

Technology as a Threat to the Image of Human Being in Times of “Metaphysical Neutralization” according to Hans Jonas

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Abstract. *In this article, we will analyze how, according to Hans Jonas, technology (more specifically biotechnology) presents itself as a threat to the image of the human being and, conversely, how the ethics of responsibility, being an ethics of the future, must take on the task of preserving this image. To do this, we will begin by analyzing the concept of image and how the advance of technological powers has ended up leading to the meliorist program of supposedly perfecting the human being, even though [1] he lacks an image as a reference for such reform (given that we are in the era of “metaphysical neutralization”) and that, as a consequence, [2] it contains unprecedented and irreversible risks that can lead to the impoverishment and perishing of the image of Human Being as we have known it until now. We will see how Jonas opposes Bloch’s “ontology of not-yet-being” to an ontology of the “already there” of the “true man”. If, in the first case, it is a question of opening up the image of Human Being to the reform of meliorist projects, in the second it is a question of preserving him as a being of freedom and, above all, of responsibility.*

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Introduction: Human being’s image at risk

Hans Jonas’ concern with the *image*¹ of the world, and especially of the human being, recurs in different perspectives of his work. As early as the preface to *Das Prinzip Verantwortung*, he demonstrates that it is necessary to approach this issue from two perspectives: on the one hand, a substantial concern for the survival of the species; on the other, a formal concern, which concerns the integrity of its essence. In his words: «it is not only about the

¹ Rubio inserts Jonas’ thought among the theorists of Bildwissenschaft: «From the very beginning of image science, Hans Jonas’ philosophy has influenced it. In 1994, Gottfried Boehm published Jonas’ article *Homo pictor: Von der Freiheit des Bildens* in his anthology *Was ist ein Bild?* This anthology quickly became a must-read reference book and contributed decisively to the dissemination of Jonas in the field of *Bildwissenschaft*. Another important achievement in the reception of Jonas as an image theorist occurred in 2005, with the publication of Lambert Wiesing’s text, *Artifizielle Präsenz. Studien zur Philosophie des Bildes* (Wiesing 2005). Wiesing reconstructs the debate in the philosophy of the image, highlighting three approaches - anthropological, semiotic, phenomenological - and characterizes Jonas with his thesis of homo pictor as one of the main references for a philosophy of the image with an anthropological orientation» (Rubio 2014, 67-68). On the subject, see also: Oliveira (2024a); Oliveira (2024b); Tibaldeo (2019); Tibaldeo (2017); Rubio (2019). On the question of Image Theory in Jonas’s philosophy, see Fossa & Tibaldeo (2024).

fate of human being, but also about the image of man [*Bild des Menschen*], not only about physical survival, but also about the integrity of his essence» (Jonas 1979, 7).² In these terms, ethics must not only be capable of preserving human being as a species (humanity), but also of guarding his genetic heritage (in both a substantial and a formal sense, as we will see). In both respects, what is at stake is the ability to foresee the dangers contained in technological advancement, both in the sense that technology is threatening the very existence of humanity, and in the perspective that it is taking on the program of reforming human beings, with a view to their supposed improvement. However, for Jonas, these two perspectives are interlinked and must include responsibility for all other living beings, given that the very image of human being depends on how he shares his existence with the other living beings on the planet. That is why he states that it is impossible to separate these two planes without disfiguring the image of human being: «in fact, the two cannot be separated without making a caricature of the human likeness—since, rather, in the matter of preservation or destruction the interest of human being coincides, beyond all material needs, with that of life as his worldly home in the most sublime sense of the word» (Jonas 1984, 136). Refusing reductionist anthropocentrism, Jonas believes that preserving an authentic image of human being also means preserving the conditions for his co-participation in the realm of the living, which also defines him. To the extent that species become extinct, the very image of human being that depends on them to exist, both substantially and formally, is altered. This would lead to an «atrophy of his essence» (Jonas 1984, 136), produced by the same mechanism that led to the anthropocentric reductionism that jeopardizes “his biological maintenance” and the “dignity of his Being”. For Jonas, it is no coincidence that the preservation of nature is therefore intimately linked to the preservation of the image of the human being itself, and this does not involve any reductionist statement, but calls for a «de-centered humanism» (Frogneux 2012, 435), in which the image of human being is dependent on the image of nature itself in its fragile balance: «Ourselves being among her children, we owe allegiance to the kindred total of her creations, of which the allegiance to our own existence is only the highest summit. This summit, rightly understood, comprises the rest under its obligation» (Jonas 1984, 137).

