

Ergon and the Embryo

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Introduction

In what manner might there be agreement over the moral standing of prenatal human beings? There is perhaps no other debate in our society over which there is less actual dialogue – all is entrenched opinion. It is truly an interminable debate; proponents cannot engage each other when their underlying premises are so radically different.¹ However, it is not sufficient to neglect this question merely by acknowledging a lack of agreement. Beyond polemical views, what can be said about a human embryo regarding whether its value is intrinsic or instrumental? Does it have any claim to ethical standing beyond what technological abilities may determine? Does it have any status other than use as raw material for scientific and medical ends? In other words, is there any reason to assert one particular use for an embryo as more essential than others? Although the so-called “moral status” issue likely will not soon be resolved, there remains the question of how exactly we ought to treat prenatal human life. In particular, human embryos are ever more frequently among us, yet paused in development, literally frozen as the result of scientific research, intentional storage, or neglect.^{2,3}

¹ McIntyre, *After Virtue*, 11.

² Ethics Committee of the American Society for Reproductive Medicine, “Disposition of Abandoned Embryos,” S253.

³ Among the many reasons that a human embryo might be placed in frozen storage are included use in a research facility, use for artificial reproduction, and those left-over embryos that were fertilized for use in artificial reproduction but were never implanted and have since been abandoned.

Many persons contend that prenatal and postnatal human lives require equal respect insofar as there is an unbroken continuum of biological development from conception through, and after, birth. Perhaps not so many would argue that a human embryo deserves no respect at all. Such a radical view is less commonly encountered than the view that is willing to admit a certain degree of respect for embryonic life, even if the level of such respect is not equal to that granted to postnatal human life. However, the willingness to admit some degree of respect for the embryo encounters difficulty in characterizing the appropriate level of respect and what specific ways of treating an embryo are thus ethically permissible. The sentiments of “concern” and “respect” for embryos are seen throughout the reports of national commissions that have taken up the controversial subjects of artificial reproduction and embryonic research. The U.S. Ethics Advisory Board declared in 1979: “the human embryo is entitled to profound respect.”⁴ This concern, however, is often stated in a manner difficult to define and enact. It is not unusual to hear the opinion that prenatal life has a unique moral standing, a position in which a human has not yet achieved the status of *personhood*. The Ethics Advisory Board followed their exhortation toward “profound respect” with the caveat, “this respect does not necessarily encompass the full legal and moral

⁴ In addition to this report, *HEW Support of Research Involving Human In Vitro Fertilization and Embryo Transfer: Report and Conclusions*, 1979, see also these prominent reports that urge respect: The United Kingdom’s 1984 *Report of the Committee of Inquiry into Human Fertilization and Embryology* (“The Warnock Report”), the U.S. National Bioethics Advisory Committee (NBAC) 1999 report, *Ethical Issues in Human Stem Cell Research*, and the U.S. President’s Council on Bioethics 2002 report, *Human Cloning and Human Dignity: An Ethical Inquiry*.

rights attributed to persons.”⁵ In other words, being biologically human does not suffice to achieve the moral status of a person. The implication is that an embryo is not quite a person. The difficulty in making this negative definition, saying what an embryo is *not*, is that we are still left wondering what exactly it *is*? It is a truly singular definition that arises: a nonperson human being. Yet, it allows a simultaneous expression of two views, both respect and limitation. A nonperson human deserves some respect as a human being, but not the same degree of respect due to persons.

The focus has not always been upon personhood as it is today. At one time, the debate centered upon the definition of “life.” Those who did not wish to regard an embryo or fetus in the same light and with the same respect as a postnatal human being would argue over the designation of *human life*. Preferring labels such as “tissue” or “group of cells,” the object was to morally distinguish between the stages of human development by restricting the designation of “human life” to indicate, for example, some level of autonomous ability. However, more recent contributions to the debate over prenatal human status indicate that this is no longer a major point of contention.⁶ These developments distinguish human life from human individuals or human beings, the former being continuous between the parent and the conceived child, and the latter beginning at a later distinct, though disputed, point in time. Instead of a debate over human life, we now discuss personhood and the “moral status of the embryo.”

⁵ Ethics Advisory Board, *HEW Support of Research Involving Human In Vitro Fertilization and Embryo Transfer: Report and Conclusion* (1979), http://www.bioethics.gov/reports/past_commissions/.

⁶ Ford, *When Did I Begin?*, 11.

The modern ethical understanding of the embryo has moved beyond the largely scientific and biological question of life to the clearly philosophical determination of “personhood.” It is a shift that is significant and telling.

This study will investigate the philosophical principles that are behind the rhetorical change. Chapter One describes in more detail how the modern debate over prenatal life has evolved, leading to the current conception of a morally relevant and exclusive “personhood.” Chapter Two turns to an ancient philosophical source, Aristotle, who offers an alternate means of understanding what is both essential and universal of members of the human race, including those at a prenatal stage of development. Chapter Three looks specifically at the ways in which these two perspectives, ancient and modern, differ from one another. It highlights the core implications of each and how these affect our view of human beings.

An appropriate preliminary question asks, why add to this much-discussed topic of how human embryos should be regarded? It might be said that the debate over the moral status of human life never really goes away, it merely returns in new clothing. Initially, the core of the prenatal debate was through the vehicle of abortion and its legislative controls. The technologies of artificial reproduction, and specifically *in vitro* fertilization added to what was at stake. Later, the focus shifted to include end-of-life concerns and the question of the moment of death, including such issues as brain death, euthanasia, and withdrawal of medical care. Now, the question of embryonic status has been reinvigorated due to the contention over human embryonic

stem cell research and so-called “therapeutic cloning.” Throughout, the discussion has always settled itself into the entrenched positions so well known by those on both sides. The purpose of this study is to circumvent the interminable debate, and refocus it by investigating an alternative formulation, the Aristotelian concept of “the function inference” introduced in the *Nicomachean Ethics*. This distinctive perspective does not so easily reduce to the old disputes over life. In fact, the recent developments in stem cell use have particularly facilitated a new focus beyond the life and death questions of the past: the image of an isolated embryo in the laboratory setting, stripped of its familiar former context. The concept of human function, as described and understood by Aristotle, offers a unique means to consider the possibility of human embryos having *intrinsic value*, as opposed to the material uses and designs that stimulate so many social debates over prenatal life. To consider the Aristotelian concept of function is to consider whether it is ethically possible to submit prenatal life to an end—in the sense of a purpose or *telos*—other than human development.

Aristotle gives what may be the best-known philosophical definition of the purpose of human life. He argues that all human actions are aimed at the ultimate goal of human *flourishing*. His definition includes discussion of the *proper function* of the human species – including the potential abilities that define what it is to be a member of this species. This concept of function is vitally important to an Aristotelian view of human life, because it describes how human beings might become who and what they truly are, how they can develop a complete life. Aristotle argues that human actions, and life as a whole, are directed toward something identifiable, and he offers a means to

connect the threads of a multitude of disparate lives by elucidating what is common to all humans. In other words, Aristotle makes his study of human beings by describing their *nature*, and vital to this description is the concept of proper function. This study will look closely at the concept of proper function as it is found throughout Aristotelian philosophy. His ethical and metaphysical framework provides a useful context against which to place the modern “personhood” debate. His is a counterpoint to the self-deterministic view that rejects the presence of any one purpose for human beings; hence, the latter view permits a human embryo to be raw material for human use, albeit a use directed toward the most noble of goals: saving and preserving human life. Looking to the concept of proper function is a distinct way of understanding human life, separate from the “personhood” and “moral status” perspectives. Ultimately, the Aristotelian view understands there to be both a nature and a proper function that define what an embryo *is*, and gives a reason to regard prenatal life as more than a mere instrument.

