

TRANSHUMANISM AND THE FATE OF NATALITY: AN INTRODUCTION

by *Eduardo R. Cruz*

Abstract. Transhumanist thought on overpopulation usually invokes the welfare of present human beings and the control over future generation, thus minimizing the need and meaning of new births. Here we devise a framework for a more thorough screening of the relevant literature, to have a better appreciation of the issue of natality. We follow the lead of Hannah Arendt and Brent Waters in this respect. With three overlapping categories of words, headed by “natality,” “birth,” and “intergenerations,” a large sample of books on transhumanism is scrutinized, showing the lack of sustained reflection on the issue. After this preliminary scrutiny, a possible defense of natality in face of modern and transhumanist thought is marshaled, evoking a number of desirable human traits. One specific issue, the impact of modern values on natality, is further explored, reiterating that concerns about overpopulation and enhanced humans should keep in sight the natural cycle of birth and death.

Keywords: Hannah Arendt; birth; natality; new generations; transhumanism; Brent Waters

The Earth has recently reached seven billion human inhabitants, and many have voiced concerns that we should control new births in order to guarantee the well being of the present population. This situation raises anew a host of philosophical and theological issues, in particular those related to human nature and destiny. One tradition for which population trends and choices are an integral part is the transhumanist one.¹ For example, the proposal of part of this movement to extend one's life to the point of immortality is well known. However, in order to avoid overpopulation as a result, new births would need to be restricted. Critics from various quarters have indicated the meaning and value of mortality for true personhood, but concerns over superpopulation usually overshadow the importance of new generations. Not much has been said (even among bioethicists) about *natality* (*Gebürtlichkeit*), not as a category in demography, but in the specific sense of being born, introduced into this world. Hannah Arendt

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elaborated this interpretation, especially in her *The Human Condition*. Whenever transhumanists regard the natural life cycle of birth and death as a negative side effect of evolution, something to be superseded, they are also overlooking the value of natality.

The goal of this article is not to address the whole issue of natality, just to propose a piecemeal approach to it, involving first what is empirically available to us. Therefore, one purpose of this article is to present and discuss preliminary results from empirical research, in databases available online, restricted to books published in the past 10 years or so. This research lends credibility to the suggestion of how little attention the emergence of new generations into the world has received, not only by transhumanists, but also by their critics. Moreover, from such a sample we describe some key issues that should be addressed around natality, following in this respect some propositions by Brent Waters. Such discussion does not happen at the ethical level, but more properly at the philosophical-theological one, with an acknowledged bent toward natality.

As is true for many authors, we have to question: Why discuss these ideas, if transhumanism is such a small movement? I think Hava Tirosh-Samuelson and Kenneth Mossman are right on target:

This anthology [*Building Better Humans?*] takes transhumanism seriously not because it is a significant social movement, which it is not, but because the transhumanist vision compels us to think about ourselves in light of current technological and scientific advances and to reflect on the society in which we wish to live. (Tirosh-Samuelson and Mossman 2012, 35–36)

As we will see below, questions about human nature and destiny abound in the transhumanist discussion.

THE SCENARIO

To accomplish the purpose of a more empirical approach to the issue of natality, we first chose a simple and instrumental definition of transhumanism, in face of other terms such as “posthumanism.” There is no consensus in the literature about these terms, and definitions are usually tied to the needs of one’s argument. We assume that posthumanism is a general outlook with many different incarnations, a term that is usually employed in cultural studies and marked by a postmodernistic mood. It also indicates discussions about virtual reality and cyborg-related reflections, in the wake of Donna Haraway’s *Cyborg Manifesto*. It is, therefore, a matter of more concern in the humanities. Transhumanism, on the other hand, is a subset of posthumanism, and indicates a movement with several branches, all in favor of replacing our miserable biological condition with a posthuman being, enabled by advances in technologies in the areas of neurosciences, robotics, IT, nanotechnology, organ replacement, and so on. Basically,

transhumanists try to make the transition from healing to enhancement in order to overcome human limitations.

Once this definition was in place, we then searched databases such as Google Books and Amazon, as well as references found in more recent books. In order to focus only on works relevant to our object of study, we used the following criteria of selection:

- (1) Books from 2002 onwards. Indeed, earlier books are lesser in number and are commented on in succeeding works.
- (2) Books published in English, since most of the relevant literature comes in this language. This is not to disregard what is published in other languages; it is only an acknowledgement that these books usually reflect what has been written in English by transhumanists and their critics.
- (3) Books mainly dealing with post(trans)humanism that include discussions on radical life extension (hereafter RLE). Works more focused on nanotechnology were usually not considered.
- (4) Books that are not too technical, having a general readership in mind. More specifically, priority was given to books with philosophical/theological bearings.
- (5) Sci-fi books were also excluded, as well as those that deal with posthumanism from a postmodern perspective (with exceptions).
- (6) We also avoided books that were too superficial, especially those of the “transhumanism-bashing” sort, that is, those too judgmental and simplistic.
- (7) The same is true for health-related self-help books, with a “live longer, live better” theme.

