



Nietzsche and Transhumanism: A Meta-Analytical Perspective

Riccardo Campa

Institute of Sociology Jagiellonian University Grodzka 52 Street 31-044 Cracow, Poland

e-mail: riccardo.campa@uj.edu.pl

Abstract:

In recent years a debate has developed over the ties between Friedrich Nietzsche's ideas and transhumanism. This article clarifies some issues at the meta-level of the discussion. Firstly, the author provides a scientometric analysis of research trends to show the relevance of the topic. Secondly, he distinguishes between two analytical perspectives, which he calls 'noumenal' and 'phenomenal.' Thirdly, by taking the phenomenal perspective, the author shows that transhumanism can be classified into four different categories, namely: quasi-Nietzschean, Nietzschean, a-Nietzschean, and anti-Nietzschean. Finally, he provides historical examples of each single type of transhumanism. This way, the article also contributes to the history of transhumanist thought. *Keywords*: Friedrich Nietzsche, overhuman, transhumanism, scientometrics, meta-analysis

1. A Preliminary Scientometric Analysis

The coinage of the word 'transhumanism' is generally credited to biologist Julian Huxley, who used it to signify the idea of self-directed evolution [1, p. 25]. The British scientist introduced the term, and the idea of founding a cultural movement under this name, in the first chapter of the book *New Bottles for New Wine*, published in 1957 [2]. Still, transhumanism as an organized movement emerged only in the last decade of the 20th century, with the foundation of the *Extropy Institute* in 1992 and the *World Transhumanist Association* (now *Humanity Plus*) in 1998 [3, pp. 37-8].

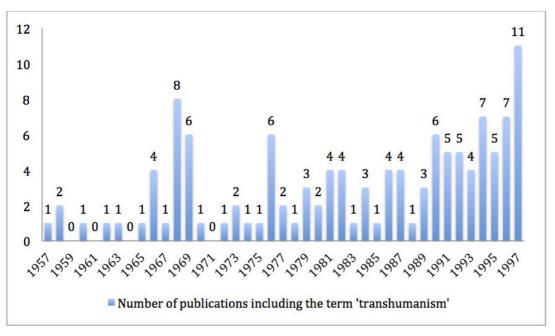
Since the emergence of the transhumanist movement, a discussion has started over the similarities and differences between the transhumanist idea of 'enhanced human' (or 'transhuman') and Friedrich Nietzsche's idea of 'Übermensch.' Can Nietzsche be seen as a forerunner of contemporary transhumanism?

Before discussing the issue, we are going to provide a brief scientometric analysis aimed at quantifying the magnitude of the debate. We will collect quantitative data from Google Scholar and use them to build graphs in Excel. It is well known that Google Scholar is not a fully reliable database. Among the flaws, one finds the following ones: 1) it does not detect all the existing articles and books; 2) the same item may occur more than one time; 3) the search engine sometimes mistakes the foundation date of a journal for the publication date of the article published in it (i.e.

the problem of 'false positives'); 4) some repositories (e.g. philpapers.org) include the category "similar books and articles" in metadata, with the effect of misleading the search engine. For these reasons, handmade search will also be occasionally implemented to control the reliability of the occurrences.

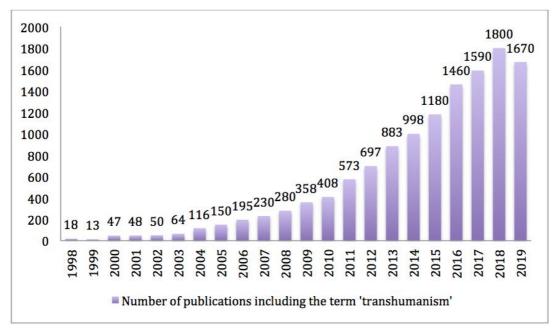
According to the Google Scholar database, overall, 1.120.000 scientific publications include the word 'Nietzsche', while 14.600 publications include the term 'transhumanism.' The interest paid by the scientific community to Nietzsche's writings is well known and does not need much explanation. Less known is the interest concerning transhumanism.

As Graph 1 shows, little use of the term 'transhumanism' was done in the period 1957-1997. We should not forget that in that period books and journals were mainly printed on paper, the massdigitalization of paper documents started only in recent years, and Google database is still far form being complete. This means that some occurrences could have been left out. It is also true, however, that missing occurrences are partly compensated by 'false positives,' which presence have been confirmed by handmade search. Overall, there is little doubt that the debate becomes slightly more sparkling in the 1990s, after the appearance of the Extropy Institute.



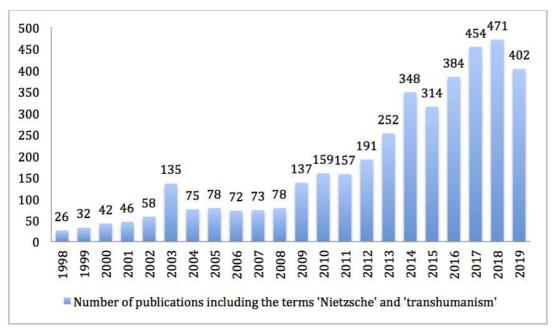
Graph 1: Annual frequency distribution of scientific publications including the term 'transhumanism' (period: 1957-1997)

Very different is the distribution over the period from 1998 to 2019. As Graph 2 shows, the absolute frequency of publications dealing with transhumanism, or at least mentioning the concept, in this period, keeps growing. The slight decrease of occurrences in 2019 is due to the fact that the survey was done at the end of November 2019, and therefore December 2019 was not included. The significant increase in frequency after 1998 can be partly explained with the activism fueled by the *World Transhumanist Association*.



