[Andrew Brook's contribution to the volume on *The Phenomenological Mind*]

Phenomenology: Contribution to Cognitive Science

My comments will focus on the issue of what, according to Gallagher and Zahavi (2007, hereafter G&Z; all references will be to this book unless otherwise noted), the phenomenological approach can contribute to the cognitive sciences (including cognitive neuroscience), one of their major themes. Toward the end of the paper, I will say something about a second major theme of theirs, the relationship of phenomenology to philosophy of mind. Conventional wisdom within cognitive science has it is that phenomenology is hostile to the scientific study of human cognition. Hubert Dreyfus, a self-declared phenomenologist, writes works with titles such as *What computers can't do* (1972) and *What computers still can't do* (1992), both of which urge that the attempt to understand the mind as a computational information-processor, at any rate, is doomed to failure. Since the computational, information-processing model is the only remotely worked-out scientific model of cognition that we have, it is not too surprising that phenomenology and cognitive science have generally been viewed as being at loggerheads.

Our authors do not see things this way. G&Z have been arguing for over a decade now that phenomenology has something unique and important to contribute to the scientific study of cognition. Their campaign, of which *The Phenomenological Mind* (2007) and a journal that they edit, *Phenomenology and the Cognitive Sciences,* are perhaps the most important fruits, has been increasingly successful.

The Phenomenological Mind is mostly devoted to introducing the phenomenology of particular issues and, in some chapters, connecting what phenomenology can teach us about them to work going on in cognitive science or philosophy of mind. Consciousness, time, perception, intentionality, the embodiment of cognition, agency, knowledge of others, and self and personhood occupy a chapter each. (The cover says that situated and extended cognition are discussed, too, but I did not find such a discussion.) I want to abstract away from the particulars of these discussions and look at two over-arching issues. The first is: What, in the view of G&Z, is this way of doing philosophical analysis called phenomenology like? The second is: Can phenomenology make an important contribution to the scientific study of cognition? If so, what? The second is the issue that really interests me. However, to discuss it, we have to know what phenomenology is in the view of G&Z. Anyway, their view of phenomenology is interesting in its own right.

Two final introductory remarks. First, though G&Z call their book an introduction, it is far more than an introduction. It is the most comprehensive work on what phenomenology has to say about cognition and consciousness and how it relates to the scientific study of cognition to date. Second, though the view of phenomenology that they advance fits Husserl (d. 1938) and his science-admiring follower Merleau-Ponty nicely, a question could be asked about how well it would fit phenomenology chez Heidegger. To say the least, Heidegger was not an admirer of attempts to study the mind scientifically. Centring the book on Husserl is perfectly appropriate – Husserl invented both the term 'phenomenology' and the approach. However, a question remains about how well G&Z's picture would fit Heidegger – or Sartre.

1. What is Phenomenology?

The word 'phenomenology' is most often used nowadays as the name for an aspect of experience: The felt quality of experience, what it is like to have the experience. For example, a distinction between phenomenal consciousness, which it is like something to have, and other kinds of consciousness has been prominent. There is more to Phenomenology, the way of doing philosophy, than this. Phenomenology, capital P, certainly is interested in how things appear to us – but not because something being like something is a form of consciousness. More on what Phenomenology the movement really advocates in a moment. For now, I am just making the terminological point that Phenomenology is not just about experiences being like something to have. (Capitalizing 'Phenomenology' over and over would get tedious and I won't do so. From now on, when I use the word, I mean the movement.)

At least in English-speaking cognitive circles, phenomenology (the movement) is often thought to consist in trying to capture images, feelings, ideas, and the like as they flit by the 'eye of the mind'. If this were what it is, it would be largely doomed to uselessness for the very same reasons as the introspective methods of Wundt and James in the 19th century were. (It is a nice irony that we are again relying on introspection. The new kid on the block, cognitive neuroscience, could not do without it.) G&Z mount a definitive case for the proposition that phenomenology seldom appeals to introspection. They point out that neither Husserl nor Merleau-Ponty even wrote about introspection. Indeed, these classic phenomenologists read just like other philosophers in the broadly Kantian tradition, offering analyses of mainline philosophical topics such as time and the self and arguing for them via a variety of more or less familiar moves.

