Psychology is a peculiar discipline. Chemistry is the science that attempts to explain chemical phenomena. Zoology is the science that attempts to explain zoological phenomena. One might expect psychology of be the science that attempts to explain psychological phenomena. But psychology, as practiced today, attempts rather to explain behavioral phenomena (including verbal behavior). Psychological notions enter its endeavor only as part of the explanans, not as part of the explanandum. In this psychology differs markedly from the bona fide sciences, such as chemistry and zoology, in the image of which psychologists have tried so deliberately to cast their discipline.

There is of course a perfectly understandable reason for this. The psychological phenomena given to us pretheoretically are the phenomena manifest in the stream of consciousness. Embarrassingly, these appear to be “private” and “publicly inaccessible”. The sense in which this is so is elusive but familiar. Right now I am visualizing a purple three-wheeled dragon; I know that this is so in a way you do not. And if next I imagine something else, equally outlandish, and refuse to share the content of my visualization with anybody, then the following becomes true: there is a fact – part of the natural history of the universe – which is known to one person only. One could rightly call it a private fact. When in its introspectionist infancy psychology really dealt with the psychological phenomena, it dealt with facts of this sort. And this too marked it as very different from more established sciences: the phenomena chemistry and zoology try to explain are public phenomena, phenomena nobody can claim exclusive access to or privileged authority over. So in search of phenomena more like those of chemistry and zoology, psychologists ended up training their powers on behavioral rather than psychological phenomena.

Unfortunately, however, this strategic decision does not make the psychological phenomena disappear. A science targeting the psychological phenomena, rather than behavioral phenomena, is still needed by anyone who would like to see science produce a truly comprehensive account of the world. If the name “psychology” is to be reserved to the science that tries to explain behavioral phenomena, then some other name is needed for the science that attempts to explain the psychological phenomena, that is, the phenomena manifest in the stream of consciousness.

The first task of that science would be to describe the phenomena it attempts to explain. The task of explaining the phenomena can only come later, when the phenomena in need of explanation have been suitably de-
scribed. Compare zoology again. The book *Owls of the World* more or less consolidates and summarizes humanity's knowledge about the 250-odd species of owl inhabiting the earth. Much of it involves trying to explain owl phenomena: typical food and hunting styles, social behavior and communication, breeding habits, migration patterns, DNA structure, etc. But much of the book – and apparently, of the owl zoologist’s workaday – is taken up with just describing owls. The heart of the book consists of 72 color plates with drawings of hundreds of different types of owls (different species, genders, and ages), with next to them descriptions in the following style:

**Marsh Owl Asio capensis**

Grassland, marsh and moorland, from lowlands up to 3000m. Locally in NW and sub-Saharan Africa and Madagascar. Medium-sized, long-winged and dark-eyed owl, dark brown above, with dark brown and white face, dark brown chest and somewhat paler underparts; tarsi feathered, toes bristled; bill black, eyes brown.

As noted, there are hundreds of these, making up the core of the book. On reflection, this makes perfect sense: it is all very well to want to explain, but first you need to get clear on what needs explaining. That is, before you launch into an explanatory project, you need to describe the explanandum.

My book *The Varieties of Consciousness* was born out of concern for the counterpart descriptive project for a science whose ultimate goal would be the explanation of the phenomena manifest in the stream of consciousness. I wanted to address in the book the preliminary task of describing the phenomenon in need of explanation. It is after all a curious feature of philosophical work on consciousness that by far most of its “research energy” goes into explaining consciousness (mostly what is at issue is reductive explanation of consciousness in terms of underlying neural substrate), without pausing first to put in place a sound description of the explanandum. In a way, what my book does is pause for some 300 pages on the matter of describing consciousness. At one level, the book offers a descriptive account of the phenomena of consciousness (at a certain level of abstraction). At a deeper level, however, that account is merely an illustration of how the relevant project might be pursued. The deeper goal is to put in place a framework for pursuing the relevant project.

