WHO NEEDS CONSCIOUSNESS?

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Thinking about animal consciousness is beset with many pitfalls, a few of which are: i) lack of clarity in words used, especially confusing 'cognition' with 'consciousness' and using words such as 'emotion' in both an objective sense (behaviour and physiology) and to imply consciousness; ii) failing to acknowledge sufficiently that different people use different versions of the argument from analogy with ourselves to infer consciousness in non-humans in animals; iii) assuming that choice and preference imply consciousness; iv) assuming that autonomic responses imply consciousness (a particular danger to those who look for physiological 'measures' of animal welfare); v) assuming that complexity of behaviour implies complexity of cognition and in turn consciousness; and vi) assuming that only cognitively complex organisms are conscious. Consciousness raises many questions of direct relevance to animal welfare that as yet have no answers, but finding possible answers may be made slightly easier if we avoid these obvious pitfalls.

Keywords: *animal welfare, cognition, consciousness, emotion*

Introduction

Consciousness is the greatest remaining mystery in biology. Other mysteries – such as how DNA molecules give rise to fully functional adult organisms – are still a puzzle, but they are beginning to yield to scientific enquiry. We may not know exactly how development occurs but we know the sorts of mechanisms that are involved and the sorts of answers that we can expect. With consciousness, however, we do not even know what kind of answer we are looking for. There is an 'explanatory gap' between what we know about and what we want to explain. Anatomical and physiological facts do not tell us what it *feels* like to be in pain (Young & Block 1998).

Almost in defiance of this, ethical concerns about the welfare of animals come from many people's deeply held conviction that many non-human animals consciously experience emotions such as fear, anxiety and boredom and that, subjectively, they experience many of the things that we do. So the study of animal welfare, by its very nature, not only touches on, but is forced to confront, the greatest remaining mystery in biology. Other scientists may get on with their scientific work and worry about consciousness in their spare time. Those of us who work on animal welfare are forced to grapple with it every day.

For this reason, a symposium on the connection between consciousness and welfare is particularly important and particularly apt at the present time when we are experiencing a complete revolution in our understanding of the way the brain works. But there are pitfalls and problems that beset anyone attempting to make the links between cognition, welfare and consciousness, and it is some of these that I would like to discuss. I do not intend this to be negative. Rather, I intend it to be like giving someone a map of a minefield so that they

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