Gallagher and Zahavi may muddy their case a bit by urging over and over that a 'first-person perspective' is central to phenomenology – at first blush, appealing to the first-person perspective looks suspiciously like appealing to introspection; we will return to this possible muddle in Section 5. Whatever, their point that phenomenology is not about introspection is decisive. Rather, phenomenology is about how things appear to us, what the things that we experience are like for us. Introspections come and go, but so long as we are awake and experiencing, things will be appearing to us. (Things including one's own self – in which case there is a way of being aware of oneself that does not consist of introspection.)

'OK', I can hear someone say, 'so phenomenology is about how things appear. What's the big deal? Appearances are – appearances, merely how things seem to someone. Surely what we want to know is how things actually are.' Here G&Z make a very nice move, one of many. Coming to know how something really is also consists of that thing appearing in a variety of ways – ultimately, one hopes, in a way that reflects how it is, or what we can know about how it is. If so, things appearing is the foundation of all experiential knowledge, and, far from being trivial, .to study how things appear is to study a foundation of all science, indeed of all knowledge of the world of any kind and of at least most of our knowledge of ourselves.

A foundation of all science is not necessarily a *feature* of all science. In particular, it would seem that *theories* do not appear to us. What would it be for awareness of a theory from my perspective to be different from awareness of a theory from your perspective? At the very least, we are not talking about spatial perspective here but of some abstract analogue. Similarly, what is the proposition that masses attract like for you? Maybe *thinking about* a theory,

entertaining the proposition that masses attract, is like something (even though this has been disputed by those who claim that propositions and concepts do not have a felt quality when we are aware of them). However, we continue to know theories when we are not experiencing them. If so, appearing to us is not a feature of all knowledge. This issue will become important in Section 3 when we ask whether phenomenology has anything distinctive to contribute to theorizing in cognitive science, which is why I have gone into it in a bit of detail.

2. How we can study the way things appear to us – and why we should.

How should we study the way things appear to us? The first step is to suspend our 'natural attitude', our inclination to take the way things appear to be, for the most part, an unproblematic source of knowledge and focus on – the way things appear. Husserl called this bracketing of the natural attitude *epoché.*

Then, instead of asking the natural question (what does this experience tell me about the world?), we can ask: What must cognitive systems be like for things to appear to us in the way they do? And we can ask: Under what conditions if any do appearances provide for objectivity, for knowledge of how things are? We can even ask: How is a science of the world as the world appears to us even possible? And so on.

One way to describe the project created by the first question would be to say that in it we are investigating the "interdependence between specific structures of subjectivity and specific modes of appearance." (p. 25) Husserl gave this pursuit a special name, too. He called it *phenomenological reduction.* Phenomenological reduction is very much in the spirit of cognitive science. One of the main methods of cognitive science is to identify some interesting kind of representation or behaviour and then, by inference to the best explanation (IBE), to try to suss out what kind of cognitive mechanism it would take to produce such representation or behaviour. This was also one of Kant's central projects.

So if we ask: Why should we be interested in how things appear to us?, one answer is that being so interested leads us to ask questions about the 'conditions of possibility' of things appearing as they do, questions of the kind just canvassed. ('Conditions of possibility' is a term that both Kant and Foucault used and G&Z are right, in my estimation, to treat phenomenology's investigations of the possibility of appearance as a Kantian project.)

This parallel with Kant raises a question. What if anything about investigating the conditions of possibility of appearances is distinctively phenomenological? Not just Kant but many other nonphenomenologists have investigated such questions. Moreover, as Kant's work shows, to investigate the conditions of experience, we don't need to pay any special attention to how different things appear to us. Any old experience in which things appear to us in any old way will give us all the material we need to investigate the conditions of experience. (A familiar worry about Kant's way of carrying out his project also arises for phenomenology. How could one possibly investigate what is necessary for experience in general to occur, or for this, that or the other kind of experience to occur, nonempirically? Any assumption that one can find important truths about the necessary conditions of experience by sitting in one's armchair and paying close attention to how things appear would be deeply suspect. Fortunately, not just G&Z but also Merleau-Ponty agree – and immerse themselves in what the 'science of the mind' is

teaching us.)

