ABSTRACT. In order to understand the nature of human embryos I first distin-
guish between active and passive potentiality, and then argue that the former is
found in human gametes and embryos (even in embryos in vitro that may fail to be
implanted) because they all have an indwelling power or capacity to initiate certain
changes. Implantation provides necessary conditions for the actualization of that
prior, active potentiality. This does not imply that embryos are potential persons that
do not deserve the same respect as actual persons. To claim that embryos “become
persons” is to understand the predicate “person” as a phase sortal, roughly equival-
ent to “adult person.” This entails that we would not be essentially persons. In
order to explain the traditional understanding of “person” as a proper sortal rather
than a phase sortal, the author distinguishes between proximate and remote
potentiality, and shows that, unlike feline embryos, human embryos, by their genetic
constitution, possess the remote potentiality to later exercise the typically human
activities. It follows that they are already persons essentially.

KEY WORDS: actual persons, embryo, gametes, phase sortal, potential persons,
potentiality, power, proper sortal

Professor Mary B. Mahowald has been kind enough to publish
extensive comments on a paper of mine that appeared in a recent
issue of this journal.¹ I am both honored and grateful for her
remarks. In what follows I would like to offer some clarifications and
replies. Instead of quoting specific claims and addressing them
directly, I shall attempt to present an over-all treatment of the major
issues.

In trying to understand the beginnings of a human life, it is crucial
to distinguish between a sperm and an egg, the so-called “gametes,”
on the one hand, and the organism that results from their fusion, i.e.
an embryo, on the other. One way to mark this distinction is by
focusing on their respective powers, i.e. on what they can and cannot
achieve given their nature.

It is clear that a sperm (or an egg), by itself, cannot develop into a
human adult. A single gamete simply does not have this power, even
if sustained by proper nutrients and conditions. An embryo, on the
other hand, if given the proper conditions, certainly can reach adulthood in the normal course of events.

One way of accounting for this difference is to say that a gamete and an embryo have different potentiality. Since “power” and “potentiality” translate the same Greek word (dunamis) this is not to say much, unless we explain what we mean by these terms. In a rigorous philosophical sense, potentiality is a principle or source or “initiator” or “starter” (archē) of change. We say that fire has the power to burn a piece of wood and that a builder has the power or capacity to build a house. This is usually referred to as “active potentiality.” The wood and the bricks can be changed or set in motion by the fire and the builder, respectively, and hence we say that they are endowed with “passive potentiality.” The source of the motion of the log and the brick is not within themselves. They do not initiate their own metabolē or change.

What is typical of all forms of life, including gametes and embryos, is that they are not primarily passive. Why not? Because what defines passive potentiality is that the “activator” or principle of movement is external to the thing. No external cause leads, say, a sperm to try to force its way through the cumulus mass to reach the zona pellucida of an oocyte. Nor is the oocyte in turn passive. This can be seen, inter alia, in the spontaneous release of “degradative enzymes that allow the sperm to penetrate the zona pellucida.” All living things have within themselves an active potentiality that scientists today view as encoded in their genome.

It is true that a host of further external and internal conditions are required for the activation of both active and passive potentialities, but those conditions are not “activators.” They come close to what we would call “necessary conditions.” In order for the fire to burn the log, oxygen is required, but oxygen does not initiate the combustion.

As I have suggested, human embryos have an internal power or potentiality that governs the morphogenesis and allows them to develop into the complex organisms that we are at a later stage.

There cannot be any doubt that an embryo in vivo possesses the specific potentiality encoded in the human genome, but an embryo in vitro also has it. In fact, in vitro fertilization works on the assumption that the active potentiality is present in the embryos that are selected for implantation. If not, the procedure would not work. It is expected that these embryos will initiate a host of “motions” or processes once they are given the natural conditions found in a uterus. Of course, embryos in vitro may be denied the normal external conditions for