Chapter One: Being and Person

How can we morally classify a human embryo, or for that matter, any of the stages of prenatal life? The peculiar dilemma is that few would say that an embryo is worthless, but it is also difficult for contemporary commentators to precisely characterize its worth. The contemporary views on prenatal life are certainly not uniform, but there is a definite focus upon the concept of personhood, and it is worth considering how this focus evolved. We might begin by examining whether an embryo is alive. Recent research within the scientific and medical communities supports this view, with emphasis on the point that any attempt to create discrete marking points in embryological development are largely artificial, with processes occurring in continuous, gradual, and indistinct patterns.⁶ However, in decades past there has been no small debate over the word “life.”⁷ This debate was fierce primarily because implicit in the recognition of life was an acknowledgment of the moral status from which rights and duties follow. In other words, it was assumed that if society acknowledged that inside the womb was indeed a human life, it was thereby recognizing a being with the same rights that we enjoy. The implicit argument runs thus:

⁶ See Scott F. Gilbert, *Developmental Biology*, 8th ed. (2006), as well as the President’s Council on Bioethics 2004 report, *Monitoring Stem Cell Research*, Appendix A: Notes on Early Human Development, and H. Pearson, “Your destiny, from day one” *Nature* 418:6893 (2002): 14-15.

⁷ Gilbert’s *Developmental Biology* has succinctly and usefully catalogued the historical progression of attempts to answer the question, “When does life begin?” See also his companion website: <http://www.devbio.com/>.

A human life is entitled to inalienable rights

A human embryo is a human life

Therefore, a human embryo is entitled to inalienable rights.⁸

With this framework, there are two main ways to take an opposing view. One route is to argue that a human life is not, in fact, entitled to rights. For obvious reasons, this denial, without further qualification, would be an unlikely position with far-reaching negative consequences, and would thus be difficult to defend. The remaining route is to assert that a human embryo is not actually a human life. Such a position might focus on the clearly non-human morphology of an embryo – how unlike the human form an embryo is. It is a collection of cells, a mass of tissue, but certainly not a human life yet. But there is a significant difficulty with this approach. By focusing on the presence (or absence) of life, a biological and scientific claim is made insofar as “life” is a biological determination; yet the real concern is with the determination of moral status. Such an argument defines life with a boundary just on our side of birth. The real difficulty in any attempt to use the classification of life as a means to place limits on the moral status of a prenatal human being is that science may not support such a limited definition. In fact, modern biology does not confirm any boundary of life that exists at birth: a non-living entity does not become a living entity merely by passing through the birth canal, nor does a non-human entity become a human entity by this passage.

⁸ I owe the idea of using a syllogism in this context to an article by Helga Kuhse and Peter Singer, “Early Human Embryos Are Not Human Beings.”

The biology of a human being is not nearly as controversial as the moral status question. The cells of a prenatal human being are functioning, active, and metabolically productive at the astonishing pace notable in all gestating animals. It is no revolutionary claim to observe that a human embryo's cells are alive. Furthermore, these cells are organized and directed toward the one specific and ultimate goal of differentiation and development.⁹ In addition, the continual development of scientific and medical knowledge, especially within the realm of genetics, grants ever-improving abilities to trace the continuous process of early human development. Our modern ability to look into the "blueprint" of embryonic cells and identify the code written within, and thus the developmental design already in motion, offers further evidence that a human embryo is a complete and vital *organism*.

From a biological point of view there is now little doubt that a prenatal human organism, for nearly its entire span of development, is a distinct living entity that grows in an organized, coordinated, and purposeful way. It is not merely a collection of cells containing human DNA, but rather a unique cellular entity unlike any other that occurs at any other stage in human development. The cells of a prenatal human being possess not only human DNA, but also the ability to progress from relatively unlimited potential into coordinated, differentiated systems within a single organism

⁹ I am referring here to the cells of the "embryo proper" within the blastocyst, those cells that will ultimately form the body of the fetus. This is distinct from those cells from the blastocyst's outer layer, which will form the extra-embryonic placenta and umbilical cord and will provide the developing embryo with a supportive and protective environment. Although the layers of the blastocyst grow into completely different entities (fetus and placenta), they are both equally necessary to embryonic maturation and are both directed toward the purpose of development.

– without any input from an external agent. In other words, there is no separate planning, designing, or coordinating entity outside of what is derived from a fertilized ovum, or zygote. While it is true that a zygote depends upon certain external conditions for its development, chief among them implantation into the uterine endometrium, to say that this dependence excludes it from being designated as a distinct entity is to forget that the adult human is also dependent upon external conditions necessary for survival.

Consider another perspective. Perhaps the embryo is alive, but not a true human being. The term “human being” can indicate various forms of status. At its most basic meaning, it is a biological classification, a taxonomic reference to our status among living things. In this sense, to deny the embryo the title of “human being” raises obvious difficulties. For if not human, how shall we then identify or classify the embryo? It is a member of the human species, surely, for there cannot be any other species more appropriate to it. The prenatal life must be a human being; at least this is the only way to identify it in terms of species. We can now update the previous formulation:

A human being is entitled to inalienable rights

A human embryo is a human being

Therefore, a human embryo is entitled to inalienable rights.

As previously discussed, it would be a difficult position to maintain that a human being is without a claim to certain rights. However, there are several ways to understand the meaning of “human being.” For example, there is some dispute over the earliest stages after fertilization, and whether the cells at this level are sufficiently organized and coordinated to represent a distinct “being” as such. Norman Ford, in particular, has raised this problem regarding the status of an early embryo (blastocyst) as truly individual. There is a possible distinction between “being human” and “being a human being.” For example, any cell of the body is “human” in that it has human DNA, but that doesn’t mean each cell of the human body is itself a “human being.” This view would distinguish between the stages of the single-celled zygote in which syngamy has occurred, and the later embryo in which the cells have begun to differentiate. Ford has formulated a definition of an embryo that also allows insight into what he believes is lacking in the prior stage of zygote:

The zygote and a single cell from the four-cell, and possibly the eight-cell, embryo are *totipotent* because they have the actual potency to form the entire blastocyst, placenta, and offspring in a continuous, coordinated biological process, given a favorable uterine environment. This implies a cell removed from a four-cell embryo would be an embryo. A human embryo, then, may be defined as *a totipotent single-cell, group of contiguous cells, or a multicellular organism which has the inherent actual potential to continue species specific, i.e. typical, human development, given a suitable environment.*¹⁰

What is lacking in the above definition is any reference to a distinct individual. What Ford believes is lacking is the cooperation and interaction that is characteristic of a unified biological *being*: “I think it is necessary to show that the first two or four cells

¹⁰ Ford, *The Prenatal Person*, 56.

are actually organized as an ongoing body or single entity, and not just distinct cells, before it can be claimed with certainty that a human individual is already formed.”¹¹ He is arguing, essentially, that the proembryo, or blastocyst, has *too much* potential in that the cells have not differentiated into different yet complementary lines. This is true so far as it goes, namely that the blastocyst is comprised of totipotent cells, which have not yet been determined into specific cell types. Still, the question remains as to what is guiding the moment of differentiation, in which the cells lose totipotency as part of the formation of the primitive streak in gastrulation. There is no external guide directing this action; instead it is the result of a cascade of internal effects, with cellular proteins changing to direct new activity. Even at the blastocyst stage, there is purposeful interaction leading to the beginning of cellular determination and loss of totipotency (an observation which Ford admits). The cells of the early embryo are internally prepared for what will be the external differentiation, and this process includes cellular communication and cooperation. Ford recognizes these facts but is not willing to give them any significance: “Purposeful interaction between cells to form an individual does not necessarily imply the human individual is already formed.”¹² Ford is confident that purposeful interaction doesn’t imply a new being, but gastrulation does. If this is true, he fails to specify what exactly is guiding the “purposeful interaction” seen in the early embryo that begins the process of cell division and differentiation. There is still a developmental movement forward from zygote to late blastocyst, a guided developmental shift that is being directed by cellular cooperation. Ford argues that there is only the potential for a being until

¹¹ Ford, *The Prenatal Person*, 67.