A similar problem of distinctiveness may also arise for the final two special techniques of phenomenology that G&Z identify. The first is *eidetic variation.* Eidetic variation consists in running thought-experiments in which we imagine various properties of things appearing to us to change or disappear to find the ones that "resist change" (p. 27). The ones that we cannot change or remove imaginatively have a claim to be particularly closely related to the kind of object that is before us. Trouble is, this kind of search for 'essences' is as old as Plato and has had a distinctive name in non-phenomenological circles for a long time: *conceptual analysis.* Virtually all kinds of philosophy do it. And not just philosophy. It being a very good idea for researchers to agree on what they are investigating before setting out to investigate, all science has to do some rough and ready conceptual analysis, too.

There are also a number of standard concerns about and alternatives to cranking conceptual analysis up into a search for essences. There are Wittgensteinian concerns about whether all instances of any interesting kind of thing will have any properties in common, it being enough if there is a crisscrossing and overlapping collection of properties, some significant portion of which is had by each instance. There is the Putnamian/Fodorian suggestion that it is reference, extension, that anchor/s the meaning of a term, not any properties of the thing thus named. There are concerns from conceptual role semantics about what is actually going on when we find it difficult to imagine away a property of something. Does that reveal something deep about the nature of the kind of thing or is it just showing us what interests us about things of that kind? And there are Kripkean worries about whether thought experiments can even tell us what our words mean. They may be a first pass at uncovering what we use a word to talk about, maybe even an inescapable first pass if researchers are to know that they are all using a given word to talk about roughly the same kind of thing, but for a final and definitive pass, maybe we have to wait until science tells us what makes a kind of thing the kind of thing it is.

Similarly and even more obviously for the final tool of phenomenology, *intersubjective corroboration.* G&Z do not claim that intersubjective corroboration is distinctive to phenomenology, so I won't say anything more about it.

If phenomenological reduction, eidetic variation, and intersubjective corroboration are not distinctive to phenomenology, what does it offer that is distinctive? The short answer is, the care that phenomenologists take to describe how thing appear *precisely.* (For a longer answer, see the next Section.) When Husserl said, "Back to the things themselves" *(Cartesian Meditations* (1929), quoted on p. 6), what he meant (according to G&Z's plausible reading) is that we should stop worrying about this, that and the other issue connected to how things appear to us and focus on the appearances themselves, on how things are appearing, what they appear to be like.

3. Where in cognitive science could phenomenology make a distinctive contribution?

To expose what is distinctive about phenomenology, let us tie this issue to the one that, I said, is of greatest interest to me: Can phenomenology make an important contribution to cognitive science? If so, what would it be like?

One way to approach the latter issue would be to say that the proof of pudding is in the

eating: G&Z claim that in the eight areas that are the concern of the last eight chapters of the book (I listed them earlier), phenomenology not only can but does say things that would make a distinctive difference to cognitive science (if only cognitive scientists would listen). We could simply assess these claims. I want to start by taking a different track, however. I want to start by identifying *where* in cognitive science phenomenology could make a distinctive contribution.

The trilevel hypothesis (so-called) is one standard way to divide up different kinds of explanatory activity in cognitive science. (I say 'so-called' because it is not an hypothesis and almost nobody thinks that there are only three levels. But those peculiarities need not concern us here.) According to the trilevel hypothesis, to explain any cognitive phenomenon adequately, doing arithmetic for example, one must work at three levels. First, one must describe what is being done accurately and precisely. ('A number is identified. Then a second number is identified. Then they are combined according to a rule. A third number results which is the number of interest.') This is called the knowledge, task or sometimes computational level. It is about what task is being performed. Next, one has to figure out the procedure, or at least a procedure, which, when run properly, would do this task (in this case the procedure would be one of the algorithms for doing arithmetic.) This is called, not surprisingly, the procedural level. One major question about it is whether there is something about cognitive procedures that will always require a distinctive cognitive vocabulary or whether this second level, even if procedural, will eventually become part of neuroscience. Finally, one has to figure out how this procedure, or a procedure, could be done (implemented, realized) by some part of a brain like ours. This is called the implementation level. And the claim is that no account of a cognitive phenomenon is complete without an account of each of the three kinds.

Where could phenomenology help with this? Well, it provides no special insight into how brains do cognition, so not at the third level. But neither does it facilitate inferences to the kind of procedure, mechanism, or what have you, the running of which does the cognitive task, so not at the second level. If so, the only place phenomenology could help is at the first level. It could help us describe more precisely the cognitive task or computation or piece of knowledge that we want to explain.