Graph 2: Annual frequency distribution of scientific publications including the term 'transhumanism' (period: 1998-2019)

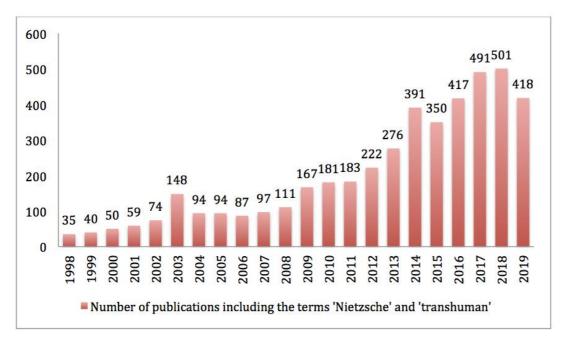
Quite interestingly, the search for the term 'transhumanism' in association with 'Nietzsche' gives 4520 results. This means that one third of the publications about transhumanism (30,96%, precisely) also mention Nietzsche. The state of proximity (or togetherness) of the two terms in the same documents is a good clue of the relevance of the issue that we are going to discuss. Another good reason to discuss the issue is the distribution of these publications over time. Indeed, it seems that the interest in the ties between Nietzsche and transhumanism is also growing over time, as Graph 3 shows.



Graph 3: Annual frequency distribution of scientific publications including the terms 'transhumanism' and 'Nietzsche' (period: 1998-2019)

As one can see, in 1998, we have 18 items including the term 'transhumanism' and 26 items including both the terms 'transhumanism' and 'Nietzsche', which makes no logical sense. A

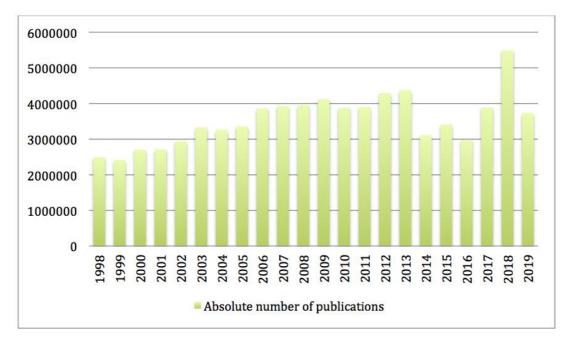
handmade search reveals that some of the detected items include the word 'transhuman,' not the word 'transhumanism.' The latter term is just present in the title of linked "similar books and articles." For example, Iain Mackenzie's article "Life, the universe and everything different" [4], which is a review of Keith Ansell Pearson's book *Viroid Life: Perspectives on Nietzsche and the Transhuman Condition* [5], does not include the term 'transhumanism.' It must be noticed that Pearson's *Viroid Life* does not contain this term either, although it is certainly on topic, since it discusses Nietzsche's idea of 'overhuman,' the concept of 'transhuman,' the theories of Pierre Teilhard de Chardin and Julian Huxley, the role of technology in human evolution, and many other issues related to transhumanism, in the perspective of so-called continental philosophy. It could be useful, therefore, to also envision the annual frequency distribution of scientific publications including the terms 'Nietzsche' and 'transhuman' (see Graph 4).



Graph 4: Annual frequency distribution of scientific publications including the terms 'transhuman' and 'Nietzsche' (period: 1998-2019)

As one can see, the numbers are slightly higher, but the pattern of the curve is the same of Graph 3. In spite of the above-mentioned possible and actual mistakes of the search engine, these numbers provide a sufficiently reliable overview of the topic trend.

Our graphs show the absolute frequencies of the publications. Obviously, the relative frequency would tell us more about the proportion of intellectual effort devoted to these topics. Indeed, the growth of publications on one topic could simply be explained with the general growth of scientific publications. However, there is no need to calculate the relative frequency to verify that this is not the case. It is enough to have a look at the distribution frequency of publications globally (Graph 5).



Graph 5: Annual frequency distribution of scientific publications globally (period: 1998-2019)

As one can see, the curve does not follow the same pattern. Moreover, in the period 2014-2017, there is an evident decrease of scientific publications, in comparison with the previous years, while the books and articles mentioning 'transhumanism' keep growing over the period in a seemingly exponential fashion.

Let us focus in particular on Graph 3. It shows that in 2009 there was a change of gear in the discussion on the ties between Nietzsche and transhumanism. As citation analysis also confirms, to an appreciable extent, the change of gear is attributable to the article "Nietzsche, the Overhuman, and Transhumanism" by Stefan Lorenz Sorgner, published in the *Journal of Evolution and Technology* in March 2009 [6]. In that article, Sorgner took a critical position especially towards Nick Bostrom, who had previously drawn a brief history of transhumanism, rejecting the idea that Nietzsche could be counted among the forerunners of the movement. According to Bostrom, indeed, only some "surface-level similarities with the Nietzschean vision" exist [7]. In contrast, Sorgner states that "significant similarities between the posthuman and the overhuman can be found on a fundamental level."

I wrote several articles and books in Italian on this issue, and my conclusions were the same as Sorgner's. In 2007, I published *Etica della scienza pura* (The Ethics of Pure Science), a six hundred pages book on the history of scientific ethos, which also includes a genealogy of transhumanism [8]. In that book, the most substantial chapter is the one devoted to Nietzsche. In the same year, I resumed the discussion even more explicitly in the article "Scienza e superuomo nel pensiero di Friedrich Nietzsche: Per una genealogia del transumanesimo" (Science and Superman in Friedrich Nietzsche's Thought: For a Genealogy of Transhumanism [9]. Nietzsche's legacy is also emphasized in my subsequent writings on transhumanism and, in particular, in my books *Mutare o perire: La sfida del transumanesimo* (Mutate or Perish. The Challenge of Transhumanism) [10] and *La specie artificiale: Saggio di bioetica evolutiva* (The Artificial Species. An Essay on Evolutionary Bioethics) [11]. This does not mean that I subscribe to all Nietzsche's ideas, nor that by recognizing the German philosopher as a precursor of transhumanism I intend to exclude his detractors from the genealogy of the movement, as in my view 'transhumanism' is just another name for 'the philosophy of human enhancement' – a philosophy that can be coupled with many different religious and political views.

Here, however, I am not going to repeat what I wrote in those works, although I am aware that having them published in Italian has greatly limited the spread. Let us say that I find the

argument put forward by Sorgner sufficiently articulated and convincing, so that I do not now feel the need to enter again into the merit of the discussion.

Here, I intend to clarify some issues at the meta-level of the discussion. To be sure, given the large number of publications on the topic, I will neither provide a full meta-analysis of the issue, nor a complete literary review. My current goal is just to build an analytical frame in which the many publications on Nietzsche and transhumanism could be codified and classified. The metaanalysis that follows is qualitative in character and based on exemplary cases. I will first underline the difference between two analytical perspectives, which here I call 'noumenal' and 'phenomenal.' Then I will analyze the discussion on Nietzsche and transhumanism through the prism of the phenomenal perspective.