¹² *Ibid.*

organization of the blastocyst into a primitive streak. “The zygote is not yet an actual ontological human individual, but it has the natural actual developmental potential.”¹³ In other words the embryonic potential for development as a distinct human being is evident even before the cells begin to organize in an observable way. Thus, even if we cannot disprove Ford’s assertion that the pre-gastrulation embryo is not yet individuated, we can agree with him on the principle of “natural actual developmental potential” in that early embryo. This is very significant for an Aristotelian view of function. We will return to the relevance of potential and function in Chapter Two, as the Aristotelian understanding of human potential will become most important for this thesis.

There is one more way to consider the meaning in “human being.” The above discussion concerned biology, and whether a blastocyst demonstrates sufficient interaction to qualify as a biological “being.” However, perhaps the embryo may be alive and biologically distinct, but not a true *moral* being. As opposed to species and embryology, this concept would place emphasis on the metaphysical meaning behind the term “being.” In other words, “human being” is a title reflecting a distinct individual who is capable of uniquely human activity, such as reasoning. It is a level of moral status reflecting the ability for rational activity. Given this deeper meaning, a new criticism is possible. A human embryo may not be a human being if the criteria used to form the category of being prove to be too exclusive. Peter Singer has best formulated this approach:

¹³ Ford, *The Prenatal Person*, 68.

To assess the claim that a human life exists from conception, it is necessary to distinguish two possible senses of the term “human being.” One sense is strictly biological: a human being is a member of the species *homo sapiens*. The other sense is more restricted, a human being is a being possessing, at least at a minimal level, the capacities distinctive of our species, which include consciousness, the ability to be aware of one’s surroundings, the ability to relate to others, perhaps even rationality and self-consciousness.

When the opponents of abortion say that the human being is a living human being from the moment of conception onward, all they can possibly mean is that the embryo is a living member of the species *homo sapiens*. This is all that can be established as a scientific fact. But is this also the sense in which every human being has a right to life? We think not. To claim that every human being has a right to life solely because it is biologically a member of the species *homo sapiens* is to make species membership the basis of rights...elsewhere referred to as “speciesism,” a prejudice in favor of members of one’s own species. The logic of this prejudice runs parallel to the logic of the racist who is prejudiced in favor of members of his race simply because they are members of his race. If we are to attribute rights on morally defensible grounds, we must base them on some morally relevant characteristic of the beings to whom we attribute rights. Examples of such morally relevant characteristics would be consciousness, autonomy, rationality, and so on, but not race or species.¹⁴

Singer agrees that an embryo is a member of the human *species*, but he denies that such status in itself requires any particular respect.¹⁵ His criteria for moral status are essentially performance criteria, and entirely independent of any particular stage embryonic development. He not only suggests that identity as a human being is insufficient for moral status; he suggests that it is not even necessary. Singer is not engaging in mere semantic choreography. Rather, he presents a fundamental shift in

¹⁴ Singer and Wells, *Making Babies: The New Science and Ethics of Conception*, 73.

¹⁵ Singer’s claim was not initially formulated in the context of prenatal life. His argument owes its origins to the animal rights movement, and to his focus on the supposed immorality of species-specific prejudice. However, the argument is equally applicable to the present context.

the argument. It is fundamental as it provides a new focal point for the question of moral status in the prenatal human. Previously, the focus was upon the question of life – a primarily biological concern – and one that is largely determined by the evidence presented by scientific research. With this new understanding, however, the focus has moved into a primarily moral realm. The new defining characteristics of significance are consciousness, autonomy, rationality, and so on. Far from debate over the presence or absence of human life, this new technique looks to whether a human being (or member of the human species) can actively exercise distinctly human capacities. It is an emphasis on performance as the criterion for moral status. Such a determination avoids the biologically dominant question of human life, to the morally relevant question of rationality. Singer has left science out of the debate, or at least moved it into a place of secondary importance:¹⁶

Which of the many differences between humans and other animals justify such a distinction? Again, the obvious response is that the morally relevant differences are those based on our superior mental powers – our self-awareness, our rationality, our moral sense, our autonomy, or some combination of these. They are the kinds of thing, we are inclined to say, which make us ‘uniquely human.’ To be more precise, they are the kinds of thing which make us persons.¹⁷

Singer wants to focus on a more restricted group than human beings, and he uses the title of “person” as the indicator of moral status. In other words it is personhood, and not mere human life, that is the important consideration. Science might speak to the

¹⁶ Of course, biology is still relevant insofar as it can determine the presence of the physical conditions necessary for rational activity, but it no longer holds the place of importance that it held in determining the presence or absence of life.

¹⁷ Kuhse and Singer, “Early Human Embryos Are Not Human Beings,” 30.

question of life, but it is only philosophy that can comment on the morally relevant consideration of personhood. What is the meaning of evolving a scientific dispute into an ethical dispute? In truth, it was always an ethical debate, but was outlined with the language of biology. Personhood leaves no doubt that what is at stake is not to be determined in the laboratory, but rather in the realm of moral philosophy. There need be no concern that a scientific discovery or medical evidence might challenge the status of an embryo or restrict its uses. Singer's concept of person clearly excludes prenatal life.¹⁸ Early human life cannot actively reason, autonomously exercise power of will, or exhibit consciousness; therefore, it is not to be afforded the respect given to human persons.

We must recall, however, that when we kill a new-born infant there is no *person* whose life has begun. When I think of myself as the person I now am, I realize that I did not come into existence until sometime after my birth.¹⁹

Singer is certainly not original in his use of the term, but he is creating a more exclusive meaning for it by defining *person* in terms of performance. This exclusive definition of person is in contrast with common usage. In everyday speech one can find the term "human being" and "human person" used interchangeably. Yet, Singer is suggesting that they are distinct. He views prenatal life in particular as an example of a human being that is not yet a human person. The result is that not all human beings have a claim to intrinsic respect; only the more restricted group of persons can

¹⁸ Singer certainly does not hold this position alone; I merely refer to him as a well-articulated example.

¹⁹ Kuhse and Singer, *Should the Baby Live? The Problem of Handicapped Infants*, 133.

make such a claim. Singer traces his modern view of personhood to John Locke.

Locke identified a person thus:

A thinking intelligent Being, that has reason and reflection, and can consider it self as it self, the same thinking thing in different times and places; which it does only by that consciousness, which is inseparable from thinking, and as it seems to me essential to it.²⁰

However, this view of the human person as distinct from the human being is not the sole philosophical perspective. It is quite possible to focus on the human person without such an exclusive definition. Many philosophers follow the definition of Boethius, which reflects an Aristotelian understanding, that a person is “an individual substance of a rational nature.”²¹ The key difference in the two definitions depends upon whether emphasis is placed on essence or performance. For example, in the case of someone with severe mental retardation, as a human being they can be said to have a rational *essence*, even though they will never be able to demonstrate this nature by *performing* rational actions.