The study looked at a universe of 68 books, as of December 2012. We have divided them up according to the classification present in Table 1: “mostly critical,” “mostly in favor,” and “mixed,” single and multiauthored.

Needless to say, this classification has a certain dose of arbitrariness, but it is enough to display certain regularities. Note that those in favor of RLE are roughly the same in number as those against it, something to be expected from an ongoing and very spirited discussion. When it comes to multiauthored volumes, the number of those pro-RLE is low, which suggests that many of them present themselves as strictly scientific contributions, loaded with technical language (usually related to gerontology), and these contributions were not considered in this first round. Moreover, in a hotly debated issue, charged with uncertainties and speculations about the future, few mixed publications (i.e., with pros and cons in a tentative balance) are to be expected. Pro-RLE ideas seem to be better represented as

Table 1. Classification of the book sample

	Mostly critical	Mostly in favor	Mixed
Single author	22	18	4
Multiauthored (E)	12	5	7

articles in periodicals, in the press, blogs, and so on; nevertheless, we have good reason to deem our sample as representative enough.

With Table 1 in hand, we proceeded with the analysis. For example, it is standard practice to look for the number of times each book is cited after its publication. We have done this by checking the total number of citations, as well as the average number per year, using Google Academics. However, as many of these books are aimed at a wider public, these figures do not explain much—in many cases, they express popular preference, not academic relevance. References to “overpopulation” do not seem to be relevant either, for most of them are *en passant*.

The diversity of the literature, in terms of style, author backgrounds, levels, audiences, etc., also impressed us: what this means is that all our conclusions are still tentative, pending other ways of classifying the materials and the elaboration of further hypotheses. Nevertheless, we think that the first step (to have a better grasp of what books on transhumanism offer) is secured.

We then searched within these books for some keywords that sprang from a first reading, as follows (see Table 2 for a sample). First and foremost, “natality” could be found in 15 of these books, all of them in the “against” field. Then we looked for “womb,” “procreation,” “childless/childbearing,” “birth,” “born,” “birth rate.” Finally, we searched for “gift/edness,” “future generations,” “intergenerations,” and “intergenerational.” Every slightly relevant occurrence was marked down with an “X.” Let us look into the data obtained in a little further detail, correlated to appropriate remarks of our own.

We focused first on the main concept under consideration, natality. As indicated earlier in this article, all authors follow the interpretation given by Hannah Arendt (as well as like-minded scholars such as Hans Jonas and Leon Kass), in her *The Human Condition*, who thus expressed herself:

Labor and work, as well as action, are also rooted in natality in so far as they have the task to provide and preserve the world for, to foresee and reckon with, the constant influx of newcomers who are born into the world as strangers. However, of the three, action has the closest connection with the human condition of natality; the new beginning inherent in birth can make itself felt in the world only because the newcomer possesses the capacity of beginning something anew, that is, of acting. (Arendt 1958, 9)

Table 2. Excerpt from the list of books, including keywords

Title	Date	Nativity	Womb	Procreation	Child	Birth/ born	Gift/ edness	Generations	Comments
Waters <i>This Mortal Flesh</i>	2009	X	X	X		X	X	X	Intergenerational

Some other authors mention the concept in passing, others in more detail. Different authors, including Jürgen Habermas, Grace Jantzen, and Brent Waters, appropriate Arendt's concept. On the other hand, none of the "in favor" authors acknowledge this reflection—apparently, the existentialist literature of the mid-twentieth century is simply ignored or disregarded. "Against" and "in favors" pass by each other in this respect. Transhumanists thus seem to make incompatible two philosophical trends, one more existentialist (which they associate with "bioluddites") and the other more utilitarian.² Our initial hypothesis, that the issue of natality deserves further scrutiny, is confirmed by this preliminary reading. Moreover, it is unfortunate that authors with religious interests have not taken cognizance of more careful analyses of this concept, such as provided by Anne O'Byrne (2010), Catherine Mills (2011), and Grace Jantzen (1999). Despite their postmodern overtones, these analyses are insightful.

Similar considerations can be made considering "birth" and words related to it. As it can be expected, most books do have a reference to these words. However, setting aside those with only brief mention to them, two opposing camps can be easily seen: those books that do regard new births and being born as relevant, and those that do not. Transhumanists are not much concerned with birth. It is true that they favor technologies for screening birth defects, endorsing "designer babies." On the other hand, they see declining birth rates as a plus, defending a "liberal agenda" (more on this below) that includes birth control procedures, the freedom of women to have or not have children, abortion, and the alleged fact that babies hinder a woman's career. At the end of the day, births may become superfluous, just one choice among others for humanity. Few say this in an explicit way. Famous transhumanist Aubrey de Grey, on the other hand, has offered what may be called "De Grey's choice": "We will have to choose between a high death rate and a low birth rate—it's as simple as that" (De Grey 2004, 238). Here he implies that, as average lifespan is extended, birth rates decrease, eventually approaching zero.