2. Two Analytical Perspectives: Noumenal vs. Phenomenal

Nietzsche distinguished two categories of people: those who are 'faithful to Heaven' and those who are 'faithful to the Earth.' The Christians belonged to the first category. Some of Nietzsche's contemporaries, and – long before them – the ancient Pagans, belonged to the second. Nietzsche's preference goes, notoriously, to the people of the second category, so much so that he urges his readers to remain faithful to Earth as the Greeks had been, at least until Socrates and Plato entered the stage of history.

These categories are not only useful in the sphere of social and political philosophy. They can also be applied to the history of ideas. Nietzsche wrote that "facts are just what there aren't, there are only interpretations" [12, p. 139]. We may add that interpretations themselves can be faithful to Heaven or faithful to the Earth.

Many noticed that our interlocutors, more or less consciously, tend to discuss issues as if the objects of the discussion had or had not a fixed and immutable essence. Some refer to ideas as they were a-historical objects, wondering about their truth, goodness, beauty, and assuming that these qualities can be objectively determined. Others keep their eyes mainly on the historical vicissitudes of ideas, that is, their birth, diffusion, social reputation, and disappearance. The first perspective is vertical, the second horizontal. The first perspective seems to start from the assumption that there is a 'thing in itself,' a noumenon, that transcends earthly events and exists independently of human sense and perception. The second perspective assumes that such an essence does not exist, or, if it does, is not knowable, and therefore focusing on ideas as phenomena is the most solid option. Many philosophical discussions have intersected with these different ways of seeing reality, in the field of ontology, epistemology, or the methodology of science. One may only think of the controversies between philosophers of being and philosophers of becoming in Antiquity, realists and nominalists in the Middle Ages, transcendentalists and immanentists, or idealists and materialists, in the modern age, or, finally, rationalists and constructivists in the field of contemporary epistemology. These philosophical discussions are certainly related to our meta-analysis, but any reference to their terminology could now generate misunderstandings. Therefore, as mentioned above, we will refer to the two intellectual attitudes as *the noumenal* and *the phenomenal* perspective.

There is a simple algorithm to find out if our interlocutor sees the world through a noumenal or a phenomenal prism. Whether one speaks of religion, politics, philosophy, or art, in case a controversy arises about the nature of an idea or a movement, those taking the first perspective will invariably appeal to the categories of *authenticity* and *uniqueness*, while those taking the second one will appeal to the categories of *diversity* and *multiplicity*.

For example, in a discussion on the nature of Christianity, those who take the noumenal perspective will try to resolve the controversy by contrasting 'false Christianity' with 'true Christianity.' That is, they will postulate the existence of a unique authentic Christianity that lies outside of history, beyond the opinions that humans can make of it on Earth, and will also postulate that they – unlike their interlocutors – are capable of grasping this a-historical essence.

On the contrary, those who take a phenomenal perspective will accept the fact that they are 'in the Matrix' no less than their interlocutors. As a consequence, they will temporarily put aside their personal preferences and, faced with a controversy about the nature of Christianity, will recognize the fact that, here on Earth, there are many different Christianities. In other words, they will not try to bypass the observable phenomenon that there are groups of self-styled Christians who think and act differently but will take note of this difference and rather try to distinguish them analytically and possibly measure their scope. They will not qualify a variant of Christianity as 'authentic' and another as 'inauthentic,' but rather classify the different Christianities as Orthodox, Catholic, or Protestant. And they will go on in this classification, as long as there will be controversy, by distinguishing between Lutherans and Calvinists, Unitarians and Trinitarians, traditionalist Catholics and progressive Catholics, and so on. The second step after the distinction could be dynamic measurement. Those who take the phenomenal perspective, once having acknowledged multiplicity and diversity, could try to establish the 'weight' of the different Christianities, and how their weight in society historically varies.

Last but not least, when one takes a phenomenal perspective, attention does not go so much to people (scholars, authors, leaders, activists) as to documents (articles, books, written discourses, manifestos), given that people change over time and are reactive data sources, while documents are stable, they can be reviewed many times and they remain unchanged.

3. Four Ways of Relating Nietzsche to Transhumanism in a Phenomenal Perspective

The point we are going to make should be already clear to the reader. The analysis of the relationship between Nietzsche and transhumanism takes on a completely different form depending on whether one assumes a noumenal or phenomenal perspective. In the first case, it is assumed that somewhere outside history one finds 'the real Nietzsche' and 'the true transhumanism.' So it even makes sense to ask what Nietzsche would think of transhumanism if he were still alive. If one takes a phenomenal perspective, however, this question no longer makes sense, since it cannot have an objective answer. It cannot have an objective answer, not only because Nietzsche is dead and can neither confirm nor reject his association with contemporary transhumanism, but because there are different Nietzsches and transhumanisms in the empirical world. This multiplicity reverberates on two levels, one subjective and one objective. Nietzsche – like any other human being – has changed his mind about different issues in the course of his earthly existence. Moreover, no less than other scholars who left written testimonies, he has been interpreted and understood in different ways by his readers. As a consequence, there are *diverse* and *multiple* Nietzsches in circulation. Just as there are diverse and multiple Jesus Christs or Karl Marxs. Similarly, there are diverse and multiple transhumanisms, just as there are diverse and multiple Christianities or socialisms. On the one hand, transhumanists themselves have different ideas about what this movement is and should be. On the other hand, external observers interpret their doctrine in different ways.

To be clear, we are not saying that the noumenal perspective is wrong and the phenomenal one is correct, or that one cannot engage in both types of analysis. We are just saying that these perspectives are different and have different functions. Here we decided to take the second perspective because it can add something new to the debate.

By assuming the phenomenal perspective, it still makes sense to ask at least three questions about the relationship between Nietzsche and transhumanism. First of all, we can ask if there is on Earth a transhumanist group inspired by Nietzsche; what are its philosophical postulates, and which weight it has within the movement that includes all self-styled transhumanists. Equally sensible is the question inherent in the earthly existence of an a-Nietzschean transhumanism, that is, of a group that self-identifies as transhumanist, or accepts to be labeled transhumanist, but makes no reference to Nietzsche. Finally, a question can be legitimately asked about the existence of an anti-Nietzschean transhumanism, which explicitly distances itself from Nietzsche's ideas (or from what it perceives as Nietzsche's ideas). These are three questions that, at least on a historiographical level, can receive an objective response.