The idea here is that, to identify the procedures that produce something and how they are implemented by the brain, we must first have a robust grip on what we are trying to explain, everyone agreeing on key examples. Where this condition is not satisfied – contemporary consciousness studies and contemporary studies of attention are but two of dozens if not hundreds of topics where it is not –, researchers end up talking past one another and explanatory chaos ensues. Paying close attention to how we experience the target phenomenon is a promising place to start. In cognitive science, the target phenomenon is a task performed, a bit of knowledge acquired, or the like, and paying attention to how we experience it is paying attention to what the target phenomenon appears to us to be like, what in the target as it appears to us has stirred up a desire in us to explain something about it, and so on. Say that the target is perception. As G&Z say, "if we have a well-developed description of ... the intentional, spatial, temporal and phenomenal" aspects of perceiving as we experience it in ourselves and others, then we will have "a more adequate model of perception for the scientist to work with than if the scientist simply starts with a commonsense approach" (pp. 9-10), i.e., with her untutored sense of what it is like to perceive.

If this drive to exact description is the contribution that phenomenology makes, is it

distinctive? In principle, there is room for doubt about this. Such a drive should be a feature of all good philosophy. However, there is lots of evidence that it is not, so the drive to exact description of how things appear to us makes phenomenology distinctive at least in practice.

At this point, readers of G&Z's book might object: 'There has to be more to phenomenology than precise attention to how things appear. Aren't you, for example, ignoring the new movement in phenomenology called neurophenomenology?' (the authors discuss this development near the end of Chapter 2). Yes, it is true. So far I haven't said a word about neurophenomenology. But neurophenomenology is not a counterexample – though it does help to pinpoint what is distinctive about phenomenology more precisely than we have done so far.

Neurophenomenology is about what changes in the brain (as revealed by monitoring brainwaves using EEG or imaging the brain using fMRI or temporarily disabling regions of the brain using TMS [transcranial magnetic stimulation] or using some other technique) go with a significant change of some kind in how things appear. For example, a group of apparently random dots resolves into a three-dimension image, or areas in s bistable image switch from looking like faces to looking like a vase. We can study what changes in the brain go with such changes in appearance.

This is all interesting and important. But notice what is distinctively phenomenological in this research: The changes in appearance, the changes in what one's experience is like, and only the changes in appearance. The rest is straight neuroscience. If so, far from neurophenomenology being an objection to my analysis of where phenomenology fits in cognitive science and what is distinctive about it there, neurophenomenology actually supports my analysis. Phenomenology can help cognitive science by helping to secure precise, accurate descriptions of the phenomena that we are seeking to explain.

That said, the example of neurophenomenology does reveal something new about the contribution that phenomenology can make to cognitive science. Classical cognitive science mainly studied tasks and the performing of tasks, that is to say, behaviour, and made inferences about the procedures and mechanisms producing the behaviour. With neurophenomenology, the 'tasks' being studied are cognitive, not behavioural – how things appear to a subject, not how the subject is behaving (p. 27) (including even the appearing of subjects' behaviour to a researcher). General cognitive neuroscience had already made this turn 'inward' – subjects' reports of what cognitive tasks they are doing, what they are experiencing, etc., is typically what gets correlated with changes in brain, not subjects' behaviour. (As I said earlier, in the light of the contempt for introspection that was such a prominent feature of early cognitive science, this turn is ironic; although also unavoidable.) Now, researchers could pay attention to how behaviour appears to them, the behaviour for example involved in doing a task, and perhaps benefit from doing so. When what we seek to explain is a cognitive process, however, not behaviour – perceiving, for example, not doing a sum on a piece of paper –, we have no choice. Initially, the only access that we have to the target process (as contrasted with behaviour that ensues) is via how it appears to people in whom the process is going on. A difference, perhaps the difference, between neurophenomenology and cognitive neuroscience in general is that people trained in the former pay much closer attention to *precisely* how things appear to subjects than people trained in the latter do.