The problem is exacerbated precisely when technology is taken on as one of the central marks of human identity itself, in other words, as an integral part of the image that modern/contemporary human beings project of themselves. In the end, human being is no longer a technological agent, but applies technology to himself, making himself an object of technology: «In the image he entertains of himself – the programmatic idea which determines his actual being as much as it reflects it – man now is evermore the maker of what he has made and the doer of what he can do, and most of all the preparer of what he will be able to do next» (Jonas 1984, 9). It is therefore human being’s image of himself that guides technological action, because he recognizes it as associated with his power to intervene on himself. Human being is, after all, a technological human being for himself, clothed in the vocation of expanding and applying his powers, which, after all, today is clothed in a *moral obligation* to make his own power progress *ad infinitum*.

For Jonas, one of the greatest dangers is that what we are (our image) we will be controlled by machines, a risk whose consequence would be to diminish one of his most undeniable trademarks: freedom. This is precisely what is at stake with the advance of powers.

² We shall cite some passages directly from the German work, as Jonas omitted them in the English version, resulting in a significant difference in the final two subchapters between the German and English editions. In these cases, the reference will appear as 1979 (and not, as in the case of the English version, 1984).

Since it is the image of human being that is at stake, then, says Jonas, it is up to ontologically founded ethics,³ such as his, to take this challenge into account:

Somewhere along the line of increasing social manageability at the price of individual autonomy, the question of the worthwhileness of the whole human enterprise must pose itself. Answering it involves the image of human being we entertain. We must think it anew in light of the things we can do with it or to it now and could never do before. (Jonas 1984, 19).

The fact is that the detection of this challenge is, in some way, not just the detection of a danger, but already of damage. It is the unprecedented power to alter the image of human being, therefore, which is already presenting itself in its “real” and not just “fictitious” or “possible” face – and in some cases already through its damage, that demands a responsibility – on the one hand with the existence of the human being and, on the other (as we are interested in in this text), with his image. For Jonas:

Just as we should not know about the sanctity of life if we did not know about killing, and the commandment “Thou shalt not kill” had not brought this sanctity into focus; and just as we should not know the value of truth without being aware of lies, nor of freedom without the lack of it, and so forth – so also, in our search after an ethics of responsibility for distant contingencies, it is an anticipated *distortion* of man that helps us to detect that in the normative conception of man which is to be preserved from it. And we need the *threat* to the image of man – and rather specific kinds of threat – to assure ourselves of his true image by the very recoil from these threats. (Jonas 1984, 26-27).

However, it is precisely technology that poses a threat to this image, given its potential to damage humanity’s genetic heritage. Jonas, therefore, adds the question of image to his analysis of the advance of the powers that make up our «technological civilization». Let’s see how this happens.

Technology as a threat to human being’s image

Technology is one of the most central subject to Hans Jonas’ work. At least three of his most important works make direct reference to the theme in their title or subtitle: *Philosophical Essays: From Ancient Creed to Technological Man* (Jonas 1974); *Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation* (Jonas 1979); and *Technik, Medizin und Ethik* (Jonas 1985). In addition, various articles, conferences and essays deal with the subject,⁴ demonstrating its importance, either as a diagnosis or as part of an effort to understand what would be «both a central and pressing problem of all human existence on Earth» (Jonas 1987, 15). Bearing in mind what Jonas says in the first chapter of *Technik, Medizin und Ethik* when answering the question «why modern technology is an object of philosophy», one could even conclude that all these texts form part of a project (ultimately unrealized) to develop a Philosophy of Technology, supposedly made up of three parts: a description of the phenomenon (in philosophical, historical and sociological terms), an analysis of its aspects (philosophical, gnoseological and epistemological) and an assessment of its consequences, effects, dangers and threats (in ethical and political terms). As can easily be concluded, Jonas dedicated himself especially to the third part of this project, so much

³ On the ontological roots of Jonas’ ethics, see Hauskeller (2015); Oliveira (2012).

⁴ Jonas (1981; 1988a; 1971) between others.

so that his magnum opus of 1979 could even be considered a chapter of the larger (I insist: unimplemented) project of philosophical understanding of technology, considered as «a subject of philosophy» for which it would be «necessary for there to be such a thing as a philosophy of technology» (Jonas 1987, 15), a discipline that was, in the 1980s, still “quite incipient” and “still needs to be worked on”. To this end, Jonas states, his text is an attempt to fulfill this project: «what follows intends to begin by asking about the specificity of this new technology, which immediately seems endowed with attributes as extreme as utopian promise and apocalyptic promise, with an almost eschatological quality in any case» (Jonas 1987, 15).

