



Book Review

Agency and Self Awareness: Issues in Philosophy and Psychology edited by Johannes Roessler and Naomi Eilan. Oxford: Clarendon Press. 2003. pp.415.

Reviewed by Joel Smith

On hearing a sound behind me I may turn my head in order to see what is happening. This piece of behaviour is a deliberate action, one which feels to be under my own control. If asked what I am doing, I will be able to provide an immediate and knowledgeable answer, viz. 'turning my head' or maybe 'looking to see what is going on'. Not only do I know *that* an action is taking place, I know *which* action is taking place, and I know *who* the agent of that action is.

This volume explores issues surrounding the kind of awareness that we have of our own agency. It is the second instalment of a series of titles originating from the Arts and Humanities Research Board's *Consciousness and Self-Consciousness* research project (the first instalment being Hoerl and McCormack (eds.), *Time and Memory*. Oxford: Clarendon Press). This collection of seventeen essays, plus an excellent editor's introduction, is noteworthy in the interdisciplinary stance taken. Containing cutting-edge contributions from both philosophers and psychologists, it will be valuable to students and practitioners of both disciplines. This cross-fertilisation of ideas is both instructive and a pleasure to see. Philosophers have much to learn from their colleagues in psychology departments, and *vice versa*. Of particular interest are the two dialogues between psy-

chologist and philosopher, between Anthony Marcel (psychologist) and Christopher Peacocke (philosopher) and between Frye and Zelazo (psychologists) and Hornsby (philosopher), with philosophical replies to the psychology papers. Whichever side of the divide one is on, one cannot fail to learn from the way in which this interaction has been carried out.

The questions addressed in this volume can be divided into three broad categories (although not without overlap): the phenomenological, the epistemological, and the psychological. Perhaps the most pressing phenomenological question is this: How should we describe, and best account for, the sense of control and ownership that commonsense tells us we have over our own actions? Many of the papers address this question. In the epistemological category, the most obvious question is: What is the nature of the knowledge that we have of our own actions and how can we account for it? Finally, the psychological question: What are the neuropsychological or sub-personal information processing systems that subserve agency and our awareness of it? Underlying and informing these questions are more traditional philosophical issues concerning the metaphysics of action, for instance: How can we distinguish between actions and mere bodily movements?

One of the thoughts driving the authors of

this volume is that an account of agency and self-awareness in the normal case must be sensitive to experimental results concerning certain abnormal cases. The assumption being that results obtained from pathological subjects and experimentally induced situations indicate a breakdown of, and thus are relevant in determining, what is going on in the standard situation. These kinds of cases can be thought of as falling into three groups, in ascending order of divergence from the standard case: everyday examples that we might overlook in accounts of action, unusual results garnered from normal subjects placed under experimental conditions, and pathological cases. I will illustrate just a few of these

Everyday examples include the following: Suppose you are driving to work along a familiar route but you intend to take an unfamiliar turning to another building. When you get to the relevant turn, you absent-mindedly take your usual turning (see the chapter by Frye and Zelazo). Here it seems that although you had an intention to act in a particular way, that intention was ineffective. Another case is that of typing. When typing, the proficient typist is aware of what he or she is writing but, if asked to describe the finger movements involved in this everyday activity, would be at a loss (see the chapter by Roessler). Here it appears a familiar action is undertaken without any explicit awareness of the movements required to perform it.

There are a barrage of interesting results elicited from experiments performed on normal subjects. One of the most surprising is described in the chapter by Marcel. Subjects' right arms were occluded under a surface which had a light on it. Due to the muscle tendon of the arm being vibrated, subjects experienced their arm to be left of the light when it was actually to the right. That is, they suffered a 'vibrotactile illusion'. The subjects were then asked to move their hand to underneath the light. Despite the illusion, they had no difficulty doing this, their arm moving leftwards. However, sub-

jects reported that they felt that they had moved their arms to the right. Here, whilst the subjects awareness of their action is illusory, their execution of the action is unimpaired.