In relation to the first of the three questions, we can also proceed more cautiously, examining the degree of adherence to Nietzsche's thinking. Authors do not limit themselves to

repeating what has been said but build on what has been said. One accepts some ideas elaborated by a previous author, and then goes further. The acceptance ratio can vary. To take account, at least in part, of this difference in degree, we introduce a distinction between 'quasi-Nietzschean transhumanism' and 'Nietzschean transhumanism.'

The first one will include transhumanist documents which mention Nietzsche's ideas in an approbatory or non-hostile way, but whose authors also feel the need to explicitly reject some aspects or some uses that have been made of them. In the second type, we will include documents that tend to underline the importance of Nietzsche's thought for transhumanism, without dwelling too much on what we should instead abandon of his thought. On the whole, we will, therefore, take into account four types of transhumanism: quasi-Nietzschean, Nietzschean, a-Nietzschean, and anti-Nietzschean.

By adopting this horizontal approach, we are fully in the domain of the history of ideas and the sociology of knowledge, which form together a unified meta-analytical perspective. It is indeed worth recalling that Karl Mannheim has repeatedly equated the Wissenssoziologie to a "sociological history of ideas" [13, p. 65].

4. Quasi-Nietzschean Transhumanism

Explicit references to Nietzsche can already be found in the early works that introduce the terms 'transhuman' and 'transhumanism' into the philosophical and scientific debate. For instance, we find references in writings by Julian Huxley, Pierre Teilhard De Chardin, Robert Ettinger, and Fereidoun M. Esfandiary. These are rather approbatory o non-hostile citations. However, they are always accompanied by some *distinguo*.

To make a first example, Teilhard de Chardin talks about the need for humanity to take control over its own evolution, to move towards a new state of existence that he calls superhuman, ultrahuman, and transhuman.

In the preface of what is perhaps Teilhard's best-known book, *The Phenomenon of Man*, Julian Huxley notes that the author "quotes with approval Nietzsche's view that man is unfinished and must be surpassed or completed; and proceeds to deduce the steps needed for his completion" [14, p. 13].

Jules Carles and André Dupleix inform us that the Jesuit scientist, in 1940, when he was in China to do his work as a paleontologist, "finds time to read and read a lot, from Nietzsche to Jean Rostand, from Camus to Huxley and Sartre" [15, p. 56].

This information is crucial for our historical reconstruction. Notwithstanding the insight offered by Huxley, in the book *The Phenomenon of Man*, there are no explicit references to Nietzsche [16]. This is not surprising if we consider that the author read Nietzsche in 1940. Teilhard's most famous book was published posthumously in 1955 and translated into English in 1959 but was completed in the 1930s. As is well known, it was not immediately published because it did not obtain the *imprimatur*, that is the press authorization by the hierarchies of the Catholic Church, which at the time had not yet accepted the theory of evolution.

The references to Nietzsche and the concepts of 'ultrahuman,' 'transhuman,' and 'transhumanization' appear in the essays written after 1940 and partly collected in *The Future of Man* [17, pp. 239, 261, 298].

Although Nietzsche is sometimes described as the philosopher of egoism or the proponent of an individualism taken to the extreme, his horizon of thought is communitarian. The overhuman must, first of all, be desired, nurtured, bred, educated by the community of belonging. Teilhard recognizes that Nietzsche has well understood that the self-directed evolution of the species, which is the result of a higher level of 'reflection,' can only have a social, communitarian dimension. The priest says: "As Nietzsche has rightly observed, although he put the wrong construction on it, the individual, faced by himself alone, cannot know himself exhaustively. It is only when opposed to other men that he can discover his own depth and wholeness. However personal and incommunicable it may be at its root and origin, Reflection can only be developed in communion with others. It is essentially a *social* phenomenon" [17, p. 126].

It will be noted that the Jesuit, to the expression "has rightly observed," adds the phrase "he put the wrong construction on it." It is known that Nietzsche is a resolutely anti-Christian philosopher, while Teilhard, although atypical, however far from orthodoxy, remains a Catholic priest. It is therefore inevitable that, in addition to the points of agreement, there are points of divergence. Let us analyze in detail this ambivalent relationship.

In the essay "The Great Option," also included in *The Future of Man*, the Jesuit distinguishes between two optimistic attitudes, one typical of Christians and the other of secular progressives of his time: 'Optimism of Withdrawal' vs. 'Optimism of Evolution.' Christians hope and believe in an escape from the world to a superior, transcendent reality. They look upwards, to Heaven, to God. On the contrary, the secularized optimists of our times (Enlighteners, positivists, socialists, Nietzschean, etc.) look forward, to an improvement of the human condition that is supposed to take place in this Universe. Distinguishing himself from his coreligionists, Teilhard states that the latter are "the true optimists" [17, p. 35]. Consistently, he urges Christians to redirect their optimism, by having faith in the evolutionary laws of the Universe. He says: "Let us follow the others, in their effort to steer the human vessel onward through the tempests of the future" [17, p. 36].

One will notice the use of a Nietzschean topos by the Jesuit father (the exhortation to be faithful to Earth), associated to a sincere sympathy for the immanent vision of an evolution that is resolved positively with the advent of the superhuman, or overhuman. The term-and-concepts 'superman,' 'superhuman' and 'super-humanity' repeatedly appears in the work of the French paleontologist [18, pp. 63, 68, 104, 122, 123, 140]. However, unlike Nietzsche, not surprisingly, Teilhard maintains the existence of a higher reality, of a transcendent dimension, of a God. Therefore, he does not limit himself to dichotomously opposing faith to Heaven and faith to Earth, but hopes for a synthesis between the two forms of faith, of religiosity, of cosmic optimism. The result is a movement that is, together, up and forward: *an ascending spiral* [19].