Since the moral status of personhood, as understood by Singer and others, is now the point of modern ethical fixation, it is appropriate to consider the philosophical implications of these arguments. This study will turn to Aristotle as a preeminent source of the ethical thought that Singer hopes to replace with his new ethics.²² What might Aristotle have to say regarding these modern concerns? How does Aristotelian

²⁰ Locke, *Essay Concerning Human Understanding*, book 2, chapter 27, section 9.

²¹ For a further discussion of the traditional concept of person see Ford, *When Did I Begin?*, and Eberl, *Thomistic Principles and Bioethics*.

²² See Singer’s book, *Rethinking Life & Death: The Collapse of our Traditional Ethics*, 1995.

moral philosophy approach the question of the morally relevant human characteristics, and what perspective could Aristotle bring in considering Singer's nonperson human being?

Chapter Two: Proper Function

Perhaps to say that happiness is the highest good is something which appears to be agreed upon; what we miss, however, is a more explicit statement as to what it is. Perhaps this might be given if the *ergon* (function) of man is taken into consideration.²³

With this introduction, Aristotle focuses his ethical inquiry upon the question of function in human beings, specifically, that one function of human beings that leads to the *telos*, or end, toward which all other actions are directed. Aristotle's ethical theory is largely an effort to investigate the end toward which human beings should direct their actions. In other words, he is attempting to describe the best and most complete manner in which to live one's life. When he identifies the human function, he is actually identifying that one type of activity that leads to the most complete human life, to true human happiness or flourishing.²⁴ However, in this study, even more important than identifying human function, is a clear establishment of the existence of such a function.

The function argument comes about as a part of a larger goal of finding the highest human good. Aristotle's focus stems from his inheritance of the Platonic teaching on

²³ *Nicomachean Ethics (NE)* I 6.1097b (trans. Apostle).

²⁴ The Aristotelian use of the word *eudaimonia* has been and remains the subject of much debate as to its proper understanding (see essays by Thomas Nagel, J.A. Ackrill, and John McDowell among others). Among the suggested translations are included both "happiness" and "flourishing," although neither seems to be fully satisfactory in all contexts. For the purposes of this study, I will not depend on either meaning, and will refer to both when discussing the Aristotelian concept.

forms and on the good. Aristotle specifically acknowledges the Platonic teaching in the first book of his *Nicomachean Ethics* (*NE*), yet departs from his predecessor by stating that even if such a thing as the “form of the Good”²⁵ did exist, it would not fit the human function that he is seeking. “It appears that what a doctor examines is not health in this manner at all, but the health of a man, or perhaps rather the health of an individual man, since what he cures is an individual and not man in general.”²⁶ In other words, just as with the specific good of a physical body, health, Aristotle wants to describe the specific good for the whole of a human being. Aristotle wants to find an attainable good, namely, a practicable human function. He clarifies this view in the *Eudemian Ethics* (*EE*):

The good itself that we are seeking is neither the idea of the good nor the good as universal; for the idea is unchanging and not practical, and the universal, though changing, is still not practical. But that for the sake of which, as an end, is best, and a cause of everything under it, and first of all goods. This would be the good itself, the end of human actions.²⁷

Aristotelian human function will be directed toward a tangible human good, not a lofty Platonic form. He establishes the highest good that a human being can achieve, the ultimate happiness or flourishing, by naming the character of human function. He begins by examining at length the function of various parts and elements of the human body. Aristotle refers to specific functions in the body, such as the heart’s function to pump blood. The final question is to determine the function not just of

²⁵ Plato, *The Republic* 352d-353b, (trans. Allan Bloom).

²⁶ *NE* I 4.1097a.

²⁷ *EE* I 8.128b (trans. Michael Woods).

parts, but also of the whole. He poses the critical question of the function of the entire human being:

But should we hold that, while a carpenter and a shoemaker have certain functions or actions to perform, a man has none at all but is by nature without a function? Is it not more reasonable to posit that, just as an eye and a hand and a foot and any part of the body in general appear to have certain functions, so a man has some function other than these? What then would this function be?²⁸

Function results in the highest good by a “certain kind of life,” or a certain manner of living. It is the summary not only of what humans are minimally capable, but also of the activity that will result most in human happiness or flourishing. The ultimate good for human beings will have three essential characteristics. It will be “that for the sake of which (all actions) are done.” Thus, activity in accordance with proper human function will lead to a complete human good, and this good will serve as the overarching guide, directing every action. Also, the good toward which our function leads will be “something which is complete...and that which is complete without qualification is that which is chosen always for its own sake and never for the sake of something else.” Finally, this good will be self-sufficient, which Aristotle describes as “that which taken by itself makes one’s way of life worthy of choice and lacking in nothing.”²⁹ In summary, activity in accord with proper human function will be self-sufficient, complete, and an end in itself.

²⁸ *NE* I 6.1097b31.

²⁹ *NE* I 5.1097a-b.

In Aristotle's description of function, there is another important criterion. "For living appears to be common to plants as well as men; but what we seek is proper to men alone."³⁰ The proper function that Aristotle is seeking will be peculiar or unique (*idion*) to human beings. This particular criterion highlights Aristotle's belief that there is something particular about human beings that will comprise their function, something that does not apply to other living beings, including other animals. Eating, or sleeping, or reproducing cannot be the human function since none of these are uniquely human activities.

Let it be assumed as to excellence that it is the best disposition or state or faculty of each class of things that have some use or function...there is an excellence that belongs to a coat, for a coat has a particular function and use, and the best state of a coat is its goodness; and similarly with a ship and a house and the rest. So that the same is true also of the soul, for it has a function of its own.³¹

This reference to "the soul" is not so much a spiritual one, as it is a means by which Aristotle can describe all human activity, including the highest and most distinctive rational activity. Modern biology has isolated these activities to parts of the brain and refers to them as higher cortical functions. However, Aristotle understands the function of the soul as a way to talk about the function of the human as a unified, complete being.³² The use of soul in this context refers specifically to the distinctly human activities of a "rational soul." The above passage also describes another aspect of proper function. Whatever human activity qualifies as proper function must

³⁰ *NE* I 6.1097b34.

³¹ *EE* II 1.1218b-1219a.

³² *De Anima* II 1.412b10-17 (trans. Apostle).

involve human excellence. It must contribute not merely to living, but to living well – making a complete use of our human nature. Human function involves the distinctly human capacity for rational thought (the “function of the soul” quoted above).

Aristotle uses the phrase “activity according to reason, or not without reason.” In other words, proper human function involves making use of that distinctly human quality that distinguishes human beings from other animals.

What does it mean for human function to be defined in terms of a distinctly human quality? The question of function must be dependent on the specific nature of the beings he discusses, namely human nature. Aristotle cannot fully describe proper human function without a parallel discussion of the nature of human beings. That is because knowing the essential nature of a being will contribute to understanding its function, and a complete description of proper function will refer back to nature. Thus, we should consider Aristotelian views on human nature. To show the connection between function, and nature and essence, it is necessary to look at Aristotle’s discussion of natural substances.