Between utopia and apocalypse, modern technology is gradually taking on the task of producing (altering, modifying, reforming) the image of the world in which we live – which includes changing the image of the human being itself. The first problem listed by Jonas concerns the “formal dynamics” of this task; the second, its “substantial content”; and the third, the absence of an ethical orientation for its action. Regarding the *first aspect*, Jonas states that modern technology (which deserves to be characterized as technology) is formally different from pre-modern technology precisely because it is a «continuous collective enterprise that advances according to its own ‘laws of motion’» (Jonas 1987, 15). For him, in the pre-modern era, technology was a “possession” and a “state”; now it is an “enterprise” and a “process”. In other words, it acts according to its own laws, according to its interests dictated⁵ from within the technological environment. This formal dynamic carries a risk precisely because, given the magnitude and ambivalence of its powers, decisions about which world and which human being should be imagined and “created” are taken unilaterally and with such speed and haste that they increase the risks, to the extent that they hinder and prevent any assessment of the validity and viability of its alleged “progress”. Given over to this dynamic, technology appropriates all *knowledge*, using it immediately for the interests of *doing*, cumulatively increasing the magnitude of its *power*. *Knowing*, *doing* and *power* are, therefore, part of this dynamic that dismisses any critical or evaluative element, which are considered obstacles to the advance of power. In “permanent activity”, guided by the logic of progress (see Oliveira 2023), technology brings together these three dimensions as part of the same process: the former nobility of knowledge is replaced by the logic of utility in order to transform the world; knowledge is used as a mere instrument for this. Jonas’ example is very expressive: «the thing is more like the relationship between being able to breathe and having to breathe than between being able to speak and speaking» (Jonas 1987, 44). Since there is no longer any separation between these three spheres, the formal dynamics of technology are mobilized around its own unbridled growth (on the horizon of what Jonas calls, using a Nietzschean expression, the «will to *unlimited power*» [Jonas 1987, 23]).

The reference in this case is obvious: technology develops based on modern science, which provides it with the conditions for continuous growth. For the philosopher, «if this or that new possibility has once been opened up (most of the time thanks to science) and developed on a small scale through action, it is proper for it then to force its application on a large scale and on an ever larger scale, as well as to make this application a permanent vital necessity» (Jonas 1987, 45). It is therefore as a “vital necessity” that technology advances into all areas of modern human life, like that «Prometheus definitively unchained» to which Jonas refers in the first line of the preface to the original (German) version of *Das Prinzip Verantwortung*: «The definitively unchained Prometheus, to whom science confers previously unimaginable powers and economics the indefatigable impulse, cries out for an

⁵ Jonas obviously has in mind that technology is guided by the interests of the socio-economic regime it serves; therefore, by saying that it is left to its own laws and interests, he simply wants to emphasize that it lacks any extra-technological control (of an ethical or political kind).

ethic that, by means of voluntary brakes, prevents the power of men from becoming a misfortune for themselves» (Jonas 1979, 7). Supported by science and driven by economic interests, technology has become the central hallmark of our civilization, characterized not by chance by Jonas as a «technological civilization».

As for the *second aspect* of Jonas’ analysis, i.e. the “substantial content” of technology, the advance of technology in the accumulation of new instruments is also noteworthy, which means that the imagination of new worlds and people can be realized almost immediately. What is imagined by scientists and futurists, in other words, immediately passes into the workshops of creators who always have new and more powerful instruments capable of bringing to reality what was previously only imagined. From *knowing*, we immediately move on to *doing*, because technological tools and powers are constantly being developed, improved and expanded. The substantial content of technology thus consists of «the things it brings to human use, the assets and powers it confers, the new goals it opens up or dictates and the very new forms of human action and conduct» that result from it (Jonas 1987, 17).

In these terms, note how Jonas’ analysis considers the fact that new technological instruments are tools that make it possible to implement projects and, with this, decisively alter the objectives of human life and the ways in which we act in the world. The advance in technical instruments and devices⁶ thus accounts for the advance in the history of the different sciences: «the succession of technology reflects that which is also present in science: mechanics, chemistry, electrodynamics, nuclear physics, biology» (Jonas 1987, 30). This occurs, according to Jonas, because scientific knowledge gradually becomes available to be used by the different technologies, causing an advance both in terms of knowledge of the object itself of each science and in the artifacts/instruments themselves used by the particular sciences: «in general, a science is ripe for its application to technology when in it – to use Galileo’s terms – the ‘resolutive path’ [“via resolutiva”] – analysis – is as advanced as the ‘compositional path’ [“via compositiva”] – synthesis – can employ the basic elements thus liberated and quantified» (Jonas 1987, 30).