Sometime before, biologist Stanley Shostak had already written:

It has never been my intention to pretend that immortality could be achieved without sacrifice. Beyond all the problems of communication, the simple pleasures offered by birth, if not death, will be increasingly rare as more and more people enter the population as sterile immortals. Moreover, the preference some of us have for human diversity may not be rewarded as richly

as it is today, since some human traits will, no doubt, not be represented among the immortals (Shostak 2002, 207).

This sacrifice, he implies, is light in comparison to the benefits of immortality. Or, to cite the like-minded philosopher, Asher Seidel, in his most recent book:

Consider once again the suggestion that humanity evolve into a species of sexless, childless, cognitively motivated beings of enhanced intellectual abilities with indefinitely extended lifespans (which apparently necessitates childlessness). Suppose further that these evolved beings have desires and satisfactions that are unlikely to conflict, and to the extent that interpersonal cooperation is needed, it is typically granted ungrudgingly. . . . Yet, there are those, myself at least, who would argue, that such a scheme would allow a near-ideal life for its participants. (Seidel 2010, 26)

Apparently, they see no plus side to childbearing. Brent Waters has suggested that this is due to the connection between natality and mortality: “Transhumanists also have no interest in natality, for the birth of a child serves as a reminder of necessity’s death and decay” (Waters 2009, 109–110). To close, we should note that most works do not have much room for the women that bear and deliver children, indicating that to create the posthuman is mainly a male business. This absence will be discussed later in this article.

As a logical consequence of this outlook, the third group of words emerges. With the emphasis of the transhumanists on will and control, not much room is left for the unexpected—therefore the lack of a “gift-oriented” outlook.³ Giftedness, in human affairs, is usually related to self-sacrifice in favor of our children, although the reverse is also true, as children are a gift to us, a source of reward and happiness—the important thing is that future generations will be better off through our self-sacrifice. Translating it into more juridical terms, we first observe that very few of the transhumanists are concerned with future generations, in the specific sense of what some have called “intergenerational justice”⁴: present generations should not become impediments to the rights of subsequent generations. There are two possibilities: one assumes that there *will be* future generations, enhanced (Habermas sparked a relevant discussion in his *The Future of Human Nature* about it), and the other assumes that it is desirable not to have them, at least after the Singularity has arrived (Kurzweil 2005, 225–26). It is the latter, usually associated with RLE and endorsed by de Grey, Shostak, and Seidel, that concerns us here. In this case, gift is associated both with childlessness and with the technological mastery of our future.

Even those who acknowledge the likelihood of intergenerational conflicts brush them aside with several possibilities of accommodation (see, e.g., Naam 2010, 107). They assume that older people, if always healthy and cognitively unimpaired, will continue to be creative and able to

live together with the young. With such an assumption, death is a solution no more, for a new generation, in order to affirm itself, would not need the withdrawal of the older one (for a criticism, see Jonas 1992, 49; Kaye 2009).

Ray Kurzweil has the *locus classicus* of this philosophy (that there are always technological fixes for any posed problem) in his *The Age of Spiritual Machines*. After acknowledging the possible boredom⁵ of someone who wins all the bets in games, he concludes that:

We are more attached to the problems [e.g., death] than to the solutions. . . . The twenty-first century is different. The human species, along with the computational technology it created, will be able to solve age-old problems of need, if not desire, and will be in position to change the nature of mortality in a post-biological future. (Kurzweil 1999, 2)

Following the same logic, Max More says: “But dying is not a responsible or healthy way to solve anything” (More 2004, 170).

In the past, the resolution of problems of need and desire would include having children, so that new generations could have the goods that are out of reach for their parents. If in the future this solution is not needed any more, why care to bear children?

Once again, in the words of Brent Waters, “More often than not, the transhumanists simply ignore any intergenerational questions in order to concentrate on the more pressing questions of extending personal longevity” (Waters 2011, 173).

In other words, transhumanists regard our defects (suffering and death included) as unnecessary liabilities—humans would be better off without them. This is perhaps the most important dividing line between those “in favor” and those “against” posthumanism: whether the undesirable features of our humanness are here to stay and may have a positive role, or whether they could be superseded.

In sum, the analysis of keywords in the literature under scrutiny, such as natality (mortality), birth, and intergenerations, indicates that the future as depicted by transhumanists does not have a legitimate place for new generations. Apparently, transhumanists follow a principle of parsimony that is not present in biological evolution, with all its waste: it is more rational to take good care of the present generation, than be hopeful for solutions with a new one.

Needless to say, due to the richness and diversity of the information gathered from these books, new analysis should be undertaken, a task that shall be pursued in later works of mine. Now we should highlight some cogent criticisms of the RLE philosophy, drawn from the sample under analysis, adding some considerations of our own. As indicated before, at this stage of the research, these are still tentative.