In the *Physics*, Aristotle draws a connection between the nature of something and its form. Our human nature describes our existence as rational beings, but form reveals who we are in terms of our material embodiment with rational capacities. These two descriptors have a connection, as he describes:

So nature is a principle and a cause of being moved ... In one way, then, nature is said to be the first underlying matter in things which

have in themselves a principle of motion or of change, but in another it is said to be the shape or form according to formula ... Indeed, the form is a nature to a higher degree than the matter; for each thing receives a name when it exists in actuality rather than when it exists potentially.³³

Aristotle argues that, much more than the physical material of our body, our nature depends on the specific human form, the unique way that the cells of our body collaborate as an organic whole. In other words, the concept of human nature describes not a collection of organic matter, but rather the organization and cooperation that shape a human being and human activity. Thus the concept of a human nature will make reference to what is the human form.

“But I mean by form the essence or very nature of a thing, and the first substance.”³⁴

There are several loaded phrases used here by Aristotle. Substance, in this context, is a way to describe the most basic subjects in the natural world:

We call the simple bodies, e.g. air, fire, water, and all of that sort, and in general bodies and the animals, deities and parts of them constituted out of bodies. And we call all these substance because they are not said of a subject, but the other things are said of them.³⁵

A “substance” has, in a way, an elemental aspect to it, a building block that comprises the natural world. Essence is part of the concept of substance, in that each of these primary, basic substances has its own essence: “Each thing seems to be nothing other

³³ *Physics* II 1.192b20; 193a30; 193b5-8 (trans. Apostle).

³⁴ *Metaphysics* VII 7.1032b1-2 (trans. Apostle).

³⁵ *Metaphysics* V 7.1017b10-14.

than its own substance, and the essence is said to be the substance of each thing.”³⁶ In other words substance and essence are inseparable, each substance must have an essence.³⁷ Christopher Megone, in his study of the Aristotelian potentiality argument, shows how Aristotle makes the link from nature to essence.

Both (substantial) matter and (substantial) form have a claim to constitute the nature of a natural substance, but Aristotle’s discussion leads to the conclusion that form has the better claim...Aristotle states that the form is “the account of what the being [the essence] would be.” This identification of the form with the essence is frequently made elsewhere...Aristotle has thus argued that nature is form, and form is essence; thus nature is essence.³⁸

It is also important to recall Aristotle’s own description of form quoted above, in which he almost interchanges nature and essence, “But I mean by form *the essence or very nature* of a thing...” (emphasis mine). The human form (and nature) is present in an organism as its essence. Accordingly, Aristotle views human nature as synonymous with human essence.

The identification of nature with essence is significant because Aristotle’s understanding of human essence is connected with the idea of an inner source of change. The natural world is not static; in fact it is characterized by constant change.

³⁶ *Metaphysics* VII 5.1031a17-18.

³⁷ Terence Irwin has described Aristotelian substance as having two criteria, basic subject and essence, further evoking something elemental. For a comprehensive explication of “substance” see Irwin’s *Aristotle’s First Principles*, Clarendon Press, 1988.

³⁸ Christopher Megone, “Potentiality and Persons,” 158 (Megone’s reference here is to *Physics* II 3, but Aristotle makes a similar argument in *Metaphysics* VII 7.1032b1-2, as quoted above).

The source of change is a thing's potentiality: "I mean, a first principle capable of bringing forth a change. For in all these definitions is inherent the definition of the primary potentiality just mentioned."³⁴ Aristotle clarifies that his view of potentiality is indeed the same as his view of nature: "For Nature, also, may be ranked in the same genus with potentiality; for she is a first principle which is fit to be the cause of motion, not, however, in another body, but in itself."³⁵ To put it plainly, Aristotle links human nature and human potential. The human form (human nature) is present within us as our human essence – the potential for rational activity.

It is this association of human essence and human potentiality that indicates the centrality of the concept of potentiality. In fact, Aristotle holds the potential for rational activity to be what is most essential in a human being. We cannot understand the nature (and therefore the function) of human beings without an understanding of their potential. Yet to understand the Aristotelian view of potentiality, we must, as with everything Aristotelian, understand his distinctions. There is not merely one blanket "human potential." One important distinction is *active* from *passive* potential. Passive potential is an internal principle that requires an external agent to set it in motion, "a change by reason of another." Active potential, in contrast, does not require any external agent to initiate its principle of change, for it is able to change "by reason of its own agency."³⁶ For example, although a tree has the potential to become a baseball bat, there is no inner principle within the tree to enact a change;

³⁴ *Metaphysics* IX 1.1046a.

³⁵ *Metaphysics* IX 8.1049b.

³⁶ *Metaphysics* IX 1.1046a.

this is a passive potential and will require an external agent (a carpenter) to actualize it. On the other hand, an acorn has the potential to become a tree, and will do so “of its own agency” once it is within the appropriate environment. The change from acorn to sapling to tree occurs because the active potentiality of the acorn represents an inner source of change; no external agent is needed to input the change.

Recall that Aristotle views active potentiality as an inner source of change – not simply change in any direction, but a particular focused change that moves a living being closer to becoming a good member of its kind. Although many types of change are possible (mutation and demise are examples as well as proper development), only those changes that result in the actualization of the essential potentiality of a natural kind will make reference to its nature. The essential potentiality is the principle of change that will result in the proper development of a being. Contrasted to essential potentiality is a material use, which does not make any reference to proper development or a natural kind. An acorn’s essential potentiality is to develop into a tree, but its material use as food for a squirrel makes no reference to what its proper development would entail. On the other hand, observing an acorn mature into a tree informs us about the nature of that particular kind of living thing. In the same way, observation of the unhindered development of a prenatal human being gives insight into its nature, into what it will become. The essential potentiality leads to development into a good member of the human kind. When what is potential evolves into something actual, the prenatal life becomes what it already is by nature.

Aristotle emphasizes that development of our potential is not the same as “gaining” our nature. Rather, it is a revelation of the nature, or essence, *which is already present*. The natural development of a being reflects the essence of that being:

When we are dealing with definite and ordered products of nature, we must not say each *is* of a certain quality because it *becomes* so, but rather that they *become* so and so because they *are* so and so, for the process of becoming attends upon being and is for the sake of being, not *vice versa*.³⁷

What Aristotle is saying, in the language of modern philosophy, is that existence reveals essence; an organism’s becoming reveals its nature. Human potential is most important in that it is directed toward an end, the realization of a specific actuality, namely, rational activity. We can only speak of a potential ability by making reference to the actualized ability itself; in this way, the actuality is prior to the potentiality. The ultimate purpose – the actual capability – is what directs the internal development of potential. In the development of a natural being, we do not speak of change as a random or haphazard activity, but as directed toward an identifiable goal. In other words, embryology is a defined science and its processes are repeated with each new embryo. Human development is expected and predictable because it has an internal guide that directs it, an intrinsic potential. The goal behind the progression of zygote to embryo to neonate, is the actualized state of human potential. Aristotle sees in this movement from potential to actual the ability to exercise distinctly human faculties, elements of our rational nature. Human potential *is* human nature.

³⁷ *De generatione animalium* V 1.778b2-6 (trans. Platt).

