

Lecture : 33

Course Title: Science, Technology and Society

A philosophical assessment

In contrast, human reproduction, under non- technological conditions, does not approximate or satisfy at least one special condition that characterizes process of production of babies under artificial conditions. **James Kimmel** describes how this unique relationship between mother and child is missing in an artificial environment that is deprived of this special bond between the two. Under natural circumstances, mother and baby are structurally separate, and without a placental attachment after birth, but they are not physically or emotionally separate. “They evolved to be a nursing couple in close, physical contacts day and night – a couple who are reactive to each other’s moods and feelings. A mother smiles when her baby smiles, laughs when her baby laughs, is anxious when her baby is anxious, content when he is content, peaceful when he is peaceful, and sad when he is unhappy. A baby smiles when his mother smiles, laughs at her sounds of delight, becomes upset when his mother is upset, anxious, distant, angry, or not available when he wants to be with her”.¹

A philosophical assessment

The human individual, as compared to other animals, is poorly endowed to survive in nature. We have no claws or fangs that can serve as weapons, we are slow moving, and we have no protective armor. Even our superior brain, coupled with the manual dexterity that allows us to create what we can imagine, would have little survival value if we were not able to act collectively. Indeed, the human brain, with its capacity for language, empathy, and the ability to imagine and to play at being another, evolved as it did to enhance our capacity for collaborative and collective behavior. Those traits that allow us to survive in the modern world, such as self-sufficiency, independence, competitiveness, selfishness, and indifference to the plight or misfortune of others would have had little adaptive value when we lived in small groups as hunter-gatherers. Our adaptive strength then was in our ability for combined and unified functioning, not in our individual and separate skills, powers, possessions, or wealth”.² The nurturing mother-infant interaction, rooted in the mother's capacity to care about the life she creates, was for most of our existence the model for all human relationships and the foundation for human society. It allowed the newborn to be born in an immature state and to slowly develop his brain and mind in relation to loving others. The nurturing process, predicated on the unity of mother and baby, developed individuals who would find it natural to function in unison with others. We would be a very different kind of species - a very unsocial one - if we were born fully developed and did not require mothering.

¹ Ibid.

² ibid

A philosophical assessment

Donald Winnicott, the English psychologist, has said that, “ ‘There is no such thing as a baby, there is a baby and someone.’ This statement captures the reality of the human baby – a reality which is often overlooked in our society because babies are inaccurately perceived from the moment of birth as separate individuals. We no longer value and support mothering or the babies’ critical need to develop in relation to a tender, nurturing mother. We have deviated from the nurturing aspect of reproductive biology by changing the baby's "someone". In a society where a baby lives and develops without his mother’s presence and without human tenderness, some babies, if not most, become a different kind of human than they were meant to be. They must adapt to and fit the substitutes that have replaced natural mothering: formula, pacifiers, cribs, playpens, security objects, and substitute caregivers. In doing so, they are, as adults, different from adults who develop in relation to a nurturing mother. Inappropriately and poorly nurtured children grow up without the internalization of tenderness. We evolved to pass on to the newborn our tender feelings for them.”³

The moral dimension

The rise of applied and practical ethics as a field in philosophy has created a need to give answers to many such concrete moral problems that must be addressed from these changing perspectives on production, reproduction etc. There is, however, no consensus about what ethical theory (utilitarianism, deontologist, virtue ethics etc.) should be adopted. Moreover, most ethical theories seem to be disconnected from cases. Thus the question what role ethical theories should play in moral practice is one of the most important issues in applied and practical ethics with the understanding that moral problems cannot and should not be viewed as rational decision problems, but should be compared with (industrial or engineering) design problems.

The moral dimension

By presenting moral problems as well-structured or multiple-choice problems, ethicists have implicitly suggested that we should choose one of the given alternatives through a rigid analytic methodology. This historical context of conceptualizing the human challenges the importance of humanness as a fixed entity. The emerging perspectives of cyborgism, post humanism, Trans humanism seek to reject humanness as guiding, normative concept, taking it as a process toward disembodiment throughout cybernetics.