THE NATALITY DEFENSE

Quite aside from the question of whether such transformations could still be called “evolution” in the Darwinian sense, which comprises cycles of birth and death, one could ask whether the posthuman condition would be better than what we have in the present.⁶

In order to have some kind of answer, we may think of the degree of wishful thinking associated with both alternatives. Skeptics of posthuman proposals seem to have the advantage in this respect, if not by other reasons than that data from the past are more reliable than extrapolations from the present into a far-fetched future. Indeed, transhumanists respond to every criticism with some future technological fix that still has to be articulated with other technological fixes. The heap of these fixes becomes so heavy that it will eventually be crushed under its own weight. At any rate, the more detached from present reality posthuman speculations are, the more they become incredible and delusory.

However, let us focus in the present, rather than enjoying future scenarios. Indeed, the main point is a philosophical, not a predictive one. I suppose Kurzweil is entirely right when he says that “The primary political and philosophical issue of the next century will be the definition of who we are” (Kurzweil 1999, 2). Why be skeptical of future scenarios? Why prefer staying human rather than sticking to the promise of posthumanhood? Why have children after all? Attempts at an answer may be divided up into eight points, as sketched below.

First, we may start from our biological past. Remember that transhumanists regard our biological inheritance as an impediment to further progress. But this past surely deserves more attention. As is true for other species, ours had as one of its major tasks to pass on our genes in order to survive. Moreover, all our babies are born prematurely, so newborns require significant care. Therefore, these and other very peculiar traits and needs are deeply ingrained in our brains.

For an example, we may refer to face processing, which is also present in other animals, but which is enhanced in human beings. This works both ways—it has to do with the eyes of a baby following familiar faces, and the enchantment of adults when they look at babies (see, e.g., Pascalis and Kelly 2009). Another example is the unique capacity of humans to tell stories. As soon as language was acquired, storytelling became an important way to educate new generations (Boyd 2009). Still another example is rites of passage. Recent research highlights that these universal traits of our species have a cognitive basis (Rossano 2009). All of this indicates that concern for natality is hard-wired in our brains, impossible to be extricated from other brain processes without loss. Most people, for example, would say “no” to a proposal of enhancement that promises better eyes and bones, at the expense of the capacity to tell stories to youngsters.

Second, we are storytellers because there are stories to be told. These are not restricted to readymade fairy tales, but rather framed in such a way as to extract moral lessons from the personal history of the storyteller. Hannah Arendt, and her commentators Anne O'Byrne and Grace Jantzen, all hold storytelling in high esteem, associating it not so much with our biological past, but rather with action and speech. As Arendt says: "That every individual life between birth and death can eventually be told as a story with beginning and end is the prepolitical and prehistorical condition of history, the great story without beginning and end" (Arendt 1958, 184). Nobody owns his/her own story: it is situated in the never-ending stream of life.

Third, the previous point brings us to the issue of human historicity, so cherished by the existentialist tradition. As Hannah Arendt points out, "The chief characteristic of this specifically human life, whose appearance and disappearance constitute worldly events, is that it is itself always full of events which ultimately can be told as a story, establish a biography" (Arendt 1958, 97). As all the nuances of the Heideggerian tradition in addressing historicity cannot be accounted for here, we will focus on one's life story vis-à-vis transhumanism.

The idea that what characterizes humans is their historicity seems to be something completely ignored by transhumanists. Spelling out one of the consequences of this historicity, the older we get, the more history we have. Perhaps what distinguishes the old from the new is the futureness of a new generation's historicity. I am not saying that younger folks are better than the elderly, that the latter have the wisdom of the past, without which youngsters would have experiences without aim, repeating the same errors of their forefathers. What I am trying to say is that the deeds, memories, and emotions that we accumulate over the years are both a blessing and a burden, for ourselves and for others, with no possibility of deletion. The older we get the heavier this burden is, regardless of our health, and there is a natural tendency to throw this burden, consciously or not, onto younger generations. The same idea can be seen in the thoughts of Hans Jonas and Leon Kass. As the former says:

Old age, in humans, means a long past, which the mind must accommodate in its present as the substratum of personal identity. The past in us grows all the time, with its load of knowledge and opinion and emotions and choices and acquired aptitudes and habits and, of course, things upon things remembered or somehow recorded even if forgotten. There is a finite space for all this, and those magicians would also periodically have to clear the mind (like a computer memory) of its old contents to make place for the new. (Jonas 1992, 40)

Closely related to the issue of human historicity is the one highlighted by Hans Jonas in the same essay, of mortality and our biological

condition. As he says, “‘Natality’ (to use a coinage of my long-departed friend Hannah Arendt) is as essential an attribute of the human condition as is mortality . . . conversely natality gets its scope from mortality: dying of the old makes place for the young” (Jonas 1992, 39).

Indeed, Kurzweil and those related to RLE see death as an unnecessary component of human evolution, and want to propose potentially immortal posthumans in three fashions: robots (like those in the movie *AI*), virtual beings (following Hans Moravec’s proposals of the “uploading of the mind”), and cyborgs, constantly enhanced by nanotechnology. Note that the first two scenarios imply the end of the biology (and its cycles) as we know it, and the third one implies our (alleged) control over the entire process.

Kurzweil frames a delightful conversation where he and Sigmund Freud are involved:

SIGMUND: These AIs don’t have bodies yet. As we have both pointed out, human emotion and much of our thinking are directed at our bodies and to meeting their sensual and sexual needs.