The “unhindered” element of prenatal development is important to consider; developmental and genetic defects, as well as outside intervention, can deviate the natural substance from actualizing its essential potential, but this altered state would no longer point to the being’s nature, since it would no longer be acting as a good member of its kind. For example, when a developmental defect causes one particular heart not to pump blood to the peripheral parts of the body, but only to move the blood back and forth within its chambers, we do not redefine the function of the heart – or say that it must have no function at all. Rather, we recognize that the deformed organ is a heart because of its cardiac matter, its approximate (though imperfect) cardiac form, and finally its attempts toward proper cardiac function. In addition, we recognize that the deficient aspects of that one particular example of a heart prevent it from fully exercising its proper function. The known existence of deformed or poorly developed organs, scientifically speaking, does not necessitate a redefinition of the function of that organ, nor does it disqualify the deficient organ from being recognized as one of a certain kind. It merely exemplifies the possibility for proper function to be disrupted or prevented.

We must also keep in mind the relationship between human function and the concepts of potentiality and actuality. It would be incorrect to assume that our function is only important because it is what makes us human beings. Our function is unique to us, but it is important because of what it reveals. Function is what brings the rational activity of human beings from potential to actual. Function is the movement of a being with the potential for rational thought into a being who actively reasons. Thus, human

nature is represented within human potentiality, and we can see the preexisting human nature when we observe proper human function. What must we say, then, about the nature of a being that is apparently human, but is incapable of manifesting any observable human activities? Of course, observable rational activity is not the sole means by which we identify a human essence. We also look to the physical form, and more importantly, to the physical origins. Otherwise, we would have no reason to consider a newborn infant to be of the human essence. The answer lies in the relationship of essence and function. As described above, function reveals the human essence that already exists, because it is grounded in the human essence. However, the disruption of function does not negate the human nature, because function is not what gives that nature in the first place. This is a key distinction. Function is what actualizes our human nature, but not what creates it. Function reveals in activity what is already present by nature: “And this is how it is in nature: what a thing is potentially, its function reveals in activity.”³⁹ Thus, the operation of human function is not itself the human essence, although it allows that human essence to be demonstrated. An insufficiently penetrating analysis would view human nature as only present when a human being performs the highest function, i.e. is actively reasoning. This incomplete understanding would present many difficulties, not the least of which is the case of sleep, in which one is able to reason but does not actively reason for that period of time. Making actual our potential is not what determines who we are; it is not necessary to be human. Instead, proper human function reveals

³⁹ *NE IX 7.1168a8-9.*

the true human being through the development and expression of our nature; it reminds us of the ever-present human essence that is our potential for reason.

Perhaps the Aristotelian view of function and potential is too broad a concept to be important. Singer, for example, in reference to human beings claims that just as the embryo has some potential, so also do the pre-zygotic gametes. He argues that there is nothing so special about prenatal life that cannot also be found in the human sperm or ovum.

Everything that can be said about the potential of the embryo can be said about the potential of the egg and the sperm when separate but considered jointly...on the basis of our premise that the egg and sperm separately have no special moral status, it seems impossible to use the potential of the embryo as ground for giving it special moral status.⁴⁰

On the grounds of potential, is there any real difference between gametes and embryo? All potential being equal, they are very much alike. Yet to place the potential of gametes and an embryo on an equal plane is to ignore a key Aristotelian distinction, described as active and passive. Passive potential, as in the case of the gamete, requires an external agent acting upon it to move it toward actualization. It cannot make this movement of its own accord, and will remain as potential until outside forces enact a change. Active potential, however, contains within itself all that is intrinsically necessary for the development of its potentiality into actuality. For an embryo, no further addition is brought by any external sources, and it will inevitably

⁴⁰ Singer and Wells, *Making Babies*, 74. See also, .Kuhse and Singer, *Embryo Experimentation*, Cambridge University Press, 1990.

develop along a definable pathway, barring the exceptions that mutation or injury may present. The guide in prenatal development is more than simply human genetic material. All human cells contain DNA nearly identical to that of the embryonic cells, yet a scraping of oral mucosa will not yield a human being, no matter what environment in which it is placed. The unique cellular coordination present in early embryonic development is identified, for example, in the surface protein cascades and homeobox complexes that direct the earliest development. The significance of guided prenatal development is that the differentiation and progression occur from an intrinsic source, and reliably follow the same course.⁴¹ This is not incidental or accidental, but imperative if the prenatal life is to survive. Thus, the biological drive for survival is also behind such development. “The being’s nature is not indifferent to the actualization of the potentialities...rather the whole body is going to die if these potentialities are not actualized.”⁴² Further, the dependence of the embryo upon the maternal womb and placenta for protection and sustenance in no way diminishes this internal developmental principle. Ford notes that the supportive needs of the embryo’s self-directed development are not unlike those of other human beings: “It is to be noted that not even adults can realize their life potential without nutrition and fluids and the right temperature and environment.”⁴³

⁴¹ Certainly, not all embryos result in a healthy human birth, but as argued above, we do not consider a failed or deformed gestation due to disrupted function to represent proper development.

⁴² Reichlin, “The Argument from Potential: A Reappraisal,” 16.

⁴³ Ford, *The Prenatal Person*, 68.

Massimo Reichlin emphasizes the force behind the inevitability of the development of an embryo's active potential. He argues that, unlike the sperm and the ovum, both of which undergo a substantial change in their essence, the embryo has ontological continuity. In other words, while gametes literally change their very core, with both nuclei fusing into an entirely new entity during syngamy, the embryo develops without any change in its identity:

This interpretation obviously presupposes an ontology...the notion of potentiality is in fact a dynamic one, basically designed to account for a being's continuity through change, so that the being's identity is preserved while it completes and perfects its nature, acquiring those capacities and qualities which did not show themselves in its early stages, but toward which its development actually pointed.⁴⁴

The important point is that there is no substantial change in essence throughout prenatal development. Ford confirms this sense of continuity, not just from prenatal life to the infant, but from infant to adult as well:

It is understood that the infant has an inherent natural active capacity to develop to the stage of being able to exercise self-conscious and rational acts while retaining the same ontological identity as (an adult) human individual.⁴⁵

It is the same being throughout, and despite significant development, there is no fundamentally new identity. This stands in stark contrast to a human gamete, which "needs an external event which is going to change radically its identity."⁴⁶

⁴⁴ Reichlin, 12.

⁴⁵ Ford, *Where Did I Begin?*, 77.

⁴⁶ Reichlin, 13.

It might be suggested that the Aristotelian focus upon active potential, and its necessary development into an actuality, neglects the difference between having the potential for some activity, and having the actual ability for the activity. For example, a six-week-old infant may have an active potential to walk, but how is this different from actually walking? In the case of rational activity, is the active potential for reason (present in all human beings) less important for moral status than a person in the midst of active reasoning? The key difference here is between essence and performance. If we speak about what is essential to human beings, we will necessarily be speaking of any human being. However, when the question of actual ability arises, it refers only to certain human beings – those whom we can observe at a particular moment as exercising rational activity. For example, a human infant certainly does not have an actual ability for rational thought; this ability has not yet fully developed and thus may be said to be an active potential. A 6-day-old, or 6-week-old, or even 6-month-old child cannot truly reason. They are each successively further along in development, each contains a further expression of the active potential for rational thought, but none can yet fully exercise it. In other words, while their essence is that of a rational human being, they yet lack the ability for performance as a rational human being.

Consider also the temporarily unconscious patient in a surgery, the irreversibly comatose patient in a long-term care facility, and the severely mentally handicapped individual. The first case is a human being who has “performed” rationally in the past and will do so again, but is without the ability at the present. The second case

involves a former rationally active human being who will never again be able to reason. The third case involved a human being who never has and never will have the actual ability for rational thought. Although the circumstances vary widely among them, each case represents at least some period of time where a member of the human species is without the ability to reason. Yet all three are human beings in their essence and nature, as Aristotle understands these. By virtue of their essence, they have the active potential that is part of human ability, although they cannot perform this ability in the moment. Aristotle is not as interested in the actual ability, or the performance, of human beings so much as in their essential properties, those distinctive elements that are always and everywhere true of them.

