

Questions of life

Alan Holland

Embryo Experimentation. Edited by Peter Singer. Cambridge University Press: 1990. Pp. 263. £27.50, \$39.50.

The Vatican, the Law and the Human Embryo. By Michael J. Coughlan. Macmillan/University of Iowa Press: 1990. Pp. 125. Hbk £12.99; pbk \$8.95.

WHEN does fertilization of the female human egg occur? Is it the moment when the male sperm first enters the outer membrane of the egg; or about 24 hours later when male and female chromosomes finally fuse? This was the problem facing the legislature of the Australian state of Victoria in 1986 when Alan Trounson and his team sought permission to test for the success of microinjection of a single sperm into an egg before the chromosomes fused, under an act which prohibited the fertilizing of an egg specifically for research purposes. The exploitation of the discovery that fertilization is a process thus forced an amendment to the existing act, whose effect was to rule that an embryo begins to exist only when fertilization is complete. It is a case that represents perfectly the complex of scientific, ethical and legal issues which are the subject of *Embryo Experimentation*.

The editors, who also contribute much of the text, are based at the Centre for Human Bioethics at Monash University in Victoria. Their up-to-the-minute command of the ground comes as no surprise in light of the fact that this is the state which led the world in its legislation on embryo research and *in vitro* fertilization generally, and whose scientists are in the forefront of these activities. The text is clear, and accessible to the nonspecialist. The discussion, although the work of many hands, is marked by a scrupulous determination to claim no more than the argument warrants. The book as a whole mounts as effective an ethical case for embryo research as has yet been made, not least through its careful dismantling of the grounds for objection.

Some of the contributions have already appeared in the medical, legal and philosophical journals, but it is useful to have the interlocking issues clearly displayed in one volume. We learn about the purposes of embryo research, where it is now, and where it is headed; about the variety of arguments over whether fertilization, segmentation or some later stage of an embryo's development constitutes the stage at which it acquires moral status; and

about the disagreements over whether legislation is appropriate and, if so, what form it should take. Among the many interesting points to emerge, whose ramifications have yet to be fully explored, is the problem of how far considerations based upon the embryo *in vivo* can be applied to the case of the embryo *in vitro* — a problem which leads Karen

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A six-week old embryo — when does it acquire a moral status?

Dawson to the radical doubt as to whether the *in vitro* embryo is indeed an embryo. Another is the undeniable but frequently overlooked fact (to which several contributors draw attention) that women as much as embryos constitute the 'subjects' of embryo research. On the question of regulation, Pascal Kasimba argues persuasively for special legislation, finding no adequate basis for regulation elsewhere, either in the precedents of Anglo-common law, or in the various forms of self-regulation which have been tried or mooted.

Michael Coughlan's monograph *The Vatican, The Law and The Human Embryo*, fills in some of the ethical background, especially concerning the Catholic tradition from which much of the opposition to embryo research derives. Coughlan, too, finds reason to support embryo research, but of particular interest is his contention that the Vatican Congregation's *Instruction* of 1987, declaring that the embryo is a person from the moment of conception, is not capable

of being supported independently of religious belief. It thereby abandons the appeal to universal moral principles, which has been characteristic of the Catholic, as distinct from the Protestant tradition. Moreover, it cannot be squared with Thomistic psychology, which holds that rational human nature can only be ensouled in a fairly complex kind of body. If it is to merit the attention of legislators, Coughlan argues, Catholic teaching must return to 'natural reason', which may well mean modifying its stance on embryo legislation and most probably on early abortion too.

Can the doubts about embryo research be regarded as settled, except in so far as they derive from a religious perspective? Not entirely. An unsatisfactory feature of both these books, to my mind, is the

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weight that is placed on the argument that the early embryo is not a human being because it is not any kind of individual at all until all possibility of twinning or recombining is past. This argument is also used to deny the embryo certain sorts of potential — by Stephen Buckle to deny its potential to become a human subject, and by Coughlan to deny the ascription to the embryo of a rational nature in the sense in which one might ascribe a flowering nature to a tulip bulb. It is difficult to view this argument as much more than a convenient weapon with which to discomfort the opponents of embryo research — enlivened as it may be by the spectres which twinning allegedly creates of "a single-

parent family within the womb" (Coughlan) or "death with no corpse" (Peter Singer and Helga Kuhse). If twinning and the like simply did not occur, would the case for embryo research really look one whit different? On safer ground is the argument that even if the early embryo is a human being it does not yet have the qualities which bestow moral status; or the point pressed by R. M. Hare, that the banning of experiments would bring no advantage: it would not preserve lives that would otherwise be lost since, without the research, they would not have existed to be preserved.

Many of our long-cherished notions are no doubt due to be upset by recent advances in medical research. But are we quite ready for the shock of 'discovering' that what first appears in the female human's womb upon conception is not a human being? □

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