The list of sciences analyzed by Jonas tells the story of this association between knowledge and its application or, better still, between advances in knowledge and the powers it offers in terms of putting into practice what was previously just an idea or an imagination. In this list, according to Jonas, biology occupies the last (most recent) step: «only now», he says, «has biology reached this point: with molecular biology comes the constructibility of biological formations» (Jonas 1987, 30). In other words, the new knowledge of molecular biology makes possible a new power of an unprecedented kind: the creation of new biological forms. In thinking about the “phases” of modern technological revolutions, Jonas concludes that the living object (life in general) was the one that most resisted this process of appropriation through the methodology that was already being practiced in the other sciences, although, being a cumulative history, life science was able to rely on advances in other areas to make the new processes possible. However, for Jonas, this is also the most dangerous phase, since, unlike in other areas, in the case of biology the “user” of the technology becomes its object: «we are perhaps on the threshold [*Schwelle*] of a technology that relies on biological knowledge and offers us a capacity for manipulation that

⁶ These can include the various electronic devices that have become part of our lives (smartphones, computers, tablets), but also industrial equipment that has changed production methods (robots, CNC machines, 3D printers), educational tools that have changed the way we learn (online teaching platforms, digital interactive whiteboards, extended reality devices), health instruments (CT scanners, ultrasounds, heart monitors), applications and software (editing tools, management systems, communication applications), communication technologies (antennas, satellites, IoT devices, the Internet of Things) and the whole range of scientific instruments that have given scientists in laboratories previously unimaginable powers (electron microscopes, telescopes, spectrometers); etc.

has man himself as its object» (Jonas 1987, 39). In other words, the knowledge of biology (such as molecular biology at the time and all the subsequent developments, which – as we know – are truly impressive, to say the least) has now made it possible to genetically manipulate its object. However, in the case of biology, that object is life itself, which obviously includes the human being who, from being a technological agent, becomes one of its many objects.

The meliorist program as a reform of the image

Now, it is precisely in this context that Jonas refers to the underlying problem of this process that underlies the whole desire to improve human beings, who begin to apply to themselves the powers born of that sum of *knowledge* and *doing* that comes from genetic engineering and all the other techno-scientific activities that come from the biological field. For him, «with the appearance of molecular biology and its understanding of genetic programming, this became a *theoretical* possibility... and a *moral* possibility, through the metaphysical neutralization of the human being» [*metaphysische Neutralisierung des Menschen*] (Jonas 1987, 39). Jonas refers here to altering the genetic programming of living beings as a “*theoretical* possibility”, but we know that it is no longer just that; quite the opposite, it has gone from theory to practice and from possibility to actual reality in a very short space of time, as is the case with genetically modified organisms, genetic therapies, cloning, stem cell studies or even synthetic biology. Several of these themes even appear in the essays that make up *Technik, Medizin und Ethik*, which proves that Jonas was no stranger to the speed of the techno-scientific advance of his time. What he draws attention to here, however, is the fact that possibility (theoretical or even practical) must also be treated as a «*moral* possibility», precisely because the appearance of this possibility as possibility occurs in a scenario that he characterizes as the «metaphysical neutralization of the human being», that is, a moment in which any image (idea, concept, nature or essence) of the human being is rejected.

The problem for Jonas is that, without an *image* of humanity,⁷ any meliorist project is morally rendered unfeasible from the outset, as it involves questioning which model would serve as the basis for redesigning or reforming the human being. As the most perilous field, this is precisely the one that most challenges morality, for it pertains to an unprecedented power applied by humanity upon itself, precisely at a moment when it experiences its greatest crisis – the crisis of its own identity or self-understanding – through the nihilistic denial of any metaphysical element capable of guiding, beyond technological parameters, any interventionist approach of technology upon what could be considered the “inherent” characteristics of the human being. Such characteristics include, for instance, genetic manipulation aimed at delaying aging, the supposed cure for death, or even the control of emotions, among others. It is worth noting that, insofar as aging and dying, for instance, constitute central aspects of the image humanity has of itself throughout its evolutionary history (an element that we can, broadly speaking, characterize as “metaphysical”, in that it concerns a hitherto unalterable characteristic that has provided humanity with an element unique to its condition), the alteration of these aspects demands a questioning that must also take place within the metaphysical domain. In other words, it is technology itself that demands a metaphysical response, as it operates upon metaphysical aspects of human existence. The refusal of such aspects – that is, their neutralization – thus assumes an

⁷ On that topic, see Tibaldeo (2023); Becchi & Tibaldeo (2016).

unprecedented perspective of danger regarding what humanity can do to itself, or rather, with itself. It is precisely in this sense that technology demands an engagement with «the metaphysical question» within the field of ethics, as Jonas asserts in the last of the five aspects that, according to him, demonstrate «why modern technology is an ethical object» in the second chapter of *Technik, Medizin und Ethik* (Jonas 1987, 42).