RAY: Who says they won’t have bodies? As I will discuss in the human body version 2.0 section in chapter 6, we’ll have the means of creating nonbiological yet humanlike bodies, as well as virtual bodies in virtual reality. (Kurzweil 2005, 203)

The resemblance, however, ends at the moment in which death is involved, for this is not the fate of “nonbiological yet humanlike” bodies.

Nevertheless, nowhere is the influence of biology more strongly felt than in the process of being born—all that animality, uncertainty, blood, and pain. No wonder that it is precisely natality that is more at stake in posthuman projects.

Fourth, still another relevant topic flows from the German philosophical tradition, that of alienation. Let us return for a moment to Kurzweil’s first quotation above, where he refers to the age-old problem of need and desire (in the second quotation he highlights the human condition.) Several variants of philosophical anthropology suggest that our humanness is defined by lack and longing, a deep alienation from the environment. Existentialists speak of our being “thrown in the world” (Heidegger) when we are born (cf. Arendt 1958, 168). This longing, on the other hand, associated with need and desire, has led to the great accomplishments of humankind. In other words, is it still possible to speak of being human without this alienation? Is it possible to display creativity and novelty without it?⁷ Again, the concept of “natality” enables a more positive answer to this dilemma: “The miracle that saves the world, the realm of human affairs, from its normal, ‘natural’ ruin is ultimately the fact of natality, in which the faculty of action is ontologically rooted” (Arendt 1958, 247).

Fifth, the satisfaction of longing and desires reminds us of utilitarianism (Hannah Arendt is also critical of this movement, as we can see in *The Human Condition*). Indeed, transhumanism may be regarded as an extension of present-day consumerist society—their proponents just follow contemporary trends to their logical conclusion: “we deliver what people want,” as it were.⁸ Hedonism and narcissism are in tune with our society, and aging and death are enemies of this kind of pursuit of happiness (Kass 2004, 317–18; Winner 2005, 392). That this is a threat to natality, we will explore in the next section.

Sixth, we now turn to a different train of thought. Indeed, some feminists would point out that these proposals are but an extension of age-old male dominance of the processes of life. By the way, even Hannah Arendt is criticized for still adopting a gender-free discussion of natality, for she barely refers to the woman that makes natality possible.⁹ Grace Jantzen (herself a commentator of Arendt), says for example: “The masculinist philosophy of the west [*sic*] has dimly recognized the significance of birth We have, therefore, the unedifying spectacle of male appropriation of birth, taking it away from mothers and bodies and making it bloodless and lifeless” (Jantzen 1999, 141; see also Donchin 1986; Rowland 1987). The specific form this refusal of birth takes in transhumanism is detailed, for example, by J. Jeanine Thweatt-Bates (Thweatt-Bates 2011), where postgenderism is addressed and criticized. A woman’s womb, procreation, labor pains, and blood are a hallmark of human embodiment. Without them, any “perfected body” will represent the ideals of only half of humankind.

Seventh, Hannah Arendt also comes to the fore when authors point out her association between natality and political freedom. Indeed, natality is a political action—to bear a new life is an exercise of freedom. If we think of Kurzweil’s deterministic future scenario—in the sense of “what can be done will be done”—every new birth is a protest against the scene set by older generations.¹⁰ This is more evident in George Lucas’s dystopia, *THX 1138* (1971), where being “birth born” is denied; the main character and his partner confront the system by having sex and a baby.

Eighth, we have the relationship between natality and the giftedness of life. Scholars such as political philosopher Michael J. Sandel (Sandel 2007), philosopher Lisa Guenther (Guenther 2006) and ethicist Richard Zaner (Zaner 2005) reflect upon “gift” as an element of this philosophy of birth, in the following manner:

To be born as human, but more specifically as myself, is to have received life, to have been given my life—the first and fundamental sense of gift. . . . The primal other, in short, is the mother, the one with whom each of us in the first instance grows older, in [Alfred] Schutz’s words; and the initial and primal place or habitat is her body, her womb. She is the one who gifts me with myself and is progressively the one who gifts me with herself. From her

we receive culture, history, world, mainly through giving the key stories by which we come to know ourselves. (Zaner 2005, 195)

Every new life is an accident, in the sense that it could never have otherwise occurred, and this contingency can be seen as a gift. In addition to the importance of relatedness for being human, it is precisely this awareness of life being a gift that enables the novelty in human flourishing.¹¹

When trying to summarize all these approaches to natality, we may note that old and controversial Norbert Wiener has something interesting to say: “We shall have to realize that while we may make the machines our gods and sacrifice man to machines, we do not have to do so. . . . There is a great chance of turning the machine to human advantage but the machine itself has no particular favor for humanity” (Wiener 2003 [1954], 72). Translating into our terms, future transhumans would not really care for humanity. Whatever “needs” are there, the solution for Wiener is not to replace this old self with machines or machine-like posthumans. In fact, even milder forms of “democratic transhumanism” are not free of an inevitable bias. Nicholas Agar, after an extensive analysis of James Hughes’s proposal, concludes that: “Thus, the path of radical enhancement for some humans significantly threatens the interests of other humans” (Agar 2010, 152).