In analytic philosophy of mind, discussions of the phenomena manifest in the stream of consciousness have traditionally tended to focus on perceptual experience and the experience of pleasure and pain. More recently, analytic philosophers have developed increased interest in two less “sensory” types of conscious experience: (i) the experience of thought, judgment, or more generally “cognition” and (ii) the experience of will, motivation, and more generally “agency”. Debates have accordingly arisen regarding the status of “cognitive phenomenology” and the “phenomenology of agency” (In this literature, the term “phenomenology” does not refer to the philosophical program launched by Husserl, but to the experiential dimension of mental phenomena; my book follows this usage.) Such debates raise a more general question, namely: what is the minimal number of types of phenomenology we must admit to just be able to describe the stream of consciousness?

One could insist that in fact only perceptual and pain/pleasure (in a word: “algedonic”) phenomenology are needed. All other apparent phenomenologies are either (i) fictions with no psychological reality in our stream of consciousness or (ii) mere combinations, or species, or combinations of species of perceptual and algedonic phenomenology. The first approach is eliminativist, the second reductive. So according to this view, all further
apparent types of phenomenology are either eliminable or reducible. The only primitive, irreducible types of phenomenology are perceptual and algedonic. In other words, the answer to the question “what is the minimal number of types of phenomenology we must admit to just be able to describe the stream of consciousness” is very simple: 2! My book’s starting point is that this view, which I call “mainstream stingy-ism”, is likely false: there are other kinds of sui generis phenomenology in our mental life. The book searches for the right number of “phenomenal primitives” at the same level of abstraction as perceptual and algedonic phenomenology.

Not to keep the reader in suspense, I can confess immediately that my answer in the book is just as crude, but slightly more generous, than that of mainstream stingy-ism. I claim there are six such phenomenologies. These may be labeled as follows: perceptual phenomenology, algedonic phenomenology, imaginative phenomenology, cognitive phenomenology, conative phenomenology, and contemplative phenomenology. You need all six to be able to fully describe (at the relevant level of abstraction) the stream of consciousness. (You also need a great wealth of more specific kinds of phenomenology – involving subspecies of the six just listed – in order to completely fully describe consciousness. For example, you need not only the notion of perceptual phenomenology, but also the notions of visual phenomenology, color phenomenology, reddish phenomenology, scarlet-ish phenomenology, and so on.)

Let me explain what these six labels are supposed to stand for by organizing the six types of phenomenology along two axes. The first and more fundamental axe concerns the manner in which, or guise under which, the experience presents whatever it presents. (I assume here, and in the book, that all experiences are presentational – there is something they are intentionally directed at. I recognize that this is not uncontroversial.) Consider the difference between consciously judging that you own a private jet and consciously desiring that you own a private jet. Both conscious states present the same state of affairs: your owning a private jet. But that state of affairs is presented differently in each. The conscious judgment presents it under the guise of the true (sub specie veri), whereas the conscious desire presents it under the guise of the good (sub specie boni). Observe, now, that merely contemplating, or entertaining, that you have a private jet is a more neutral kind of experience: you take a stand neither on the truth nor on the goodness of your owning a private jet. In fact, you take no stand at all – the state of affairs is simply present before your mind. The way I put this in the book is as follows: consciously judging that $p$ involves essentially presenting-as-true $p$; consciously desiring that $p$ involves essentially presenting-as-good $p$; entertaining that $p$ involves essentially merely-presenting $p$. Crucially, presenting-as-true is a phenomenal property, and the phenomenal property most essential to cognitive phenomenology; presenting-as-good is a phenomenal property, and the phenomenal property most essential to conative phenomenology; merely-presenting is a phenomenal property, and the phenomenal property most essential to the phenomenology of a slew of more neutral propositional attitudes, such as entertaining, contemplating, considering, supposing, etc. It should be stressed that all these are attitudinal rather than content properties of conscious states, that is, properties these states have not in virtue of what they present but in virtue of how they present whatever they present.