For Jonas, this neutralization presents itself as an anti-essentialist perspective of contemporary ethics, leaving the very object (humanity) at the mercy of any type of intervention: «this neutralization, which undoubtedly allows us to do whatever we want, simultaneously denies us the guide to know what we ought to want» (Jonas 1987, 39). In this way, technological nihilism (“everything is permitted”) converges with ethical nihilism (no limits to action or power). The claim for absolute freedom of technology to use knowledge in the service of power ultimately unfolds into an unprecedented danger. For the author, this unprecedented event was triggered by the very «theory of evolution of which genetics is a cornerstone», insofar as this theory «has deprived us of a valid image of the human being (because everything emerged indifferently, by chance and necessity)». Consequently, it has exposed humanity to the experiments that characterize “factual techniques”, which, as they advance in understanding their object, find us «woefully unprepared for their responsible use» (Jonas 1987, 39). In other words, ethical nihilism produces an unprecedented crisis insofar as it empties human action of notions of good and evil, even as technological powers, which most urgently require such a stance, continue to grow.

Jonas recognizes that the theory of evolution (whose philosophical consequences he analyzes and whose scientific assumptions he adopts in *The Phenomenon of Life*) has ultimately exacerbated the tendency of modern science to deny teleology or purpose in nature. This teleology has now been replaced by outcomes that are merely the product of “evolutionary chance”, which have denied «valid essentialities that would grant them their sanction», thereby authorizing any kind of intervention, even those that risk altering the very image of the human being as it was inherited through evolutionary history. We live in the era of «freedom devoid of norms» (Jonas 1987, 40). This is precisely what is at stake in the field of biotechnology,⁸ insofar as “the technological invitation of the new microbiology doubles both its physical feasibility and its metaphysical admissibility”: first, because it can act, and second, because in acting, it alters the very elements it denies through its actions (the “essence” of the human being). Although, according to Jonas, the biologists of his time still harbored doubts about the direction of this entire process (doubts that, nearly fifty years later, we no longer have), one thing is certain: all believed in the “right to its exercise”, or even more so, (almost) all claimed the freedom to continue acting according to the formal logic that has driven the history of technology until it reached the biotechnological domain. The greatest danger, therefore, lies in the success (and not the failure) of technology, insofar as its defenders, the scientists, have lost the capacity to critically evaluate the consequences of their actions. This is why Jonas speaks of an intoxication born from the scientists’ fascination with their own powers: «judging by the rhetoric of its prophets, the idea of ‘taking the reins of our own evolution’ [*Entwicklung*] is intoxicating even for the men of science» (Jonas 1987, 40).

⁸ Becchi (2010, 49) speaks of a risk of «destruction of the biological integrity of man». Also, Becchi (2008) highlights how the power of technology operates in the face of the vulnerability of life as a whole, including human life.

Image and metaphysics

The idea, therefore, of reforming the human being lacks an ethical evaluation regarding what is altered and, even more so, the risks inherent in this endeavor concerning the alteration of the image of the human being that present generations have inherited from the past and of which they are (or should be) the protectors. For this reason, if «the idea of reworking human constitution or ‘designing our descendants’» is no longer a «mere fantasy», it is also true that it confronts an «inviolable taboo» that is increasingly threatened by the advancement of new powers. It is this “taboo” of the image that ought to be preserved which, therefore, runs the risk of being irreversibly altered:

If *this* revolution occurs, if technological power begins to craft the fundamental keys upon which life will have to play its melody – perhaps the only such melody in the universe – for generations to come, then reflecting on what is humanly desirable and on what must determine the choice – in short, reflecting on the “image of man” – will become more imperative and urgent than any thought that mortal reason could demand. Philosophy, let us admit, is lamentably unprepared for this task, its first cosmic task. (Jonas 1987, 40).