The wisdom of the past serves us as a surer beacon in these revolt waters of technological change. This wisdom, mainly framed in religious traditions, presents the best of our humanhood, not in spite of our defects, moral or physical, but in the wise administration of what we, in the ignorance of our desires, consider as good and bad aspects of the human experience. As the old saying goes, “Every cloud has a silver lining.” The parable of the wheat and weeds immediately comes to mind—we cannot extricate “defective” traits, handed down to us by biological evolution and by culture, from our desires for a good life.

Analysts of transhumanism, such as Brent Waters, Ronald Cole-Turner, and Hava Tirosh-Samuelson, by blending religious tradition with Hannah Arendt’s concept of “natality,” have come to an insightful appreciation of our condition as finite beings.

Still another passage from Brent Waters neatly summarizes some of what is at stake in natality:

Hannah Arendt contends that natality should be the overarching moral symbol for shaping the human condition. . . . Some kind of principle is needed to disrupt this deadly pattern [Nietzsche’s eternal recurrence], and Arendt proposes natality as a promising candidate. By “natality,” she means something more than physical birth, although this act symbolizes the disruptive power to break the pattern of mortality. Each new baby embodies a hope of new possibilities; something new is started and is thereby also renewing. More broadly, natality entails the acknowledgment that there are fundamental limits inherent to what it means to be human. In other words,

to be human is necessarily to be finite and temporal. It is only within the imposition of these given limits that humans are liberated to break the pattern of death and be genuinely creative or, better, procreative in the sense that they create social and political structures that are greater than themselves, enabling human generations to flourish over time. (Waters 2009, 74, 138–39).

This does not mean that we follow Waters all the way; I am only stating that his use of natality to approach transhumanism is instigating and may function as a framework for further analysis.¹²

Even though these authors with an existentialist bent are not “bioludites,” they nevertheless may go too far in their critical standpoint (this is particularly true in Leon Kass). We are confident that with the method indicated in the present work, a more nuanced picture of the transhumanist movement may be achieved. Indeed, transhumanists do have many answers to the issues sketched above, and these answers must be taken properly into account, as many of our authors have done. As coping with all the issues would go beyond the length of a regular article, a choice becomes necessary. In the next section we will focus on the fifth point above, the “liberal agenda” and its impact on natality.

MODERN AGENDA AND ANTINATALISM

The term “liberal agenda” is used very often, but it resists a good and consensual definition. It does not even occur in our book sample, even though similar expressions are found. It may have a positive ring to it or a negative one (e.g., negative when used by the religious right in the United States). Ours is a more neutral approach—we take issue not so much with the features of the “liberal agenda,” but more with the unintended consequences.

The starting point is the recognition that transhumanists extend the values of the Enlightenment and modernity. Even though these roots sound familiar to us, this ascription still is very abstract. In order to bring the discussion closer to our reality, let us associate these values with a “prochoice” agenda.

“Prochoice” (procreative choice/freedom/liberty) usually refers to the right of women to choose to have (or not to have) an abortion, but it can be understood more broadly. As autonomous individuals, bearers of rights, women have reproductive choices: planned pregnancy, birth control, abortion, deferral of maternity, and so on. However, both the affirmation of the individual and his/her rights are in precarious balance with government control, such as in population policies and health care (Agar 2010, 189 ff.). Moreover, ours is a consumerist society, where hedonism and narcissism are very common. Despite moral pleadings for restraint and political correctness, there is a prevalence of more basic and unconscious drives associated with desire.

All these values and trends promote antinatality, not because people do not want or do not love children, but rather because these trends objectively conspire against bearing and rearing them. Just consider, in the realm of family planning, the role of financial deliberations. There is today a stimulus to taking a rational approach to parenthood, calculating how much one child will cost a couple in the long run. Following this line of thinking, fewer people will engage in the adventurous effort of having children. In other words, utilitarian concerns hamper natality.

It is interesting to note the present relevance of this discussion. Indeed, several books have been published in the last few years arguing for and against a person's decision to have children, and they have been the subjects of many reviews and discussion in the blogosphere. The polemic also shows the existing gap between academic rationale and the actual decisions of couples to procreate. The idea of a "liberal agenda" pops up when there are references to the "standard model" of how to make decisions about procreation, which involves rational choice and considerations about the welfare of the family. Against this view there is the argument that the kind of experience of having one's child is an "epistemically transformative one," thus rendering useless rational choice decisions on this matter.¹³ If such a decision is polemical today, we can imagine how much more it will be in transhumanist scenarios.

Feminist thought, moreover, has invested in choice and rights, and a possible outcome of this thought is that, the more women want to affirm themselves as individuals, the fewer children they should have, to the point of childlessness (Smajdor 2009). When someone says that "it is natural to have kids," feminists reply that the word "natural" should be put in quotation marks—from a "natural history of childbearing," late modernity yielded a "social construction" of it. This focus raises, again, a question that may seem repugnant to many, namely: Why have children at all?