A similar kind of three-way distinction, I claim, divides perceptual, algedonic, and imaginative phenomenology. Seeing a dog presents the dog under the guise of the real, though seeing that the dog is asleep presents that the dog is asleep under the guise of the true. Such states are oriented on the way things are, not the way things ought to be. Algedonic experiences, in contrast, present their objects under the guise of the good or bad: pleasure in a cup of coffee presents-as-good the coffee, while the pain attendant on stubbing one’s toe presents-as-bad...
the state of the toe. Meanwhile, imagining one’s toe stubbed can cause a certain discomfort, but does not itself constitute discomfort. Nor does imagining a dog constitute a perceptual experience of a dog, even if in some extraordinary circumstances it might be confused for one. In itself, imagining a dog merely presents the dog. Thus perceptual phenomenology is the sensory analog of cognitive phenomenology, algedonic phenomenology is in some sense the sensory analog of conative phenomenology, and imaginative phenomenology is the sensory analog of entertaining/contemplative phenomenology. This brings up the second axe along which we can organize the six phenomenologies I claim are basic: some are sensory and some are nonsensory. There is clearly a difference in the manner in which the dog is presented in each case. Now, one might suggest various ways of capturing the deep difference between seeing a dog (or seeming to see a dog) and thinking of the very same dog (in his absence), but in any case the difference is real and can be put by saying that the seeing presents the dog sensorily whereas the thinking presents him nonsensorily.

Superposing the two distinctions, we obtain six different attitudinal phenomenal properties. To a first approximation, we can capture their essential characters as follows: sensory-presenting-as-true, sensory-presenting-as-good, sensory-mere-presenting, nonsensory-presenting-as-true, nonsensory-presenting-as-good, and nonsensory-mere-presenting. Each captures the most essential or central character of each of the aforementioned six basic types of phenomenology.

This, then, is the substantive descriptive account of the (phenomena manifest in the stream of) consciousness I offer in the book. Because this account’s primary function is illustrative, in that it is intended in the first instance to show what a descriptive account of the phenomena looks like, the discussion in the book tends to be exploratory. Nonetheless, I try to offer a central argument for the phenomenological reality and irreducibility of each of these six phenomenologies; or rather, for each of the four phenomenologies that go beyond the perceptual and the algedonic.

The central mandate of Chap. 1 of the book is to develop an argument for a sui generis cognitive phenomenology – an experience of thinking or judging that something is the case that outstrips any perceptual or algedonic experience one might undergo when thinking and judging. As I mention in the chapter, I am particularly convinced of there being a sui generis cognitive phenomenology by the simple fact that otherwise life would be boring. It is hard to understand why one would even be engaged in philosophical activity if all one hoped to derive from such engagement is the experience of certain images. However, as I also note in the chapter, it is not yet clear to me how to turn this compelling observation into an argument. Instead, the chapter’s official argument is based on a thought experiment whose purpose is two-part: first, to paint forth with some detail the inner life of a person who lacks any sensory and algedonic experience but still undergoes thought processes; then, to claim that this person’s inner life submits to the same “explanatory gap” problems that characterizes phenomenal consciousness so intimately. The person I imagine is a mathematically gifted but otherwise unfortunate woman named Zoe. Zoe is unfortunate insofar as she is not only blind, and not only deaf, but in fact all her senses have stopped working at some point (and all episodic memory of past sensory experiences has disappeared as well). Furthermore, Zoe suffers from (congenital or acquired) analgesia – the condition in which a person does not experience pain – as well as its pleasure counterpart. And yet, due to her mathematical genius, her inner life is quite active: she spends her days trying to set up axioms, prove theorems, define terms, and so on. I argue first that Zoe is both conceivable and (metaphysically) possible. I then argue that we can ask all the same
questions about explanatory gap and hard problem with respect to Zoe’s inner life that we can with respect to yours and mine: how can a thousand electric pulses coursing through Zoe’s neurons just be the realization that a proof must go this way and not that? Such amenability to explanatory-gap concerns, I suggest, is the mark of phenomenality.