Other surprising data comes in the form of Libet et al's (1983) famous experiments. Subjects were asked to move their hand at a time of their own choosing. They were watching an accurate clock, and asked to judge the time at which they had initiated the action. On average, subjects judged that they had moved 86ms before any muscle activity occurred (see the chapter by Haggard). Since a cause must precede its effect, it would appear that awareness that one is acting is not caused by any awareness that one's body is moving.

Pathological subjects stimulate a great deal of discussion in this volume. The most frequently mentioned is so-called 'Anarchic Hand syndrome' (see the papers by Marcel, and by Humphreys and Riddoch). Subjects with Anarchic Hand syndrome sometimes find that their hand is doing something that they have not intended to do, and over which they have no control. For example ES, a patient described by Humphreys and Riddoch, once found her hand slapping her aunt at a dinner party. Whilst ES is aware of what is happening when such actions take place, she does not feel as though she has control over them, and does not know what the hand will do next. The feeling is of one's hand 'having a mind of its own'. It is important to note that that behaviour of anarchic hands is complex and goal directed, and so cannot be put down to simple reflex behaviour. There is little agreement between the contributors to this volume about the psychological and philosophical consequences of Anarchic Hand syndrome. Should we describe the behaviour of the anarchic hand as action without an agent (see the paper by Peacocke), or as the subject's intentional actions but which involve intentions which are unrecognized by the subject (see the paper by Campbell)? On the one hand, it might seem a conceptual truth that every action has an agent, on the other we might be unwilling to

describe these actions as intentional, even on an attenuated sense of intentional.

What is the significance of these everyday, experimental and pathological cases for the epistemological questions raised earlier, viz. what is the nature of the knowledge that we have of our own actions and how can we account for it? One collection of views which might seem reasonable is the following: (1) We have authoritative knowledge of our basic actions – basic actions being those actions we perform in order to perform anything else, and which we do not need to perform another action in order to perform them (see the chapter by O'Brien). (2) This knowledge is derived partially from our introspectively knowing what we intend (or try) to do, and also partially from our proprioceptively (and maybe visually) perceiving our bodies carrying out those intentions. (3) This knowledge of *which* action is being carried out, being gained partly via proprioception, automatically gives rise to knowledge that it is *oneself* who is acting, since proprioception itself provides one with the relevant 'sense of ownership'.

It seems to me that the cases described above put a certain amount of pressure on each of these theses. First, the case of typing presents a certain difficulty for the view that we are authoritative over our basic actions. The basic actions I engage in when typing are finger movements, but it seems implausible to say that I know what finger movements I am making. If I have authoritative knowledge over anything, it appears to be the action of typing some particular word. But this is not a basic action.

The view that knowledge of our actions results from introspective knowledge of our intentions plus perceptual knowledge of our bodily movements faces serious difficulties. To begin with, it is far from clear that all action involves intention (or trying). In the case of absent-minded driving, it would be odd to describe you as intending or trying to take the familiar route (under any description of taking the

familiar route), yet that is what you are doing and what you are doing surely counts as an action. Secondly, Libet's results show that the standard awareness that we have of our own actions is not caused by the movement of our bodies. This puts pressure on anyone who wishes to claim that our knowledge of what we are doing is partly based on a perceptual awareness of one's body. We seem to 'know' what we are doing before we do it.

Finally, Anarchic Hand syndrome presents a problem for anyone who wishes to claim that knowledge of *who* is acting is based on a proprioceptive awareness of the action. For subjects with Anarchic Hand syndrome do proprioceptively perceive their hand as moving in a particular way, and presumably enjoy a sense of ownership over sensations etc. in their hand, yet they lack the sense of ownership that usually attends bodily action. However we are to explain the phenomenology and epistemology of the ownership aspect of action, it seems that it is not to be done via the ownership aspect of proprioception.

I have barely skimmed the surface of this fascinating volume of essays. It is clear that it will repay serious attention, and that it provides an excellent addition to a growing interdisciplinary field. Those interested in either the philosophical or psychological aspects of action will find it a great source of stimulating material.

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References

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