The Jesuit returns to the topic on March 30th, 1941, in a document written in Beijing and remained unpublished until 1959, when it was included in *The Future of Man*. By annotating some reflections on the relationship between science and religion, the French paleontologist writes: "Throughout human history this conflict between the 'servants of Heaven' and the 'servants of earth' has gone on; but only since the birth of the idea of Evolution (in some sort divinizing the Universe) have the devotees of earth bestirred themselves and made of their worship a true form of religion, charged with limitless hope, striving and renunciation" [17, p. 69].

Once again, Teilhard starts from Nietzsche to go beyond Nietzsche. More precisely, he indicates the need for a synthesis between the two optimistic forces that oppose pessimism and nihilism. These spiritual forces, "provided both are positive, must *a priori* be capable of growth by merging together. Faith in God and faith in the World: these two springs of energy, each the source of a magnificent spiritual impulse, must certainly be capable of effectively uniting in such a way as to produce a resulting upward movement" [17, p. 69].

To conclude, these works by Teilhard illustrate quite well a way of being transhumanist drawing from Nietzsche but in order to go beyond his view.

A similar attitude can be found in the book *Man into Superman* by Robert Ettinger, published in 1972 and reprinted with a new preface in 1989 [20]. Ettinger can be considered the founder of the cryonics movement, having envisioned the possibility of freezing human bodies, relying on future developments of technology that could heal the damages of aging or diseases, as early as in 1962. This possibility is presented in the book *The Prospect of Immortality* [21]. Already that book contains themes that will become pillars of the transhumanist movement, even if the term 'transhumanist' does not appear in it. Nor is there any reference to Nietzsche.

Quite different is the situation of the document *Man into Superman*. To begin with, in the 1989 preface, entitled "The Transhuman Condition," Ettinger explicitly defines himself as immortalist and transhumanist. These are his words: "Some do blame us immortalists, us

transhumanists, and reproach us for hubris, because in earlier times there seemed to be good reasons to accept the status quo – namely, there was little we could do about it, hence mental health and a stable society might require resignation" [20, p. 4].

As for Nietzsche, Ettinger openly distances himself from the uses of his thought made by the Nazis. At the same time, however, he insists that these uses are not a good reason to deny the value of Nietzschean philosophy.

First of all, we must recognize that "Friedrich Nietzsche was the man who popularized the term 'superman' (übermensch) [sic]" [20, p. 24]. It is undeniable that he "became a patron Saint of the Nazis" and that he was a creature of many contradictions in his person and his writing. However, Ettinger points out that "[i]t is as easy to demolish his illogic as to admire his literary bravura, but this is not our primary interest, which rather concerns any new or constructive ideas he may have had concerning the purpose of life and the quality of the superman" [20, p. 25].

Ettinger makes it clear that Nietzschean philosophy is of aristocratic orientation. Nietzsche distinguishes between the 'morality of the master' and the 'morality of the herd,' and concludes that the first type of morality is appropriate to the superman. The distance from Judeo-Christian moral values, the rejection of democratic sentiments, the lack of interest in the condition of the weak, the exaltation of the blonde beast (an expression which, according to Ettinger, refers to the Russians, rather than the Germans), induce the author of *Man into Superman* to elaborate an ambivalent judgment. He writes that "[a]ll this sounds downright un-American, but it contains some nuggets of truth – specifically that the individual must serve himself, the 'Ego whole and holy,' following his own instincts, rather than serve society. So far, so good: Judaeo-Christian morality does indeed have some peculiar inversions of values" [20, p. 25].

In some respects, Ettinger considers the thinking of Nietzsche to be simplistic and contradictory. How can one celebrate the value of selfishness and denounce the danger of extreme altruism, and then conclude that man should sacrifice himself to favor the rise of the superman? Once again, however, the American author insists that the transhumanist perspective cannot do without certain elements of Nietzschean thought, starting from the idea of the will to power as the spring of human transformation.

Overall, according to Ettinger, the first theorist of the superman "saw only a small facet of the truth. Nevertheless, the best of Nietzsche is very good, and he made an important contribution toward exposing the illusions of the altruists" [20, p. 26]. In light of these statements, Ettinger's transhumanism can be qualified as quasi-Nietzschean, on a par with that of Teilhard de Chardin, though for different reasons.

The last examples we propose for this category are three works by Fereidoun M. Esfandiary, also known as FM 2030. Just like Teilhard de Chardin, Esfandiary distinguishes intellectuals into optimists and pessimists and, in turn, distinguishes the optimists into two subcategories. The subcategories are not, however, those already elaborated by the Jesuit paleontologist. According to Esfandiary, the difference between the optimists of the 19th century and those of the 20th century is in the degree of progressive faith they have. The former, however visionary, could not imagine the possibility of obtaining earthly immortality through technology and spreading human life on other planets. Esfandiary does not criticize the philosophers of the past for their lack of imagination. He merely observes that the scientific-technological level of their time did not allow them to transcend their speculative limits. In other words, he acknowledges the importance of their optimism but argues that we can now dare more, pushing ourselves beyond the limits that have held back their imagination.

In the book *Optimism One*, written in 1970, Esfandiary mentions by name three thinkers of the past: "Even recent visionaries like Marx, Nietzsche, Freud, and the evolutionists were necessarily resigned to the inevitability of human mortality and confinement to this planet. Progress was believed possible only up to a limit. Certain barriers of Time and Space were considered impossible to transcend. The human situation was viewed as basically and unalterably tragic" [22, p. 222].

Then, the author tightens the lens on Nietzsche only, citing one of his most significant sentences: "Why has there been no philosophy, no religion that has said yes to life?" The 'yes to life' by Nietzsche is, therefore, seen as the cornerstone of transhumanist philosophy. It is a moment of fundamental rupture from all the philosophies and religions of the past.

Also the reference to the human condition as 'tragic' reveals that Esfandiary's reference to Nietzsche is well pondered. Why did loyalty to Heaven, or pessimistic resignation, triumphed over loyalty to the Earth and every optimistic philosophy of the future? Esfandiary answers this question by distinguishing between past and present: "In view of humankind's tragic plight this age-old pessimistic *no* is understandable" [22, p. 222]. Less understandable is the reason why, even today, we persist in basking in pessimism or hoping to escape from the world. According to Esfandiary, "[t]oday we are still saying *no* to life though for the first time our evolutionary triumphs are loudly saying *yes*. Pessimism remains a fashionable intellectual posture still equated with realism even though *Realism* is being turned upside down" [22, p. 222].