The argument, condensedly put, is this: (1) a phenomenal property is an explanatory-gap-able property; (2) some of Zoe’s cognitive states have explanatory-gap-able properties; so, (3) some of Zoe’s cognitive states have phenomenal properties; but, (4) Zoe’s mental states do not have perceptual or algedonic phenomenal properties; therefore, (5) some of Zoe’s cognitive states have irreducibly cognitive phenomenal properties, i.e., exhibit sui generis cognitive phenomenology.

In Chap. 2, I provide an argument for a sui generis conative phenomenology. Here the style of argument is different – I proceed through a series of phenomenal contrasts. In arguments from phenomenal contrast, the existence of a phenomenal property P is established by juxtaposing two experiences with the hope of (i) eliciting the strong intuition that their overall phenomenal character is different and (ii) showing that the best explanation of this overall phenomenal difference is that one experience exhibits P whereas the other does not.

In the chapter, I consider a series of potential reductive accounts of the experience of doing something, or trying to do something, and produce contrast cases that, in each case, are supposed to elicit in the reader this kind of intuition (that is, an intuition that there is an overall phenomenal difference between that experience and various experiences that might be proposed as potential reducers). In particular, I argue that there is a felt difference between the experience of clenching one’s fist and the (i) the tactile experience of the different parts of one’s hand touching each other; (ii) the combination of (i) and the judgment that one has caused the hands’ parts to touch; (iii) the combination of (ii) and the visual awareness, if there is such, of one’s causal efficacy; (iv) the combination of (iii) and proprioceptive awareness of muscle contractions in one’s hands; (v) the combination of (iii) and proprioceptive imagery of those muscle contractions. The overall phenomenal difference shows that the experience of clenching one’s fist has more to it than any (combination) of these other experiences. That “more” is the element of sui generis conative phenomenology, I claim.

In the cognitive domain, the paradigmatic experience is that of making a judgment that p. In making the judgment that p, the essential character of the act as presenting-as-true the content p is particularly manifest. In the conative domain, I claim in Chap. 2, the paradigmatic experiences are those of deciding to φ and trying to φ. Or perhaps better: there is a special kind of experience, that of deciding-and-then-trying to do something, which I claim is paradigmatic in the conative domain – the character of presenting-as-good φ is particularly manifest in this kind of experience. However, when we consider these two kinds of paradigmatic experience in the domain of conceptual, nonsensory mental activity, we realize that there must be a third kind of phenomenal state, neither cognitive nor conative but on a par with those. The paradigmatic state of that kind is entertaining (the proposition p or the action φ). The act of entertaining p, for example, does not present-as-true p, but also does not present-as-good (the holding, or the bringing about of) p. It merely presents p, without commenting either on its truth or on its goodness. Other conscious states of that kind include contemplating, considering, grasping, apprehending, and more. In Chap. 3, I argue that such states form a third kind of sui generis phenomenal state, irreducible to (any combination of) perceptual, algedonic, cognitive, or conative states. The argument proceeds in two steps. In the first step, I argue that the kind of knowledge we have of our being in states of that type is the kind of knowledge characteristic of phenomenal states – immediate, noninferential know-
ledge. This suggests that states such as entertaining $p$ have a phenomenal character. In a second step, I consider a number of potential reducers of that phenomenal character and dismiss them. For example, I argue that the phenomenology of entertaining $p$ is not the same the phenomenology of having 50% credence in $p$, nor the same as the phenomenology of judging that possibly, $p$.

