychological Bulletin* exemplifies this and makes for fascinating reading. It revealed substantial theoretical emphases among German psychologists and the absence of scientism (Watson, 1934).

**Davood Gozli:** So, in effect, the fragmentation gives psychologists a license to pursue empirical projects under mutually incompatible metaphysical systems. Today it is possible to be, as you mentioned, a neo-Cartesian as much as it is possible to be a neo-behaviourist. One can even oscillate between the two within a single research career, which is what Albert Balz (1936) described as "the metaphysical infidelities of modern psychology".

**Fiona Hibberd:** It does. These incompatibilities or “infidelities” that constitute Psychology’s disunity and fragmentation have been commented on by some within the discipline and by many external to it. The fragmentation presents as a high degree of specialization but is said to be somewhat artificial because it is seldom a division of labour along the lines of the different phenomena to be investigated; it is sub-areas marked by different approaches to the same phenomena—by different philosophical, theoretical and methodological preferences and by everything else that follows from those, in particular different interpretations of research outcomes. For example: there are, or have been, evolutionary psychologists, social constructionists, post-modernists, direct realists, representationalists, connectionists, embodied cognitivists, various kinds of behaviourists, Piagetians, Vygotskians, quantitative psychologists, qualitative psychologists, various schools of psychotherapy, and so on. With divisions of this kind, and the various divisions within these divisions, the result is areas that are inward looking and immune to scientific criticism from outside. More often than not, psychologists from one school just don’t engage with those from another. Walter Mischel (2008, writing in the Association for Psychological Science’s *Observer*) said that “Psychologists treat other people’s theories like toothbrushes—no self-respecting person wants to use anyone else’s.” Most seem genuinely unconcerned about this, and this nonchalance is at odds with other scientific disciplines where conceptual unification is an aspiration.

**Davood Gozli:** Since you mentioned qualitative psychology, I would like to ask you a question about that. I have been increasingly curious about the distinct role of qualitative research, both as it might relate to my own work and as it might relate to the discipline as a whole. Broadly speaking, where is the place of qualitative research? And how is its place in Psychology justified?

**Fiona Hibberd:** It is surely a mistake to try and estimate the quantity of an attribute if the attribute is not quantitative, i.e., if it is without quantitative structure. In Psychology, whether a particular psychological attribute has quantitative structure is never tested. It is simply assumed from the outset that it is quantitative. Yet, the evidence suggests that no psychological attribute is quantitative (e.g., Michell, 2011, 2012). Now this is evidence that the very great majority would not want to consider, even though it raises ethical questions. Anyway, the importance of qualitative research in Psychology cannot be overstated, and its role is clearly evident in a realist metaphysical system which, I argue, inheres in reality (Hibberd, 2014a). This makes the best justification for qualitative research ontological, not ideological and not one that comes out of favouring social constructionism and an overly simplified rejection of positivism. It requires psychologists to investigate the substantive character of the attributes that they aspire to measure and not assume *a priori* that these attributes are quantitative.

**Davood Gozli:** In your writing (e.g., Hibberd, 2009, 2010, 2014a), you have argued for the important role of John Anderson (1893-1962) in philosophical psychology. What makes Anderson an important figure in the history and philosophy of science?

**Fiona Hibberd:** I think Anderson’s work is of value to all fields of inquiry, principally because he showed the unavoidability of their interconnectedness. He argued for the treatment of philosophy as descriptive rather than prescriptive—as a kind of general science where certain logical principles are factual in the sense that they are real, and empirical in the sense that we experience them. This has far-reaching implications because many think either that logic is nothing more than language or semantics, or that logic is something applied to empirical content, instead of being part of it. Not unrelatedly, Anderson defended generality. This is an



important counterpoint to the contemporary tendency to particularize—to assume, for example, that particular individuals located in particular contexts have nothing general about them, or that particular words used in particular contexts have no general and relatively fixed meaning. Both assumptions are evident in the empirical research process and both raise a number of problems.

**Davood Gozli:** Would you characterize your attempts to overcome the conceptual fragmentation of Psychology as a form of foundationalism?

**Fiona Hibberd:** I would characterize it as foundationalist, but without the certainty that can sometimes feature in other foundationalist positions, e.g., Descartes' *Cogito*. The metaphysical claims I make are tentative in that each claim either describes or fails to describe a universal feature of reality. In that respect they have the same status as any explanatory hypothesis in science.

**Davood Gozli:** Your recent article (Hibberd, 2014a) has become a landmark in my thinking about psychology. Please tell us about what motivated this paper.

**Fiona Hibberd:** I had been reading about psychology's conceptual disarray and fragmentation and thought that, properly understood, metaphysics and its implications, go a long way in addressing this. I thought it was a risky project if only because the word 'metaphysics' has been a pejorative in psychology for so long (there's no disunity on that point!) but I was asked by the then editor of *JTPP* to present my philosophical position for a special issue. So that was an opportunity to argue that psychology's ongoing neglect of metaphysics is a mistake, to explain why metaphysics is unavoidable in both the research and practice of psychology, and to try and articulate that metaphysics as the foundations of a process psychology.

**Davood Gozli:** By the term *process psychology*, are you referring to a particular form of psychology (one of many possible forms) or are you highlighting a philosophical standpoint that regards all psychology as process psychology (similar to, e.g., how the term *embodied cognition* is not meant to distinguish itself from disembodied cognition, but to highlight a standpoint regarding the nature of cognition).

**Fiona Hibberd:** The latter. It's a metaphysical thesis (following Heraclitus, Plato, Leibniz, Hegel, Peirce, James and others) recognizing that *all* situations or states of affairs are in process, and so no area of reality can be excluded, not psychology, not geology, nor any other. By 'process', I mean a linked or integrated sequence of changes from one situation to another. Things change in certain respects and at very different rates. As Gibson (1979) noted, persistence or constancy is just change at a very slow rate, but change over time is a ubiquitous feature of reality.

**Davood Gozli:** As my final question, I want to ask you for some recommended readings. For students who are interested in philosophical psychology, a list of readings that would give us a starting point into the subject would be very useful. What would you include in such a list?

**Fiona Hibberd:** I've already mentioned Robinson (1985), but would also recommend: Bell and Staines (2001), Bem and Looren de Jong (2013), Bennett and Hacker (2003), Sparkes (1991), Valentine (1992) and the text, edited by my colleagues here in Australia, Mackay and Petocz (2011).

**Davood Gozli:** Thank you for your time. I am very grateful to have found your work.

**Fiona Hibberd:** A pleasure and thanks for your interest, Davood.

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## Competing Interests

Davood Gozli declares that he has no conflict of interest. Fiona Hibberd declares that she has no conflict of interest.

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## Ethics Approval

This article does not contain any studies with human participants or animals performed by any of the authors.

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