To say 'yes to life,' the individual has, first of all, to understand the value of one's own life. In other words, one has to reassess egoism as a positive force, after we have been taught for millennia that only altruism has a positive value. Just like Ettinger, Esfandiary praises Nietzsche for his braveness and states that the "strengthening of the ego is helping to humanize the individual" [22, p. 140].

Starting from Nietzsche's ideas to go beyond them, by drawing scenarios that the German philosopher had not anticipated or imagined, is a pattern of reasoning that comes back also in the later works of Esfandiary.

In 1973, the Iranian scholar publishes *Up-Wingers: A Futurist Manifesto*, a book in which he affirms the need to take a new political path, alternative to traditional ideologies of the Right and Left, in order "to transcend more rapidly to higher levels of evolution" [23].

Esfandiary is convinced that we are "at all times slowed down by the narrowness of Rightwing and Left-wing alternatives," and this happens because "[t]he premises of the entire Left are indistinguishable from those of the entire Right." In other words, "[i]t is no longer only the Right that is conservative. The entire Left is also suddenly conservative."

That the conservative Right is suspicious of any change is a well-known fact. Even if it has accepted capitalism, which is a disruptive force capable of undermining every traditional way of thinking and acting, the Right remains contradictorily linked to the morals and religious beliefs of the past. What appears to be new, at the beginning of the 1970s, that is immediately after the 1968 uprising and in conjunction with the spread of the hippie counterculture, is that the Left has also become conservative. If the Right is opposed to progress in the name of tradition, the liberal and the radical Left paradoxically resist progress in the name of progress.

Esfandiary reports a list of falsely progressive positions of the so-called progressives: "The Space Program? That is a waste of money they protest. The money ought to be spent on more important things. Genetic Engineering? That is dehumanizing. It will lead to push-button people. New concepts of reproduction such as out-of-the-womb? That is hideously impersonal — mechanical. Modern technology? Dehumanizing. It is robbing us of privacy and individuality — upsetting the balance of nature. Every breakthrough is viewed as a threat. Every new idea viciously attacked as anti-human simplistic utopian."

This is the reason why the futurists must abandon, even nominally, any adherence to the Right and the Left. The choice must no longer be confined between being 'Left-Winger' or 'Right-Winger,' or going to the extremes of these ideological positions, or positioning in between them, at the center of the conventional political spectrum. We need to sweep away the traditional political scheme, embracing the 'Up-Winger' political philosophy, which makes of self-directed evolution its main postulate.

In the context of this discourse, when it comes to indicating the thinker of the past that laid the foundations for this vision, Esfandiary quotes Nietzsche. These are his words: "In this late twentieth century we Up-Wingers are launching an upheaval greater than any movement greater than any revolution in our entire past. This is a Cosmic Upheaval which will not simply catapult us to a higher history as the visionary Nietzsche had anticipated — but to something far more transcendent — a higher evolution."

Again, there is a recognition of Nietzsche's crucial role in Western philosophy, along with a distinction from his thought. Esfandiary climbs on the shoulders of the giant, to see further. Nietzsche would have taken a step in the right direction, but not long enough, as he only dreamt of a 'higher history' and not of a 'higher evolution.'

In 1988, Esfandiary legally changed his name into FM 2030, to break with the tribal practice of given names. The following year, with the new name, he signs what is perhaps his best-known book inside the transhumanist circles: *Are you a Transhuman? Monitoring and Stimulating Your Personal Rate of Growth at a Rapidly Changing World* [24].

Here too, we find Nietzsche quoted. More precisely, FM 2030 reports fragments of his previous books in which he quoted the German philosopher. This is proof that we are not in the presence of impromptu quotations, but of a pattern of thought which he never abandoned – a transhumanist thought scheme that we think is correct to define 'quasi-Nietzschean.'

5. Nietzschean Transhumanism

A first unambiguous endorsement of some key concepts of Nietzschean philosophy by a leading exponent of the transhumanist movement can be found in the article "Transhumanism: Toward a Futurist Philosophy," written by British philosopher Max More (born Max T. O'Connor). Here, the author contrasts the entropic character of religions with his extropian philosophy. More takes a phenomenal perspective, making it clear that extropianism is only a type of transhumanism. In other words, he recognizes the multiple dimension of transhumanism, by writing that "[t]he alternative to religion is not a despairing nihilism, nor a sterile scientism, but a transhumanism. Humanism, while a step in the right direction, contains too many outdated values and ideas. Extropianism – the form of transhumanism being developed here – moves beyond humanism, focusing on our evolutionary future" [25].

Afterward, the author states that the Nietzschean idea of Übermensch is an extropic idea, that is, an idea characterizing a variety of transhumanism. Precisely, he writes that "Religion justifies complacency and stagnation. The religionist has no answer to the extropian challenge put by Nietzsche's Zarathustra: 'I teach you the overman. Man is something that is to be overcome. What have you done to overcome him?'" [25, p. 6].

As many historians of ideas have noticed, Nietzsche is not to be seen as the philosopher of nihilism, as claimed by some of his critics, but as the philosopher who wants to go beyond nihilism, understood as the absence of values and purposes. Nietzsche is sometimes seen as a nihilist because he preaches the overcoming of Christian values. Those who believe that Christian values are the only authentic values can only see the *pars destruens*, and not the *pars construens* of Nietzschean philosophy. We should never forget, however, that Nietzsche believes Christian values to be negative ones. These values must be overcome because they represent the annihilation of more authentic values. According to the German philosopher, the roots of nihilism are actually traceable back to Christianity, seen as a counter-nature worldview. Christian beliefs have replaced Pagan values, which were closer to human nature. Once the beliefs in God and the afterlife disappear, nothing remains. That is why secular explicit nihilism can be seen as the offspring of Christian implicit nihilism.

More expresses this idea as follows: "I agree with Nietzsche (in *The Will to Power*) that nihilism is only a transitional stage resulting from the break-down of an erroneous interpretation of the world. We now have plenty of resources to leave nihilism behind, affirming a positive (but continually evolving) value-perspective" [25, p. 6].

Being the main promoter of extropianism, the British philosopher does not only emphasize multiplicity and diversity. He also states that "[t]he extropian philosophy being developed and expressed in this journal is the most complete form of transhumanism so far" [25, p. 10].