Unprepared philosophy cannot assume such a task precisely due to the anti-metaphysical and nihilistic movement that, in contemporary times, discredits any reference to what must be preserved: without such an “image”, it would be impossible to establish any limits to technological intervention, so that even those characteristics most properly human would be subject to biotechnological action, as we have already seen. This situation is further aggravated when we consider the new role, for example, of medicine itself, whose task of healing (restoring an organism to its natural state) is replaced by that of enhancement (augmenting certain potentialities or introducing new ones). For Jonas, this strategy presents itself as a meliorist endeavor, and «nowhere is the meliorist objective [*das melioristische Ziel*] more inherent to the essence of the matter than in medicine» (Jonas 1987, 128), insofar as medicine, supported by technological advances, acts upon the human organism to heal it from deviations imposed by potential illnesses. Like a *homo faber*, the physician becomes an «artist of the body with open-ended purposes» [*zweckoffener Leibeskünstler*], which directly opposes the tradition of medical art. Until now, healing had not been understood as «the production of a thing, but the restoration of a state, and the state itself, even if art is applied to it, is not an artificial state, but precisely the natural state or as close to it as possible» (Jonas 1987, 150). Today, however, the physician is the figure who assumes that (metaphysical) task of altering the constitutive elements of human essence.

In these terms biotechnology approaches the metaphysical question, because it is not only a matter of putting the very existence of the human species on the planet at risk (as in the case of the extinction of life) but also of provoking a definitive alteration in the image of the human being that should exist in the future. The risk inherent in the unrestrained advancement of technology in the realm of life is that it could «ruin its genetic integrity or alter it arbitrarily» (Jonas 1987, 48). This risk «raises the metaphysical question with which ethics had never been confronted before, namely, whether and why there should be humanity; why, therefore, man, as evolution has produced him, should remain preserved, his genetic heritage respected; and even why there should be life at all» (Jonas 1987, 48). Jonas identifies two levels of problems here: the first can be called *substantial*,⁹ as it concerns the very existence of humanity in the future; the second, *formal*, as it pertains to the form of that existence. In the first case, the ethics of responsibility responded with a clear and absolute imperative: «*that there be a mankind*» (Jonas 1984, 43), which means that

⁹ Jonas refers to a «substantive existence» of humanity (1984, 95).

humanity’s existence cannot be subject to gamble. In the second, ethics appeals to the image of humanity to be preserved, emphasizing the mode of existence, or the «condition of future generations» (Jonas 1984, 40) of the human being. In both cases, what is at stake is the metaphysical question of “being”, that is, a question that, in ethical terms, must decide «how much we are authorized to risk in our grand technological wagers and which risks are entirely inadmissible» (Jonas 1987, 48) – in other words, the limits ethics must impose on technological action to preserve being in both its substantial and formal senses. Thus, in both *Das Prinzip Verantwortung* and *Technik, Medizin und Ethik*, Jonas appeals to the capacity of ethics to address this metaphysical problem. For him, «if existence is a categorical imperative for humanity, then any suicidal gamble [*selbstmörderisches Spielen*] with that existence is categorically forbidden, and the technological ventures in which it is at stake, even remotely, must be precluded from the outset» (Jonas 1987, 48). His entire ethical proposal is founded on the responsibility for the use of these powers, aiming to avoid any kind of gamble.

When addressing the «duty toward the existence» (Jonas 1984, 40) in the second chapter of *Das Prinzip Verantwortung*, Jonas distinguishes between two perspectives: «the duty toward the existence and the condition of future generations» (Jonas 1984, 40). For him, the latter is obviously subordinate to the former: existence must first be ensured, and only then can the proper mode of that existence be guaranteed. Altering the image (or, as he refers to it in the 1979 work, the “idea”) of the human being means rejecting a type of ontological responsibility. This is because, for the author, «it follows that the first principle of an “ethic of futurity” does not itself lie *within* ethics as a doctrine of action (within which thereafter all duties toward future beings belong), but within *metaphysics* as a doctrine of being, of which the idea of Man is a part» (Jonas 1984, 44). Jonas is aware that such a statement directly opposes the anti-metaphysical tendency of contemporary society, marked by what he considers to be a dogma: «no metaphysical truth» (Jonas 1984, 44). This appeal to metaphysics should not be mistaken for a return to religion: although Jonas acknowledges that faith offers arguments for thinking about humanity as created in the image and likeness of God, he refuses to ground his ethics in religious terms. For him, metaphysics «has always been a business of reason, and reason can be set to work upon demand» (Jonas 1984, 45). That is, his metaphysical perspective appeals to the investigative power of rationality in grounding principles capable of guiding technological action.