In Chap. 4–5 of the book, I argue that emotional experience and moral experience do not involve a sui generis phenomenal character at the relevant level of abstraction (though they may at a lower level of abstraction, say the one that corresponds to auditory [as opposed to perceptual] phenomenology). To round up my list of phenomenal primitives, I argue in Chap. 6 that imaginative experience involves a special and irreducible phenomenal character. In particular, I argue that imagining $x$ and perceiving $x$ have irreducibly different kinds of phenomenal character. To appreciate the claim, consider that there are three prima facie possibilities for difference between the phenomenologies of perception and the imagination: (1) there is no difference; (2) there is a difference of degree; (3) there is a difference of kind. The first view is that perceiving a particular dog and imagining him (in the same setting) have exactly the same phenomenology; the only difference is in the surrounding beliefs: only the perception is accompanied by a belief that the dog is really there, or that the dog is being perceived, or something like that. The second view is that perception and imagination have the same kind of phenomenology, but perception has a sharper, or more vivid, or finer-grained version of it. The third view is that the two have a different kind of phenomenology – there is a qualitative difference between seeing a dog and visualizing him. The third view is probably the least represented in the history of philosophy, but it is the view I defend. In particular, I argue, to a first approximation, that whereas a perceptual experience of $x$ presents-as-real $x$, an imaginative experience of $x$ presents-as-unreal $x$. The phenomenology of perception and imagination, on this view, is not exhausted by the sensible features of what is experienced (the dog’s colors and shapes, say), or even by the “higher-level” properties of what is experienced (being a dog, being a beagle). It contains one more phenomenal feature, one which has nothing to do with what is experienced and has only to do with how it is experienced. That is the property of presenting-as-real in perception and presenting-as-unreal in imagination. Naturally, you cannot reduce one of these features to the other. To that extent, imaginative experience involves a sui generis kind of (sensory) phenomenal character.

In this way, my book attempts to provide a sustained argument for one particular answer to the question “what is the minimal number of types of phenomenology we must admit to just be able to describe the stream of consciousness?” – “six”. But it must be confessed that in this area philosophical argumentation has a somewhat uncomfortable role.

I think of the ideal scenario as one where a philosophical argument does not only compel us rationally to accept some thesis, but actually makes us see why the thesis is true – it reveals to us, in a way, a truth that was previously invisible to us. I say this fully mindful of the fact that notions such as “seeing the truth” and “truth being revealed” require elucidation. But something like it must exist. If you reflect a bit on the claim that if $x \geq 1$, then $2-2x \leq 1$, you will come to see that it is true. After some reflection, a certain experimental event takes place: the claim’s truth feels like it is revealed to you. Philosophical arguments rarely manage to accomplish this, but it is the ideal case. For me, Kim’s argument from causal closure to reductive physicalism was such. For many, Armstrong’s argument from objective similarities to in re universals is such as well. Arguments that manage this feat are rare in philosophy, but many arguments tend toward this ideal.
In the philosophy of consciousness, however, we are typically convinced of the truth of phenomenological claims on the strength of something like introspective revelation of their truthmaker (the conscious phenomenon itself). Accordingly, the arguments we provide do not attempt to reveal the actual reason why these claims strike us as, and are, true. For we feel as though the grounds of their truth are given to us directly, independently of the deliverances of discursive reason. The reader can appreciate the claim fully only if she sees for herself its truth – she must be visited by the relevant (private!) act of introspective revelation. What the arguments typically do, then, is clutch at some symptom of the relevant truthmaker and try to exploit it to lead the reader to a kind of “blind” (i.e., not revelation-based) acceptance of the phenomenological claim. The result is that the person providing the argument does not actually believe the argument’s conclusion on the basis of the argument she provides. This situation is perhaps not all that rare in philosophy, but it seems to be a fate in the philosophy of consciousness.

The arguments I present in the book are no exception. In some cases (notably my argument for irreducible cognitive phenomenology), I felt very clearly that any force my argument might have would not lie in its capacity to convert opponents, but rather in its capacity to put into words the convictions of proponents. My main hope, in any case, has been to construct a unified picture of the realm of consciousness, where there are six elementary types of phenomenology structured along two axes (sensory/nonsensory and presenting-as-F) – and in doing so, to illustrate the kind of “descriptive” investigation that would be needed to underpin a science of conscious phenomena.

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Notes