



The concise argument: consistency and moral uncertainty

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Although in certain contexts judged to be over-rated,¹ consistency is generally held to be a virtue in arguments about medical ethics. In everyday life, to be told that you are acting hypocritically, in a manner that is inconsistent with values you profess, is at least embarrassing, and depending on the circumstances can have more serious consequences, not least for politicians. How far complete consistency in thought and action is humanly possible or even desirable is a more doubtful however. In terms of inconsistency over time, certainly, the maxim ‘When the facts change, I change my mind’ can be a reasonable defence: but in order to avoid less defensible forms of inconsistency, changing your mind about one thing may require changing it about others also. To take seriously just such a possibility is the ethical challenge of this month’s feature article: ‘Moral Uncertainty and the Farming of Human-Pig Chimeras’ by Julian Koplin and Dominic Wilkinson (see page 440).²

In this case, the facts that have or could soon have changed surround the emerging possibility of generating, within human-pig chimeras, human organs for transplantation into patients who need them and (although as yet the theoretical possibility) of avoiding the need for immunosuppression by generating the organs using stem cells from the patients themselves. The potential benefits of this possible answer to the worldwide shortage of transplantable organs clearly are immense. But, Koplin and Wilkinson point out, there are also serious potential harms. If human-pig chimeras with ‘partly humanised brains’ were to ‘develop morally relevant cognitive capacities’, such as dawning self-awareness, their moral status would make farming and killing them ‘a serious moral wrong’. Yet having said that, the real difficulty is that we cannot be certain, philosophically, ‘precisely what capacities confer what degree of moral status’, nor, practically, how to ‘devise some way of testing for these capacities in chimeric animals that look, behave and communicate very differently to humans’.

Given such uncertainty, Koplin and Wilkinson conclude, ‘concern about the possibility’ that human-pig chimeras ‘have

sufficient moral status that killing them is a serious moral wrong’ strongly suggests the adoption of some kind of ‘precautionary approach to human-pig chimera research’; and an appropriate form of this, they suggest, may be the ‘moral status no alternative principle’ (MSNAP) which ‘would allow the farming of human-pig chimeras *only* if there are no alternative means of addressing the organ shortage’. Whether this or some other precautionary principle is adopted however, Koplin and Wilkinson go on to argue, what follows is that the same principle should apply not just to human-pig chimeras but also to the farming of (non-chimeric) pigs for food. Fortifying this claim with evidence from behavioural and cognitive research, they argue persuasively that there is ‘ample reason to take pigs cognitive abilities seriously’, and hence to be just as uncertain about the moral status of non-chimaeric as chimaeric pigs. But if that is the case, and if MSNAP is applied to ‘current uses of non-chimeric pigs in agriculture’, there is much more clearly than in the case of chimaeric pigs, a ‘plausible alternative to farming to farming pigs for food’, namely vegetarianism. In making this observation, Koplin and Wilkinson emphasise, they are not necessarily advocating either vegetarianism or a moratorium on human-pig chimera research. Their aim rather is to highlight ‘an important tension between two common moral views: that farming human-pig chimeras for their organs is morally concerning, and that farming non-chimeric pigs for food or research is ethically benign’. ‘At least one of these views’ they argue, ‘stands in need of revision’ so that the immediate ethical challenge is to ‘resolve this inconsistency’.

This challenge is taken up, also in this issue, by four commentators. Christian Munthe (see page 447)³, while admitting the need for precaution in ‘producing human-pig chimeras for transplantation’ offers two reasons why too much intellectual effort should not be expended on resolving the inconsistency highlighted by Koplin and Wilkinson. One is that ‘it is far from certain that any transplantation practice based on this technology will ever see the light of day and, even if it does, it is

presently unclear what alternative options for meeting the needs actualizing transplantation will then be available’. The other no less important reason is that since there is ‘no opportunity cost to speak of to stop’ farming ‘large animals for food’ and since ‘there are perfectly viable alternatives’, we ‘do not need to farm large animals for food at all’.

Per Sandin (see page 455)⁴, by contrast, while more sympathetic to the need for precaution, does not ‘believe that the tension [Koplin and Wilkinson] highlight is as vexing as they make it out to be’. One reason is scientific. ‘What makes a brain a human brain’, he observes, depends on a complex array of genetic, genomic, epigenomic, metabolic, physiological and environmental factors. A pig with human neurons in its brain is not likely to develop a human brain unless these factors combine to produce an organ that is structurally and functionally similar to a human brain’. ‘Therefore’, he concludes, ‘it is very unlikely that a pig with a humanised-brain would have the cognitive abilities that we think are linked to moral status’. In the ‘case of pigs with normal, pig brains’ moreover, the current ‘social consensus that it is morally acceptable to raise these animals for food’ may be wrong (as social consensus has been in the past), but since it ‘currently exists one might argue that it takes more than uncertainty concerning the moral status of pigs to overturn the practice of raising them for food. One needs substantial evidence that the majority view is wrong’. Thus, Sandin concludes, while ‘Koplin and Wilkinson have described an interesting tension in our thinking about pigs with humanised brains vs. normal pigs, they have not shown that we should impose a moratorium on developing pig-animal chimeras or that we should stop raising normal pigs for meat.’

Mike King (see page 451)⁵ accepts the logic of Koplin and Wilkinson’s concern over inconsistency, but wonders how far the search for consistency could lead. Observing that Koplin and Wilkinson state that ‘the moral status of human pig chimeras is uncertain if the animal ‘would have gone on to develop’ moral

status-conferring cognitive capacities', he suggests that 'one of the implications' of this 'argument from Potential' is that the range of 'entities' to which moral caution might be applied could extend to and greatly beyond 'chimeric and non-chimeric pig embryos, pre-embryos, or even mixtures of gametes'—since if 'pigs have full moral status, these could all go on to develop full moral status too'. On this basis, King continues, moral caution could also be extended to many other 'entities' of uncertain moral status, such as 'sentient and non-sentient animals, insects, plants, bacteria, and artificially intelligent machines'. While this could make 'moral caution...quite a commitment', he concludes, it also 'stretches plausibility that one ought to give any moral consideration to mixtures of plant pollen and ovules, let alone a lettuce, for example'.

Robert Streiffer (see page 453)⁶ commends Koplin and Wilkinson's discussion for providing 'an illuminating parallel between the biomedical research ethics context and the food ethics context', and one that he 'had not noticed despite having a foot in both camps'. He questions however whether their 'proposal that for

farming for organs to be ethical, it must run no greater chance... than perhaps zero...of enhancing the moral status of an animal to that of a normal human': even if this condition were met, he argues, further ethical considerations need to be taken into account. Nevertheless in conclusion he agrees that Koplin and Wilkinson's 'concerns about moral uncertainty provide reasons for concern about farming for food, in addition to the overwhelming reasons already identified in the food ethics and animal ethics literature'; and he expresses the hope that 'because the moral uncertainty concerns draw from a different and somewhat novel source, they will find some purchase in some who fail to appreciate the force of the other reasons that have been articulated'.

The above synoptic accounts of the papers by Koplin and Wilkinson and their commentators however fail to do justice to the analytic depth and breadth of their contributions to the ethical discussion of consistency and moral uncertainty, in relation both to the existing literature on food and animal ethics and to the newly emerging issues raised by the possibility of farming human-pig chimeras

for transplantable organs. These papers themselves deserve to be read attentively and argued over intelligently. Complete consistency in medical ethics may not be humanly possible, but as we hope readers will discover, rising to that challenge will prove enriching.

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