Having said that the study of how things appear to us is what is distinctive about phenomenology and something about where that studies fits into cognitive science, let us close

this section with a quick look at another issue: How much can we build into a study of appearances? The causes of things appearing are excluded because they seldom appear – looking out of the window and being struck by the amount of snow on the ground, I am given no information about how my brain has formed that perception. What about the reasons for things appearing as they do. How things appear is shaped not just by sensory input but also by desire, belief, memory, affect – by the reasons one has for being interested in the appearing object, in this case snow, in the way that one is and reacting to it as one does. (I am invoking Dilthey's distinction between *verstehen* (understanding) processes of 'explaining' by finding the meanings of thought, feeling and action, and *erklären* (explaining) or *kausal erklären* (causally explaining).) Phenomenologists have often been interested not just in how things appear but also in what thus appearing means to someone. G&Z introduce the consideration in their introduction but seem to make little use of it after that.

4. How much could phenomenology contribute?

Having delineated the place in cognitive science where phenomenology can make a contribution and what its contribution is like, let us now ask: How big a contribution could it make? We cannot discuss all the topics to which it could make a bigger contribution than it is currently making, according to G&Z, so we will limit ourselves to two. The first is time and how temporal phenomena appear to us. The phenomenology of time has played a central role in phenomenology from the beginning, even appearing in the title of Heidegger's *Sein and Zeit* (1927), the best-known work of phenomenology to date. The second is a topic much less widely discussed in phenomenology, our consciousness of other minds. Merleau-Ponty famously discussed this issue and said some important things about it (for example in *Phenomenology of Perception* (1945); a key passage is quoted on p. 184), some of which resonate with Wittgenstein's views, and Gallagher has written on it but few other phenomenologists seem to have paid much attention to it. Time first.

The way time is experienced is full of puzzles and it is very hard to find a way to describe temporal experience that is not obviously problematic. This makes it a happy hunting ground for the phenomenological approach. Indeed, it is hard to see how we could make any significant progress with the cognitive or neuroscience of the experience of time without first doing a lot of work on the exact phenomenology of time consciousness. I cannot begin to do justice to the rich array of these puzzles offered by G&Z (in Chapter 4) and others but here are three examples.

If the experience of an event, a person crossing a street, say, involves retaining experiences of early stages of the walk and integrating them with experiences of the later stages, why do we not experience the person as filling the entire crosswalk (p. 77)? (Since we don't, time experience is not simply retention, not in working memory or anywhere else.) Similarly (a nice puzzle discussed by Sean Kelly, 2005), if hearing a melody is retaining the earlier notes as they were experienced and combining them with later ones, why do we not hear a chord rather than a melody? (Since do we hear a melody, not a chord, the idea of the specious present cannot be the right way to go.) (G&Z do not present this puzzle but it can be described quickly, which is why I choose it. This is not true of many of the ones that they do present.) A third. In the well-known phi phenomenon, if a green circle of light is flashed briefly on a screen and it is followed by a red one at an appropriate time and distance, everyone experiences the first circle as moving

to the second location and changing colour as it goes. Yet that *cannot* be the order of the actual experiences of the dots. (So time experience cannot simply be a tracking of 'objective' time.) And so on.

Even these simple puzzles are enough to show that there is lots of room for work on how time appears to us. It being so extraordinarily difficult to say anything noncircular about time, we also need to ask how well phenomenology has done with this task. Here the picture is mixed. Husserl's trichotomy of retention/primal impression/protention is at least terminologically promising, distinguishing the target phenomena from both memory and the element of direct perception in current experience. Concerning the structure of temporal experience itself (a separate problem because the experience of F need not be F – a perception of red need not be red), G&Z offer us another trichotomy and urge that temporal experience is neither an object *in* time, nor a consciousness *of* time. It is a *form* of temporality. Again, promising – but it is not clear how to fill out either trichotomy in sufficient detail for it to become a solid tool for linking time consciousness as we experience it to what cognitive neuroscience is telling us about how the brain 'does' time.

Now consciousness of other minds. Could paying proper attention to how other minds appear to us contribute to our understanding of what is going on here? The answer is interestingly mixed. On the one hand, how we actually experience other minds is radically different from how the traditional problem of other minds presents the situation. The traditional setup simply assumes that what we can directly perceive in others, behaviour, facial expression, and the like, never provides direct consciousness of others' mental life. The only knowledge of others' mental life that we have is inferential – the dominant story is that we infer from behaviour, facial expression, and the like to the mental states and events that would *best explain* what we have observed. It has long been understood that this setup faces serious problems. E.g., if the mode of access to others' mental life and my own are radically different from one another, what could possibly lead us to think that they are states of the same kind? (Writers as otherwise different from one another as Merleau-Ponty, Wittgenstein, and P. F. Strawson have all mounted variants of this objection.) Problem notwithstanding, most cognitive scientists and their philosophical fellow-travellers swallow it whole.