Taking up the subject in 2010, in the wake of the debate opened by Sorgner, More admits, however, his lack of knowledge about the use of the term 'transhumanism' by Julian Huxley some decades earlier [26, p. 2]. In other words, he affirms the superiority of his form of transhumanism, without however knowing all the forms of transhumanism already existing. This does not detract from More's valuable contribution to transhumanism. It is well known that in philosophy, science, and technology, discoveries and inventions are almost always 'multiples.' They are done independently by different researchers in different regions of the world because they are 'in the air,' they are prepared by the *Zeitgeist*, the overall research front [27, pp. 343-370].

From the perspective of the history of ideas, what is really relevant is the socio-historical impact of an idea. The association between Nietzsche and the transhumanism proposed by More has left its mark. To provide just one example, it is taken up in a classic of transhumanist thought: *The Singularity is Near* by Ray Kurzweil [28, pp. 373-374].

If More was the first to propose a strong association between Nietzschean philosophy and transhumanism, others have followed this path. In the book *Biopolitics: A Transhumanist Paradigm* by Stefano Vaj, published in Italian in 2005 and English in 2014, Nietzsche is cited thirty-one times, mostly in an approbatory way [29].

It should, however, be recalled that the already mentioned 2009 article "Nietzsche, the Overhuman, and Transhumanism" by Sorgner has reportedly been the most impactful contribution to Nietzschean transhumanism. The author states that, when he first became familiar with the transhumanist movement, he immediately thought "that there were many fundamental similarities between transhumanism and Nietzsche's philosophy, especially concerning the concept of the posthuman and that of Nietzsche's overhuman" [6, p. 29]. Sorgner underlines that "Nietzsche upheld that the concept of the overhuman is the meaning of the earth" and adds that "the relevance of the posthuman can only be fully appreciated if one acknowledges that its ultimate foundation is that it gives meaning to scientifically minded people." To those that consider any reference to Nietzsche inconvenient or inadvisable, Sorgner replies as follows: "I do not think there is anything wrong or abominable about that" [6, p. 42].

6. A-Nietzschean Transhumanism

To this category belong all the documents that contain ideas and theories respecting the following two conditions: 1) they are labeled as 'transhumanist' by their authors, or by critics and readers with the agreement of the authors; and 2) do not make any explicit reference to the works of Nietzsche.

On a par with Ettinger and FM 2030, Max More has strongly associated transhumanism with the idea of life extension and immortalism. For instance, he writes that "science, technology and reason must be harnessed to our extropic values to abolish the greatest evil: death. The abolition of aging and, finally, all causes of death, is essential to any philosophy of optimism and transcendence relevant to the individual" [25, p. 10].

Many transhumanist scholars contribute, on the philosophical or scientific level, to the struggle against aging and death, without referring to Nietzsche and his philosophy. An example in this sense is represented by Aubrey de Grey and Michael Rae's book *Ending Aging* [30]. It should be noted that the authors do not use the term 'transhumanism' either. However, De Grey participated in several events organized by the *World Transhumanist Association*. In particular, at the Transvision conference held in Helsinki in 2006, De Gray said that he can accept having his work labeled as transhumanist, or otherwise associated with transhumanism, provided that one refers to the philosophy traced by biologist Julian Huxley. Taking a self-evolutionary perspective, Huxley originally conceived transhumanism as follows: "man remaining man, but transcending himself, by realizing new possibilities of and for his human nature" [2, p. 17]. It is worth noting that, at that time, De Gray was busy writing *Ending Aging*.

His clarification is understandable. De Grey develops his research in the field of biomedicine and gerontology. His explicit goal is to extend life indefinitely and, possibly, to defeat death through interventions on the human body. This approach is quite distant from that of other

transhumanists who intend to achieve immortality, or at least radical life extension, through the development of artificial intelligence, the technology of mind-uploading, and the Singularity. De Grey's approach is 'wet' (organic), rather than 'dry' (inorganic).

Through the pages of *Ending Aging* one can easily see that there is no reference to Nietzsche, nor to concepts elaborated by the German thinker, such as 'will to power,' 'eternal return of the identical,' 'overman,' 'death of God,' etc. There are neither hostile nor approbatory mentions. Therefore, we can conclude that this document, undoubtedly important in the history of anti-aging research, represents a good example of a-Nietzschean transhumanism.

Many other written documents belong to this variety of transhumanism. A further example could be the book *Engineering the Human Germline* by Gregory Stock and John Campbell. The authors examine scientific and ethical aspects related to the genetic planning of future generations. In the field of human enhancement technologies, the modification of the germline to produce 'enhanced' children, both from a physiological and cognitive point of view, is one of the fundamental themes of transhumanism. What differentiates contemporary transhumanism from the eugenics of the past is the insistence on the free choice of individuals (in this case, the parents). The coercive role of the government is, generally, excluded. However, governments can still play a role in the process of empowering future generations, for example by facilitating a generalized access to genetic engineering. This can be done through public facilities, or by financing the access to private clinics with public money.

The authors explicitly refer to this perspective, by reporting the point of view of James Hughes, in a section entitled "Other Voices": "To preserve solidarity, we need a new model of collective identity, of 'transhuman' citizenship. Rights and citizenship must be redefined around the abilities to think and communicate, not around human, version 1.0, DNA. As humanity subspeciates through germline therapy, it will be best if we can remain part of the same polity, a common society of mutual obligation and tolerance, for as long as possible" [31, p. 132].

The 'transhumanist' character of Stock and Campbell's discourse is quite evident. However, they do not refer to Nietzsche, nor do they mention authors who refer to Nietzsche in the section "Other Voices". We can, in this case also, conclude that we are in the presence of a-Nietzschean transhumanism.

7. Anti-Nietzschean Transhumanism

Having to propose an example of anti-Nietzschean transhumanism, the first thought goes to the article "A History of Transhumanist Thought" by Nick Bostrom. Perhaps it is an exaggeration to say that Bostrom takes an anti-Nietzschean position. One cannot find in his article harsh criticism of the German philosopher's ideas. The point he makes is that, contrary to appearances, Nietzschean d transhumanism do not have much in common. His work could have been labeled as a-Nietzschean if it had just ignored the German philosopher.