Therefore, «the secular philosopher striving to establish an ethics must, above all, admit the possibility of a rational metaphysics, despite Kant, provided that the rational element is not determined exclusively by the criteria of positive science» (Jonas 1984, 45). This is because, while Kant reduced the scope of reason to the horizon of science, Jonas believes that expanding this scope touches upon a form of metaphysics guided by rationality. And this is not merely a preference of philosophy, but an urgency imposed by the context of biotechnology. It is for this reason that the ethics of responsibility, to address the challenges of the technological landscape, must return to the «ultimate metaphysical choice which can give no further account of itself (perhaps as little as can the self-choice of being which it underwrites)» (Jonas 1984, 80). Such a return to metaphysics must, however, avoid the traditional error of anthropocentrism, inherent in the «Hellenic-Judeo-Christian ethics of the West», given that «the apocalyptic possibilities inherent in modern technology have taught us that anthropocentric exclusiveness could be a prejudice and that it at least calls for reexamination» (Jonas 1984, 45-46). This is because such an ethics does not deal exclusively with human well-being but also with the well-being of all other forms of life, understood as ends in themselves, with whom humans share existence on planet Earth. Preserving different species is part of philosophy’s «cosmic task», since «an impoverished extra-human life, an impoverished nature, also means an impoverished human life» (Jonas 1987, 36). Impoverished, human life loses its constitution and, therefore, impoverishes its image.

The “technological homunculus” and the impoverishment of the human image

The meliorist program carries two central problems according to Jonas: [1] on one hand, it becomes a threat because it rejects any image that could serve as guidance for the intended reform, thereby amplifying the risks inherent in technological action. On the other hand, [2] given the inherent ambivalence of technological action, exacerbated by the vulgarity of the desires and ambitions of current generations, the very absence of such an image increases the risk that the resulting creation will be nothing more than a being which, instead of representing a genuine improvement over the past, would ultimately signify an impoverishment of the human condition as a whole. Since we have already addressed the first aspect above, it is now appropriate to address the second point to examine how Jonas understands these risks and, consequently, how this diagnosis challenges the intoxicated enthusiasm of technological action itself.

Let us begin by emphasizing that Jonas exhibits deep skepticism toward the supposed “progress” or “advances” claimed by technology. For him, the inherent ambivalence of all human actions — and even more so of technological ones, where this ambivalence is compounded by the magnitude of power involved — suggests that apocalyptic ideals appear more probable than utopian ones. From the perspective of the image of humanity, he considers this one of the greatest risks, as the vulgarity of ideals (which can easily be inferred from the spirit governing contemporary life within the capitalist model of society) points to significant concerns. For Jonas, due to the «ontological error of utopia» (Jonas 1979, 383) — the belief that humanity has not yet fully realized itself and must therefore apply the powers it has acquired to transform itself — this would only lead to a “homunculus”, that is, an artificially created creature that, far from enhancing human conditions, would impoverish them, diminishing and miniaturizing humanity: «the really unambiguous man of utopia can only be the flattened, behaviorally conditioned homunculus of futuristic psychological engineering. This is today one of the things we have reason to *fear* of the future» (Jonas 1984, 201).

In other words, the utopia of hope *à la* Ernst Bloch, whose realization Jonas classifies as an «ontology of the not-yet», entails numerous risks, as it may result in an impoverishment of the human condition.¹⁰ For Jonas, this improvement project ultimately signifies an impoverishment and a weakening, precisely because any enhancement of humanity’s image distorts elements intrinsic to it, beginning with the ambivalence of human actions, the unalterable condition of human freedom, and the indispensable responsibility that accompanies it. By attempting to reform humanity’s image with the goal of allegedly improving, enhancing, or perfecting it (as is the case with all meliorist projects, including and especially transhumanism),¹¹ such endeavors would strip the human being of its ambivalent condition. For Jonas, this ambivalence can be considered one of the hallmarks of human authenticity, as it forms the foundation of the exercise of freedom (which exists within the contingency of human existence, erratic and imperfect as it is) and responsibility. This is reflected in the pages of *Das Prinzip Verantwortung*, where Jonas critiques Bloch’s utopian project

¹⁰ Bloch’s thought is analyzed by Hans Jonas to demonstrate the error of utopianism, that is, the fact that belief in utopias lies at the root of this ontology founded on hope. For Jonas, although Bloch did not address the subject nor support the enhancement project of *human enhancement*, it is certain that this project is based on the same idea of utopia.