Yet even a modest amount of attention to the actual experience of others would show that our experience of others is nothing like what the traditional setup supposes. When we see a young child screaming, we don't ask, 'Now, what mental states would best explain these screams?'. We take the activities, presentation of self, body language of others as at minimum reliable expressions of what they are feeling, thinking and wanting. And it is good to be reminded of this. There are circumstances that give rise to doubt but most do not. If there is no 'problem of our knowledge of other minds' in much of our everyday intersubjective life, maybe there is something seriously wrong with the traditional setup.

So far, so good. But so far is as far as phenomenology can take us. And it is not quite far enough. Why not? If we often treat actions and the rest as reliably expressing others' mental life, we do not always do so. Indeed, we never do so for all aspects of even a single other's mental life. For we know that others keep things to themselves. Children develop a sense of privacy at about age six. From that age on, no person ever again expresses all that they think or feel about certain beings, significant others in particular. And there is a dissociation running the other way, too. We can play-act being in love, fake pain, express intentions that we don't have.

In the face of this double dissociation, it would appear that there is a real problem explaining how it is possible for us so often to treat others' mental lives as unproblematically observable in the way that bodily motion and facial configuration are. It would also suggest that mental life is something *different* from anything that can be readily observed. How much can the work of phenomenology proper, close description of how things appear, help us with these issues? So far as I can see at the moment, not very much. (Which is not to say that phenomenologists such as Merleau-Ponty and Gallagher haven't made interesting proposals here. The point is, they are not making them as phenomenologists, not if G&Z are right about what characterizes phenomenology.)

5. Is perspective always first-personal? Consciousness and consciousness of self

I return at last to the issue that I left dangling earlier, whether G&Z's talk about the first-person point of view muddies the water of their own, plausible nonintrospectionist reading of what phenomenology is on about. Here is the kind of thing they say: "To the extent that phenomenology stays with experience, it is said to take a first-person approach." (p. 7). Far from first-person perspective exclusively being about the type of access that each of us has to his or her own experiences, there is a first-person perspective even with respect to our experience of the world around us: "intersubjectively accessible objects ... are intersubjectively accessible precisely insofar as they can be accessed from each first-person perspective." (p. 40) Even in an apparently hard case, science, a scientist's experience of a world, of data and effects, is "infected ... by a first-person perspective". And so on. There are dozens of similar passages.

Here is how I react to these passages. G&Z may well be right about perception and thought being perspectival but the claim that perspective must always have a first-person element is almost certainly wrong. By 'a first-person element', I mean an element that would have to be expressed using a first-person pronoun ('I, me, my, mine') or equivalent. Let us grant that all experiencing is from a perspective and contains a point of view. However, and this is the key point, things can appear to a person and she can pay attention to the things, to what they appear to be like, and so on without her even knowing to whom they are appearing, let alone paying any attention to the latter. When I pay attention to how time appears, to take a favourite topic of phenomenologists, I am paying attention to time and how it appears. I need not even know that the appearance is mine, that it is time as appearing *to me* to which I am paying attention. If so, not only does phenomenology not appeal to introspection, phenomenology need not be about the first-person, about the appearance of *oneself or one's properties* to oneself, at all. And it only muddies the water to say or imply otherwise.

Notice that the previous paragraph is a nice illustration of some of the things said in the second-last section on what phenomenology is. Phenomenology is about describing things *exactly* as they appear, setting aside preconceptions and ascribing to an event of something appearing no more than actually appears. In the case just considered, I am not sure that G&Z have done that. If I am right, while appearing *often* has a first-person element, it *need not* have one, the temptations of the contrary idea notwithstanding, and we can think of cases in which it does not have one.

The issue before us connects to a very old issue in consciousness studies, whether one

can be conscious of the world and/or one's own body without being conscious of oneself and one's psychological states, without, for example, being conscious of being conscious. G&Z do take a stand on the latter issue and they take it on behalf of "all the major figures in phenomenology": "an implicit, non-objectifying, pre-reflective awareness of our own experience as we live it through," (p. 15) "a minimal form of self-consciousness ... is a constant structural feature of conscious experience" (p. 46).