However, there is a direct reference to Nietzsche and we have to take it into account. With his article, Bostrom was probably responding to Max More, who – as shown above – had instead pointed out the relevance of Nietzsche's work to transhumanist philosophy. It should also be noticed that the *World Transhumanist Association* was founded by Nick Bostrom and David Pearce as an alternative to Max More's *Extropy Institute*, and with the intention of proposing a mainstream version of transhumanism. By considering the context, one can find concrete elements to argue that Bostrom's position is ultimately anti-Nietzschean.

Bostrom writes: "It might be thought that a major inspiration for transhumanism was Friedrich Nietzsche, famous for his doctrine of der Übermensch" [7, p. 4]. With this incipit, he recognizes that the association between Nietzsche and transhumanism is far from being weird. Indeed, it seems rather obvious.

At this point, a question spontaneously arises: what does the word 'Nietzsche' evokes in the author's mind? Indeed, the ideas given us by the German philosopher are many and so are the uses that have been made of them. Bostrom quotes a Nietzsche's sentence that had already been quoted

by More, providing more evidence that he is mainly answering to the extropian philosopher: "I teach you the overman. Man is something that shall be overcome. What have you done to overcome him? All beings so far have created something beyond themselves; and do you want to be the ebb of this great flood and even go back to the beasts rather than overcome man?" [7, p. 4].

Afterward, he offers his interpretation of the quote. According to Bostrom, what Nietzsche had in mind "was not technological transformation but a kind of soaring personal growth and cultural refinement in exceptional individuals (who he thought would have to overcome the life-sapping 'slave-morality' of Christianity)" [7, p. 4].

Even though his research is historical in character, Bostrom's approach is not phenomenal, but rather noumenal. There seem to be two immutable essences, of Nietzsche and transhumanism, which the author compares. The comparison shows that the two essences have little in common, or are even incompatible. These are the conclusions reached by the author: "Despite some surface-level similarities with the Nietzschean vision, transhumanism – with its Enlightenment roots, its emphasis on individual liberties, and its humanistic concern for the welfare of all humans (and other sentient beings) – probably has as much or more in common with Nietzsche's contemporary the English liberal thinker and utilitarian John Stuart Mill" [7, p. 4].

We speak of 'noumenal perspective,' because among the various Nietzsches we have inherited from history there is also an illuminist Nietzsche, who is recognized by many philosophical handbooks and monographs, unlike Bostrom's article. Indeed, historians of ideas speak of an 'Enlightenment period' or 'Enlightenment phase' of Nietzsche's intellectual life which begins with the writing of *Human, all too human*, in 1878, and end with the publication of *The Gay Science*, in 1982 [32], [33], [34], [35, p. 11], [36, pp. 39, 125]. It is a phase in which the German philosopher distances himself from his master Arthur Schopenhauer and his friend Richard Wagner, from the arts and from romanticism, to celebrate the philosopher educated in the sciences. In this period, Nietzsche adopts the genealogical-historical method to explain the evolution of human morality, and defends freedom in its most radical form.

It is clear that, for Bostrom, Nietzsche is rather the romantic philosopher who celebrates the superior man and despises the inferior man, rather than the neo-Enlightenment philosopher who wants to free humanity from superstitions and lies. Nor does Bostrom recognize Nietzsche as the philosopher who indicates in self-directed evolution, through the selection and breeding of the offspring, the road that will lead humanity to evolve into a super-humanity [37]. Also of interest is the fact that, in defining the essence of transhumanism, Bostrom puts the concept of 'overhuman' in a position subordinated to the postulates of Left-wing liberal thought. We specify 'Left-wing,' because Right-wing liberalism, being very close to social Darwinism, has never shown particular compassion or attention to the needs of the masses either. It seems that, according to Bostrom, a 'true transhumanist' has, first of all, to defend individual rights, adopt a utilitarian philosophy, and desire the welfare of all humanity. Only if these conditions are respected, the effort to generate new sentient species is legitimate and fully transhumanist.

Indeed, even accepting for the sake of discussion the conclusion that Nietzsche did not have in mind the evolution of humankind by technological means, it is striking that a major similarity between transhumanism and the liberal thought of John Stuart Mill is affirmed. As far as we know, Mill never said that it is necessary to overcome humanity and create a superhuman species by means of technological tools either. The association between transhumanism and Mill reveals that, in Bostrom's view, transhumanism is an updated form of 19th-century liberalism.

There is little doubt that, in spite of his well-known eclecticism, there is no way to find a liberal-democratic Nietzsche in the folds of his writings. Nietzsche is, indeed, an enemy of democracy, which he sees as a sublimation of Christianity, as the new weapon that the weak may use to curb the strong. Nor Nietzsche is particularly sympathetic with utilitarianism. In light of these considerations, it does not seem risky to conclude that the position expressed by Bostrom in his article is not merely a-Nietzschean, but anti-Nietzschean.

8. A Conclusive Note

In the limited space of an article, it is impossible to carry out an exhaustive research on the reception and diffusion of Nietzsche's ideas in the transhumanist movement. We did, however, provide a meta-analytical frame that could be used to produce further and more detailed research on this topic.

It must also be noticed that, here, we scanned only books and articles in English. During the quantitative phase of our meta-analysis, if we had also searched for documents in German, French, Italian, Spanish, and other languages, the total sum of items detected would have obviously been much higher. And if we had taken into consideration exemplary works in other languages, our typology would have been richer also from a qualitative point of view. A more comprehensive research would actually be fully justified, if we consider that Nietzsche is a German philosopher particularly appreciated by French and Italian postmodernist thinkers, and that the debate on Nietzsche and transhumanism is certainly more relevant to continental philosophy than to analytic one. However, we could not broaden too much the scope of the research, since we wanted to stay within the parameters of an academic article.

Despite the limited number of examples discussed, we still learn something from them. Once the difference between the noumenal and phenomenal perspective is clearly understood, one realizes that, to a large extent, the discussion on Nietzsche and transhumanism is not so much an attempt to understand reality as an attempt to forge it. To 'choose' the roots of transhumanism is a way to give this philosophy a direction in the future.

Thus spoke Nietzsche's Zarathustra:

I am of today and of the past... but there is something in me that is of tomorrow and the day after tomorrow and of days to come... [38, p. 101].

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