The conservative viewpoint (remembering that "conservative" is also a label, not necessarily opposed to "liberal"¹⁴) inverts the emphasis: instead of "rights," "human nature" has the primacy. For scholar Yuval Levin, there are three roots of modernity and its association with progress: "the freely choosing individual of classic liberal democratic theory; the rational actor of free-market capitalism; the consenting adult of libertarian cultural theories" (Levin 2008, 62). Labels apart, all three roots are future-oriented. According to Levin, "In part, children are absent from this vision of the future because the vocabulary of classical liberal and libertarian thinking leaves little room for them" (Levin 2008, 62). Children pose a hindrance to any vision of progress, and raising them in such a way so as to meet, when they become adults, the expectations of the society surrounding them is a distraction from the forward path. Reminding one of Arendt, he asserts that "The constant intrusion of children into our world reminds us that even as we blaze a trail into the new and unknown, we are always at risk of

reverting far back into humanity's barbarous origins" (Levin 2008, 63–64). Embodiment receives high praise at this point: "Children enter the world as we did, and as all human beings have before us: small, wrinkled, wet, screaming, helpless, and ignorant of just about everything" (Levin 2008, 65).

With this background in mind, we may move to transhumanism and the "liberal agenda." Besides reinforcing old tenets of progressive thought in the West, proponents of RLE add a new ingredient to the opposition between "liberals" and religious conservatives. Again, the question is that, if we may live forever, why have children? Indeed, the prospect of extreme longevity comes with desirable childlessness.

De Grey, once more, has something to say. Just a few lines after "de Grey's choice" mentioned above, he states: "We could, let us not forget, discover that there are plenty of things to do with our time that are more fun than having kids and that having hardly any children around is not so terrible after all. And so on, beyond our imagination" (De Grey 2004, 238).

Nicholas Agar (himself a defender of liberal eugenics) thus presents De Grey:

Some of de Grey's confidence about the ease with which the negligibly senescent will renounce parenthood comes from the declining birth rates in parts of the world in which women have been empowered. He [de Grey] explains, 'Firstly women are finding it more and more possible to occupy themselves in ways that they find more fulfilling than having kids, and secondly they are breaking out of their upbringing that having kids is the one true way to live.' (Agar 2010, 98)

The other side of the coin is government (or expert, it does not matter) control on individuals as new technologies impact our society. Consider the following statement by leading transhumanist Julian Savulescu: "I will defend a principle which I call Procreative Beneficence: couples (or single reproducers) should select the child, of the possible children they could have, who is expected to have the best life or at least as good a life as the others, based on the relevant available information" (Savulescu 2001, 413; see comments in Mehlman 2012, 79ff.).¹⁵ As experts are the ones to give "the relevant information" and to undertake the procedures to produce the "best children," we may infer the degree of control that is involved in this process.

In our book sample, many critics have pointed out totalitarian tendencies in transhumanist thought that counter the defense of enlightenment values. This deep contradiction of modernity (the "dialectics of Enlightenment," as Adorno and Horkheimer put it) is reproduced and enhanced in transhumanism. Even proponents of the "democratic transhumanism" mentioned above do not escape this contradiction between the defense of

individual liberties and the need for enforced behavior (Agar 2010, 159 ff.). The disdain for “bioluddites” and other enemies of progress may betray the lack of tolerance typical of totalitarianism.

Therefore, the components of the “liberal agenda” mentioned above (individuals with their rights and choices; government control seeking efficiency and long-term planning through experts; consumerist society; and rampant capitalism undergirding all of this) find their logical outcome in transhumanist thought. Despite their mutual contradictions, all of these trends present restrictions to childbearing, and make it purely subject to one’s capricious desire.

In short, the proliferation of procreative liberties, also related to Malthusian worries of the recent past, have resulted in greater choice for women and a decline in birth rates. This decline, in fact, is so extreme that a sizeable number of countries in the world already have a birth rate below the replacement rate (2.1 children per woman in reproductive age). Therefore, we are heading toward childlessness, both because of the antinatalist frame of mind (that we have called the “liberal agenda”) and prospects of life extension. Children that still come to this world (especially if they are “designer babies”) will find so many adults around that there will be little room for the new and unexpected, in the Arendtian sense.

In children, the liberal ideal of a free, autonomous, and rational individual finds its limit. Indeed, children are refractory, unruly, and stubborn, challenging our ideas of what a good life should be . . . and we are responsible for our kids until the end of our lives. Hans Jonas emphasizes the plus side of it:

. . . that which was the beginning of each of us, when we could not know it yet, but ever again offers itself to the eye when we can look and know. For when asked for a single instance (one is enough to break the ontological dogma [naturalistic fallacy]) where the coincidence of “is” and “ought” occurs, we can point at the most familiar sight: the newborn, whose mere breathing uncontradictorally addresses an ought to the world around, namely, to take care of him. (Jonas 1984, 130–31)

Referring to Waters’s remark above, that children remind us of our mortality, it should be added that they also bring to our attention that we cannot bend at our will the decisions of other people. Any project aimed at designing a new future (and the transhumanists have plenty of them) may be frustrated by the obstinate character of reality. Fortunately, the other side of the coin is that children also bring us joy and meaning in life, and (*pace* De Grey) fun as well.