This claim strikes me as *extremely* dubious. For one thing, no non-human animal has any such consciousness of themselves, so far as we know, yet most are surely conscious. Different theorists bite one end or the other of the bullet that has to be bitten if one denies one or the other part of this claim. Biting either end of that bullet has always seemed to me a desperate measure, something that only a person in the thrall of an unsustainable conviction (assumption?) about consciousness would try. Moreover, their claim about the link between consciousness and self-consciousness is not intrinsic to phenomenology: One can be a good phenomenologist and yet deny that any form of consciousness of self must or even always does accompany consciousness of the world, one's own body, and the like. But even if we grant it – grant that self-consciousness of some kind always accompanies conscious experience –, would this entail that (perspectival) appearing, or even (perspectival) attention to how something appears, always accesses the objects appearing *from a first-person perspective*? I see no reason to think so. When accessing oneself maybe; but why when accessing an appearing object?

Moreover, the pre-reflective consciousness said to be the constant first-personal feature of conscious perspective could not give the phenomenologist what she needs to do the phenomenology of self-consciousness. How things appear has to be clear and our awareness of how they appear has to be precise if we are to be able to do what phenomenologists want to do: make inferences about the conditions of possibility of things thus appearing, about what kind of causal theory would explain what is appearing, and the like. The kind of implicit, non-objectifying, pre-reflective awareness that I have of myself in, for example, the peripheral consciousness of self that may accompany paying focal attention to something is too indistinct to allow any secure inferences to other things. Or so it seems to me.

6. Consciousness: Phenomenology and analytic philosophy:

Phenomenology has devoted a lot of attention to consciousness over the roughly 100 years of its existence and this is reflected in G&Z's book. Half the chapters are about consciousness: kinds of consciousness of self (introspection vs. pre-reflective consciousness of self, for example), consciousness of time, consciousness of others, whether the self is a form of consciousness, consciousness of our identity over time, and so on. Consciousness even enters centrally into chapters where something else is the overt topic, methodology and intentionality for example.

G&Z say many interesting things about these topics to do with consciousness, a great many more than I can even touch on here. Shoemaker's (1970) much-discussed claim that we are immune to error through misidentification with respect to the first person is an example. They point out that such immunity exists in a narrower range of cases than is often thought and they use pathological conscious states such as the experience of thought insertion to make their case. I would add here that *how* we know is very important; in particular, immunity exists only when we

are aware of the person in question from the point of view of being that person – by virtue of having that person's experience, not observing them, and so on. However, it would take more space than I have to argue for this claim and explore its implications.

Instead, I will take up a different point. For many topics in consciousness, it seems to me that the most interesting encounter is not between phenomenology and empirical cognitive science or neuroscience. The most interesting encounter is between phenomenology and classical analytic philosophy of the person. By 'classical', I mean the work of P. F. Strawson, Sydney Shoemaker, Derek Parfit, and the like. Issues central to that work include conditions of persisting as a single person, the relationship of personhood to the body, the relationship of personhood and moral responsibility, and so on. When phenomenologists discuss consciousness and selfhood, what they say often resonates with that work in a host of ways that invite further investigation. It would take an entire paper to explore these resonances, so I will have to leave this suggestion at that.

Gallagher's and Zahavi's book is long overdue. No one could read it and fail to come away convinced that cognitive scientists and cognitive neuroscientists need to be much more precise and discriminating in how they describe the targets of their research than they have been so far, and that that is true *a fortiori* when the target is consciousness or its contents.

Two final notes. (1) G&Z cite works by the year of the edition they are using, rather than by the year in which the work originally was published. Thus it is a good idea when they cite or quote past authors to check the dates of original appearance. Often it is earlier than one would expect, which can be interesting. Husserl published *Logical Investigations,* for example, in as early as 1900-1. Merleau-Ponty published *Phenomenology of Perception* as soon as the war ended in 1945 – a full twenty years before the 'cognitive revolution' began. Reading Merleau-Ponty, it is surprising to see how much empirical work that we would now call cognitive science already existed in the 1930s and early 1940s. (2) I discuss many of the issues of this paper in Brook (1994) and subsequent publications.

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