Chapter Three: *Ergon* and the Embryo

Human embryos may be accepted as human beings and human lives, but remain caught amidst the metaphysical and ethical dispute over personhood. If we cannot say uncontroversially that an embryo is a human person, is there any other reason to respect the embryo for its own sake, as opposed to its material uses? Aristotle's idea of proper function offers an alternative approach toward the embryo, one that is not dependent on the significance of the 'personhood' categorization. Aristotle's concept of a natural function that reveals a being's essential potentialities gives a fresh reason to grant a human embryo moral respect for its own sake. If the function of a human being is essential to adult human flourishing, it is also important for the embryonic human being. This is because function is a concept that belongs to the class *human being*; it is not a property of a particular stage in human development, such as a neonatal reflex. Proper human function is essential to our classification as human beings, and as such it is pertinent to any stage of life. This Aristotelian idea of an essential quality is as vital to the human species as is our DNA, in the sense that both our material bodies, and the active potential for reason, contribute to characteristic human operations. There is no alteration in human function simply because of the temporal boundary between pre- and postnatal life, just as proper function is continuous from childhood to adolescence and beyond.

Why is the proper function of human beings worthy of such respect? Recall that Aristotle's case for function is equally applicable to any human being, since it

depends upon what is central to all: the active potentiality for rational activity.

Consider also the modern biological view of the embryo as containing self-sufficient and complete information for development, in concert with the Aristotelian view that such an intrinsic “blueprint” is indicative of an embryo’s active potentiality for rational thought. These two perspectives of biology and ontology together inform the meaning of proper human function. The genetic advances of the last decades leave little doubt that what directs and informs embryogenesis is an internal guide, not direction imposed from an outside source. The embryo’s function reveals its active potential for those very same morally relevant characteristics (rationality, etc.) on which Singer places such importance. Function is inseparably linked to our unique characteristics. If we were to assume that natural function is not essential, it follows that the final ends of natural function, participation in and actualization of human nature, are also not necessary. According to this view, Aristotle’s concept of the complete human life, and of human flourishing, is really only one possible outcome among many equal outcomes. An implicit result of this philosophical shift is that a natural basis for the cause and end of human beings can no longer be asserted.

For a prenatal life, to disregard proper function makes the active potentiality of which Aristotle speaks nonessential, able to be disregarded by choosing to make a different use of an embryo. Thus, accepting the destruction of a human embryo as permissible within scientific research is not compatible with Aristotle’s conception of human function. Without the *telos* that Aristotle has established, there is no function for human beings except what they themselves choose. Such an arbitrary view of human

purpose implies that there is no right or wrong use for a human being, so long as it is self-determined. Without the concept of proper function, it is possible to make a case for any use, and “any use” is not so far removed from abuse. To remove a sense of respect for human beings as such, is to leave us all vulnerable to abuses that might occur (and have occurred) when we are open to anything. In other words, the danger occurs when we open the human being to a use that capitalizes on our material value, as opposed to our essential value. Without recognition of the importance of our proper human function, there is no inherent reason to respect a human being for his or her own sake.

Looking more closely at the embryo, if it were used for its instrumental value in a way that disregards or even irreparably harms its function, Aristotle would view any such use as violating the human essence of the embryo, precisely because it would represent a misplaced priority – accidental supplanting essential. Any human use that neglects or contradicts our proper function would imply that function is not essential, or even that there is no truly “proper” function. For example, embryonic stem cells made available for research are typically taken from the embryo in such a way that the embryo is destroyed. The original embryo is no longer viable, and its self-sufficient principle of development, its active potentiality, is no longer in existence. The used embryo cannot fulfill its function – it no longer retains the ability to make actual its potential.

If we disrupt an embryo's active potential, this action forces to a halt the internally directed development that was already active; it is necessarily a destruction of a previously begun process. Aristotle does not see this as a simple matter of choosing one use over another; rather, it is abandoning the essential properties of a human being in favor of making use of its material value. The destruction of the active potentiality contained in a human embryo is either an implicit denial or a complete disregard for the concept of natural function. As Aristotle makes clear, the principle behind function contains a reference to both a teleology and etiology for the human embryo. In other words, function reveals the most ultimate goal of the embryo, and this in turn is guidance for the embryo's development. However, by destroying the possibility of the embryo ever becoming an adult human being, such an action contains a subtle assumption that there is no necessary intrinsic *telos* towards which the embryo is moving. Without such essential potentiality, what remains is only the use and purpose that is ascribed. When the embryo becomes the raw material of scientific research, it is valuable only as an instrument. In the same way, such an action implies that there is no intrinsic cause for the embryo to exist. There is no reason for existence except that which is given, in this case, by research making use of its material cells. To put it in the language of Aristotle, there is no recognition of human function, or none that is respected. The most that can be said is that instead of function, there is material use. This replacement is a critical difference.

Essence and Person

What does this mean for Singer's non-person human being? In addition to his emphasis on performance criteria (rational thought, autonomy, etc.) as the basis of personhood, he claims that sentience is the threshold at which living beings may be said to have personal interests and therefore a claim to moral status. Singer asserts that the early human embryo "can have no ends of its own," and that "it is only when an embryo reaches the stage at which it may be capable of feeling pain" that it may have some interests that deserve respect.⁴⁷ Singer is probably interested in this criterion since it is specifically non-anthropocentric. It allows a "cross-species kind of entity,"⁴⁸ a definition that does not refer to any essential human characteristics. However, Aristotle's emphasis on the essential potential of human beings offers a sharp contrast to the pain perception criterion that is Singer's threshold for moral regard. In the case of early human life, it is essential that the human potential for rationality be developed, not merely that the transient sensory experience of pain be avoided.

Although Singer is known for his emphasis on the capacity to feel pain, his concept of personhood actually places great importance on the human performance of "morally relevant characteristics" cited previously. Along with sentience, he has asserted that the actual use of these characteristics (self-awareness, autonomy, rationality, etc.) is the basis of personhood, and thus of human rights. Should Aristotle have encountered

⁴⁷ Kuhse and Singer, "Early Human Embryos Are Not Human Beings," 34.

⁴⁸ Megone, 172.

the modern concept of personhood, he likely would not have seen it as a morally significant distinction. Christopher Megone argues that using the criterion of personhood to determine moral status ignores the essential character of a human being in favor of the specific state of existence of the being at a particular time: “The view that it is good to educate humans from an early age onward must rest on the fact that a child’s essential potentialities determine his interests, not the state potentialities he instantiates when five.”⁴⁹ In other words, our treatment of children is reflective of their essential potentiality, what they are becoming. If moral status were determined only by what they are capable of at a given age of childhood, it would drastically alter attitudes and behavior. Megone uses the phrases “state potentiality” and “essential potentiality” to distinguish between emphases on performance and essence, respectively. This distinction was discussed in Chapter Two as the difference between an actual ability and an active potential. It is the latter that is of importance to Aristotle. Megone articulates, “Crucially, in the Aristotelian view, the fetus’ essential potentiality is what makes it a human being.”⁵⁰ Only the essential potential of human beings can speak to their nature, to who they truly and fundamentally are. The definition of “non-person human being,” however, does not recognize the potential of early life simply because this potential is not yet actualized. To put it another way, the potential is not “ready at hand.”⁵¹ To deny the moral status of personhood unless distinctly human qualities are being exercised, or are able to be exercised

⁴⁹ Megone, 173.