CONCLUSION

Richard Zaner has a remark that follows Arendt’s thought: “It is curious to note first that few philosophers have thought it necessary or, I suppose, fruitful to focus on this phenomenon of having been born of woman.

Reflections on death and dying are plentiful; those on birth, being borne and then born, or ‘worlded,’ are oddly lacking” (Zaner 2005, 194).

Some other authors discussed here have made similar remarks. Following Hannah Arendt (and, in her footsteps, Hans Jonas and Leon Kass) as an honorable exception to Zaner’s remark, they have indicated the importance of this insight for the proper assessment of transhumanists’ proposals of RLE, insofar as these render new generations superfluous. As we have seen, these proposals are still tied up with a liberal agenda concerned with high rates of natality, and with the corresponding policies of placing all sort of constraints on the latter.

Our contribution here is to devise (for future work) a more thorough screening of the relevant literature, to have a better appreciation of the issue of natality. With three overlapping categories of words, headed by “natality,” “birth,” and “intergenerations,” analyses of other authors such as Brent Waters have been confirmed and extended, adding some considerations of our own. We have argued that natality, together with sex, is crucial in order to keep our biological nature in evidence, with all its “dirt” and pain. New births are not superfluous, with the corresponding necessity of death. On the one hand, this cycle of birth and death hints at lack and longing as constitutive for humanhood. On the other hand, the same cycle provides for our historicity the gifted character our life, with the corresponding novelty and flourishing. Even the protest against older generations acquires meaning—the negative side of the cycle is as crucial for humanhood as its positive side. Any concerns with the planet’s overpopulation should take this discussion of “natality” into consideration. This preliminary work thus gives some indications of what can be further explored, so this article can be regarded as the first in a series.

Restricting ourselves to what should be done in academic terms, the literature indicated in this article should receive greater attention, to devise more appropriate forms of classification. On the other hand, Arendt’s commentators on the issue of natality still have to be properly taken into account, as well as the utilitarian component of transhumanist ideas. We have also highlighted the importance of the wisdom of religious traditions. In particular, the saying of Jesus about the grain of wheat (John 12:24) gains a remarkable cogency for today’s concerns, on and around the possibility of regulating the cycle of natality and mortality. However, going straight to the theological consequences of these ideas may be spiritually comforting, but not sufficient for academic respectability—spelling out consequences should be preceded by a more thorough interdisciplinary analysis.

ACKNOWLEDGMENTS

Earlier versions of this article were discussed at the XIV ESSAT Conference, April 24–29, 2012, Tartu, Estonia, and at the “Transhumanism and Religion group” at the AAR Annual Conference in Chicago, November

17–20, 2012. Acknowledgement is made to CAPES and FAPESP, Brazilian agencies that enabled my participation at these conferences.

NOTES

1. Transhumanist thought has been the focus of a number of essays in a recent issue of *Zygon* (*Zygon: Journal of Religion and Science* 47 (4) [December 2012]), so we refer the reader to that issue for a better grasp of transhumanism.
2. Many critics have indicated that the transhumanist philosophy is a radical extension of utilitarianism—see, for example, Tirosh-Samuelson (2011, 38).
3. See Guenther (2006), for the notion of “gift” associated with birth and maternity.
4. This concept was made popular by Hans Jonas, and it is analyzed in more detail in Tremmel (2006).
5. Many critics of RLE point to the inevitable boredom stemming from a life too long. Transhumanists offer a series of answers to these objections, but they look like empty promises.
6. In Larry Temkin’s words, “Is Living Longer Living Better?” (Temkin 2011, 350 ff.).
7. The role of alienation (estrangement) in the dialectics of human accomplishment reminds one of Paul Tillich. See Tillich (1963, 30–106).
8. “. . . we want everyone to have access to the same possibilities of endless personal fulfillment—simply because, if this is possible, there is no justifiable reason to deny it to anyone who wants it” (Jones 2012).
9. See, for example, Schott (2006), for several references of earlier works to this criticism of Arendt.
10. This connection is missed by an important author in the transhumanist tradition, James Hughes, recognized for his concern with the sociopolitical bearings of posthuman proposals. Cf. Hughes (2004).
11. Sandel has been the target of a few criticisms, including some by Leon Kass, but we cannot pursue them here.
12. Waters’s analysis of “natality” does not go very far, and the attribution of “gnostic” to transhumanism is doubtful.
13. Cf. Lombroso (2013), who comments on an unpublished paper by philosopher Laurie Ann Paul. From this post a whole thread of reviews and polemics can be retrieved.
14. See, for example, bioethicists who see themselves defending liberal democracy, such as Francis Fukuyama and Leon Kass.
15. In a more humorous tone, there is even the idea that people should have “breeding licenses” (Munkittrick 2010).

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