EDITORIAL

Symposium on Consciousness, Cognition and Animal Welfare: Overview and Acknowledgements

This supplementary issue to volume 10 of the journal comprises the proceedings of the Universities Federation for Animal Welfare Symposium on Consciousness, Cognition and Animal Welfare held on 11–12 May 2000 at the Meeting Rooms of the Zoological Society of London, Regent's Park, London, UK.

Concerns for animal welfare rest largely on beliefs about the range of phenomena that animals have the capacity to consciously experience and which themselves are, or which invoke, feelings that may range from highly pleasurable to highly unpleasant. There is variation among cultures and nations in opinions about appropriate levels of resourcing for animal care in farming, biomedical research and other animal use, and this appears to be, to some extent, a reflection of differences in beliefs about animals' capacities for suffering. Although a commitment has recently been made by the European Heads of State to make provision in the Treaty of Rome 'to ensure improved protection and respect for the welfare of animals as sentient beings', the fact remains that deciding which species are sentient (ie which have the capacity for subjective experiences), and determining the range of phenomena they can be sentient of (and which can affect their welfare), remain difficult judgements.

Gaining insight into the capacities of other animals for subjective experiences is notoriously difficult. However, in recent years, a range of new experimental techniques and approaches have led to significant advances in understanding aspects of the neuroanatomy, neurophysiology and functioning of neural systems which underpin subjective experiences in humans. In addition, advances in the subject of animal cognition are providing greater insight into the range of phenomena of which animals may be conscious and which may, therefore, be relevant to their welfare. The aim of this Symposium was to bring together experts in various aspects of the study of human and non-human cognitive neuroscience and related fields to present and discuss recent advances in these subjects and how these may contribute to the understanding of conscious aware states in animals and thus to the science that underpins the development of animal welfare.

The question of how conscious states are generated is a mystery that has puzzled humans for thousands of years. Not surprisingly, this question and its corollaries – which organisms have conscious states? and of what can they be conscious? – were not resolved once and for all at this Symposium in May 2000. The papers provide an insight into the scale and very challenging nature of these questions. They also reveal the remarkable progress that is being made in knowledge of brain design and function and raise hopes of major breakthroughs before long.

It remains the case that we cannot prove that conscious feelings exist in non-human animals (or other humans) but the papers presented here, which approach the subject from a variety of angles, support the belief that they do. However, the papers also show that the scientific community is not unanimous in opinion about the range of taxa that may have this capacity. This is somewhat inconvenient for the progress of measures for animal welfare, but it has to be faced. Lack of certainty about where key boundaries may lie, such as that between conscious and non-conscious organisms, will no doubt stimulate further efforts to establish robust criteria for drawing lines where they should be; and should caution all to extend the benefit of the doubt as widely as possible.

The Symposium was attended by 200 delegates from 17 countries. It can be difficult to estimate the demand for places at scientific meetings. In this case, demand considerably exceeded the number of seats available.

We would like to express our gratitude to the following for their contributions to the Symposium and to the proceedings:

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James K Kirkwood, Robert C Hubrecht, Stephen Wickens, Helen O'Leary and Sara Oakeley Editors

ARTICLES