⁵⁰ Megone, 165.

⁵¹ Robert Pasnau, on page 115 of his book *Thomas Aquinas on human nature*, uses this phrase to discuss Aquinas’ view on active potentiality. The Aristotelian version of this idea is found in *De Anima*, II 5.417a-b and *Metaphysics* IX 6.1048a-b.

immediately, places priority on performance over essence. Megone has contrasted the distinction between state and essential potentialities with Singer's concept of personhood. Modern personhood rearranges these two types of human potential, placing priority with the ability of a being at one particular state in time. An emphasis on state potentiality is an emphasis on performance, or the ability to perform some activity without any further internal development or external agency. Yet Aristotle is interested in the essential qualities of our nature, not the transient expression of that nature. Why is it that we commonly regard the mentally handicapped, especially those who will never be able to fully or actively reason, with the level of moral respect proper to human persons? It cannot be because of their performance, or because of any "ready at hand" ability to participate in uniquely human rational activity. Recognizing personhood in those who cannot "perform" is recognition of their essence. The same could be said of a newborn baby. The Aristotelian concept of function places emphasis on the essence of human beings, not on their ability at a given moment.

Animal Function

There is also a species-level dilemma to reconcile. Singer has made the claim that traditional ethics are "speciesist," and give inappropriate moral status to human beings as such. Aristotle tells us that to disable human function is a destructive act, yet how are we to view the disruption of the function of other living beings? Can it be that function is important only in the human being? Or is it that Aristotle is supremely

anthropocentric; can it be that all plants and animals ultimately function for our purposes, or do they each have their own function proper to their species?

There are several Aristotelian responses to this problem. First, Aristotle makes it clear that his function argument extends universally: “If indeed what is healthy or what is good is different for men and for fishes ... there would not be one kind of wisdom concerned with the good of all kinds of animals but a different kind for each species of animals”⁵² Each living being has a function proper to it and to its ultimate good. In addition, each individual function is related to the specific capacities of that species. There is a good for acorns just as there is a good for humans, but these goods do not necessarily coincide. What then of the accusation that Aristotle teaches that other living things exist only for the sake of human beings? This problem is well addressed by Monte Johnson in his study of Aristotelian teleology: “Humans, simply by virtue of being human, cannot be the center of the axiological cosmos for Aristotle ... Not all good is directed at them. That which accrues to humans at birth makes them neither good nor bad, it merely gives them the ability to deliberate and intentionally act in ways either good or bad. Things no more ‘function primarily for the benefit’ of bad humans, than they do for good fishes.”⁵³ Aristotle gives his descriptions of other living things in terms of each organism’s own well-being, not as useful to human beings. It is true that Aristotle discusses human use of the natural world, especially in his *Politics*, but he does not make the primary function of the natural world to be human use. Johnson makes this distinction between use and function in animals by way of example: “It is true enough that humans and other animals benefit from plants

⁵² *NE VI* 7.1141a-b.

⁵³ Johnson, *Aristotle on Teleology*, 227.

and other animals, but we can no more infer from this that they function primarily for our benefit, than we can infer that humans function primarily for the sake of mosquitoes, since they benefit from biting us.”⁵⁴

The killing of plants and animals is clearly a case of disrupting their function for our use. Why do we participate in this, or why is it considered acceptable to make use of other living things as instruments? There is no doubt that Aristotle considers humans to be the most superior beings in the natural world: “Of the other animals, which are inferior by nature to humans, none has a part in this (rational activity).”⁵⁵ It is our unique function, our rational ability, which gives us our place in the hierarchy of the natural world. Aristotle is not the only one who holds this superiority. All of us implicitly affirm it on a daily basis, since the destruction of certain living things is necessary for our very survival. This necessary use of certain living things is true of all species, and such use is an essential part of the natural world. In this sense, Singer may be justified in leveling his charge of “speciesism.” A use for survival falls short of outright exploitation and anthropocentrism, though. As Johnson notes,

By use of a certain art, humans utilize other animals for the sake of their own survival. But it avoids doing so by making the plants and animals themselves out to be things that function ‘primarily for the sake of human beings,’ and makes it clear that other kinds of animals have their own ends as do humans.⁵⁶

⁵⁴ Johnson, 233.

⁵⁵ *EE* I 7.1217a.

⁵⁶ Johnson, 237.

Human acquisition, as Aristotle refers to it in the *Politics*, is acceptable so long as it is necessary, indicating that there are many unnecessary uses of the natural world that would be inappropriate.⁵⁷ So we permit the limited disruption of function in non-human life since such limited use is essential to human survival, and most especially, because the rest of the natural world does not share in our unique potential or function as rational animals. Thus we use plants and animals in cases of need, but Singer and Aristotle would agree that the natural function of other living things should not be interfered with unless it is to satisfy true human needs.

Certainly this does not permit many, perhaps even most, of the uses of the natural world which are now commonplace. It is clear that Aristotle's view of function would not permit wholesale destruction of living things for the sake of human convenience. But even more important than the question of need, Aristotle would not support destruction of human function at any stage, adult or embryo, principally because of the active potentiality for rational activity that raises the human being above the level of other forms of life. In other words, Aristotle is not anthropocentric in the sense of believing that the natural world exists for our convenience, but he does maintain that the human being has a priority of need as a higher form of life.

⁵⁷ See Aristotle, *Politics*, Book I.

Conclusion

Aristotle's understanding of function, as the essence of human potentiality and as inextricably linked with human development, offers a sort of "common-sense morality" response to the "non-person human being" posited by Singer and others. Aristotle could not have recognized Singer's concept of a "non-person human being," since his philosophical framework emphasizes the essential potentiality of human beings, as opposed to their performance. As far as function is concerned, birth is an obviously arbitrary standard that does not mark any significant shift in human potential. Far more significant, in terms of function, is that movement from passive to active potentiality for full development into adulthood – not merely the material potentiality of the gamete, but the essential potentiality of the embryo.

Of course, Aristotle's philosophy of human nature is open to critique.⁵⁸ However, a rejection of his function argument is essentially a rejection of the idea that there are proper and improper ways to treat human beings. There cannot be a halfway point that acknowledges Aristotelian proper function, yet tries to depict function as nonessential to human beings. Although the concept of "personhood," as the distinct and exclusive category characterized by Singer, has begun to be part of the modern language of moral and legal rights, it is important to see that this characterization is not compatible with Aristotelian ethics. Aristotle gives compelling reason to

⁵⁸ In addition to Singer's "new ethics" articulates throughout his work, there is also the criticism by John Rawls of "comprehensive doctrines" which might be directed at the Aristotelian view. See Rawls, *A Theory of Justice*, Harvard University Press, 1971.

recognize the function of human beings as the foundation of their moral status. Against this backdrop, it is more evident that the “non-person human being” concept abridges true human equality as such. Singer’s personhood standard leads to the conclusion that all human beings are equal, but those who are persons are more equal than the non-persons. Aristotle’s consideration of proper human function shows that such a standard of inequality among human beings is inconsistent. We cannot ignore the necessity of natural function within prenatal life, without also diminishing its centrality for adult human beings as well. If we replace function with mere use, we remove a vital element of respect for human beings.

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