But then, the question remains: ‘what roles do humans play’? Is it normative, or value neutral functionality, that defines man? Is human dignity a natural possession like one’s beautiful blue eyes, or just a vulnerable body? Is man an incomplete process that is in the making, and that is to be rewritten and re composed many more times? Is he subjectivity, or, intersubjectivity? Is man the sole author of his life, or only one of the co-authors,

³ Ibid.

working as a team with other seen or unseen designers? Is he one or many? Man is basically static, or dynamic? Is everything about man is just his genetic code that can be easily decoded by intelligent designers? Humans might be genetically disposed to grow bald, fear strangers, and avoid incest; men to dominate women; both to want many children or to be selfish. But how should we modify these traits in our genetically improved future? To make men less promiscuous, or women more aggressive than they now are by nature? To make both wish fewer children?

The moral dimension

In enhancing such traits as intelligence, memory or altruism, there might be unforeseen consequences.” There exists a genetically engineered strain of the fruit fly *Drosophila* that learns ten times faster than the normal strain. At first sight, the application of these technologies to humans sounds marvelous. Imagine learning ten times faster; think of all the benefits it could bring. However, there may be costs. Improved learning implies improved memory and if you have a far superior memory you will forget far less. Most of us have experienced unpleasant happenings that we are only too grateful to forget.”⁴ Further, there is some evidence to suggest that the handful of people who have total recall or perfect photographic memories find life difficult. For a start, they don’t always find it easy to know what day, month or even year it is. If one has perfect memory, events that occurred a year ago may be almost as fresh in one’s mind as events minutes ago. This can lead to confusions and can make social relationship difficult.

Biotechnology – Implications for the Meanings of Life and Life Processes

STS on Biotechnology and its Implications for the Meanings of Life and Life Processes

Remaining a critic of the strong version of genetic determinism, David B Resnik and Daniel B Vorhaus have raised some important questions related to genetic modifications and the threat of genetic determinism. Are these so called serious risks in genotechnology real or imagined? If there is no fear of strong determinism in this regard, are there other ways to focus some other serious geno technological implications on human life at large? How does one proceed in this direction? They let us know: “Since these strong deterministic assumptions are false, the arguments against genetic modification, which assume and depend upon these assumptions, are therefore unsound. Serious discussion of the morality of genetic modification, and the development of sound science policy, should be driven by arguments that address the actual consequences of genetic modification for individuals and society, not by ones propped up by false or misleading biological assumptions”⁵

⁴ www.tldp.com/issue/166/166fruit.htm(accessed June 2011)

⁵ David B Resnik and Daniel B Vorhaus ,*Philosophy Ethics and Humanities in Medicine* (2006) Volume: 1, Issue: 1, Publisher: BioMed Central, Pages: 9

Citing some usual arguments against genetic modification like: the freedom argument, the giftedness argument, the authenticity argument, and the uniqueness argument, the authors continue: “Serious discussion of the morality of genetic modification, and the development of sound science policy, should be driven by arguments that address the actual consequences of genetic modification for individuals and society, not by ones propped up by false or misleading biological assumptions.”⁶

Distinguishes between determinism and fatalism, Resnik and Daniel B Vorhaus define fatalism as the view that specific outcomes or events will occur in our lives no matter what we do. The classic example of fatalism is the myth of Oedipus. A prophet told Oedipus that he would kill his father and marry his mother. To avoid this horrible outcome, Oedipus went to live far away from his homeland, and was still unable to avoid fulfilling the prophecy. Analogously, genetic fatalism is the view that we cannot avoid specific genetically predetermined outcomes, no matter what we do or what happens to us: our fate is in our genes. According to Lewontin,⁷ genetic fatalism also has social and political implications, because it implies that much of social and political realities are beyond our control.⁷

Drawing attention to the fact that although genetic fatalism has also become a popular belief in some circles, critical examination of this idea shows that it does not square with modern biology, or with commonsense.” As an almost trivial example, for genetic fatalism to be true an individual possessing a gene responsible for a specific type of cancer must develop that type of cancer, no matter what he or she does. Clearly, this is not the way the world works. Leaving aside any discussion of genetic causation and assuming that, in this case, the gene strongly determines the phenotype (cancer), science might yet discover a pre-emptive cure for that particular cancer and thus prevent phenotypic expression. Or, to offer one macabre alternative, the person might get hit by a bus and die before ever developing the cancer.”⁷

⁶ IBID

⁷ Lewontin R: *Biology as Ideology*. Toronto: House of Anansi Press Limited; 1991