¹¹ Although the term transhumanism began to be used in futurist contexts as early as the 1970s, Jonas never employed it in his work, preferring instead the terms «meliorism» or «meliorist project». For a history and analysis of the term’s usage, see Oliveira (2020; 2021).

founded on hope, against which the theory of responsibility presents itself as a complementary alternative. The pursuit of an image of a true human being in the future implies a denial of all human history as we have known it thus far. For Jonas:

The basic error of the ontology of “not yet” and its eschatological hope is repudiated by the plain truth – ground for neither jubilation nor dejection – that genuine man is always already there and was there throughout known history: in his heights and his depths, his greatness and wretchedness, his bliss and torment, his justice and his guilts – in short, in all the ambiguity that is inseparable from his humanity. Wishing to abolish this constitutive ambiguity is wishing to abolish man in his unfathomable freedom. In virtue of that freedom and the uniqueness of each of its situations, man will indeed be always new and different from all before him, but never more “genuine”. Never also exempt from the intrinsic perils, moral and other, that belong to his genuineness. (Jonas 1984, 200-201).

There is, therefore, no reason for enthusiastic belief in meliorist projects that aim to alter the human condition by removing its ambivalence. For Jonas, the promotion of an alleged improvement of humanity is the promotion of a «particular image of man» (Jonas 1984, 139), an image forged in the present according to current needs, intentions, interests, and powers, which lacks any certainty regarding its own efficacy. Instead of narrowly promoting such a limited image, ethics should «to keep open the horizon of *possibilities* which in the case of human being is given with the existence of the species as such and – as we must hope from the promise of the *imago Dei* – will always offer a new chance to the human essence» (Jonas 1984, 140). The image, ultimately, is a *becoming*, shaped by the different existential experiences of everyone and each generation of humans that evolve over time and space. Here lies the risk of the meliorist program: by making irreversible decisions about the future of humanity based on present interests, it would close off possibilities and define future humanity according to comparative ideals that must, at the very least, be questioned. This is because the modification of humanity’s image (which Jonas considers a «typological modification») would endanger what is most intrinsic to the human being, which resides precisely in its ambivalence. The risk is even greater when we consider humanity’s capacity to allow itself to be altered and to adapt to different scenarios. The truth is that there is no reason for hope in this field but rather much more for concern and responsibility:

But if the enduring transformation of living conditions and habits through technology were to lead to a typological modification of “man”, the most malleable of creatures (which is not an absurd idea), this modification would hardly be in the direction of an ethical-utopian ideal. The predominance of vulgarity in technological blessings makes this highly improbable, even if we were not to consider the enormous atrophy of individuals under the massive, objective, and psychological compulsion of the technological order. (Jonas 1979, 382).

Instead of Bloch’s «ontology of the not-yet-being», Jonas asserts an ontology of the «already-there» of the «true human», who is none other than those who fulfill an image of humanity that, in some way, in its errors and achievements, has always existed. If that ontology starts from the idea that “S is not yet P”, meaning that humanity is not yet its predicate (in terms of self-realization), this would imply that it is up to (bio)technology to contribute to designing the new human based on a new image that, as we have already seen, does not even exist. After all, for Jonas, «of mankind it can never be said (except in idle speculation) what it is “not yet”, only in retrospect what it *was* not yet at this or that time in the past» (Jonas 1984, 110).

Final considerations: in defense of the integrity of the image

In the final paragraph of the German version of *Das Prinzip Verantwortung*, Jonas revisits the problem of the image when addressing his «non-utopian ethics of responsibility», in contrast to the utopian ethics of hope. The section, whose title is phrased as a task (*Preserve the “image and likeness”*), appeals to respect and fear as capable of protecting humanity «from the misguidance of our power (for example, from experiments with human constitution)» (Jonas 1979, 393). According to the author, this would require recovering a positive view of «what humanity has been and is» (respect), but this would only be possible through a «negative representation» (fear) of what humanity could become in the future. Through respect, humanity would be embraced in its «already-there»; through fear, its deformation into its «not-yet» would be avoided.

This does not mean, however, that improving the human condition should be dismissed. Jonas is neither a technophobe nor an optimistic determinist fatalist who believes we should simply fold our arms in the face of natural impositions. On the contrary: we should use all available powers to promote the prosperity of humanity, but this should not come at the exorbitant cost of a decisive alteration in its very image. Neither the exaggerated hope of «everything is permitted» nor the naive fear that paralyzes: «just as hope, fear must also not lead us to delay the true goal – the prosperity of humanity in its integral humanity – and meanwhile ruin such a goal by virtue of the means» (Jonas 1979, 293). To achieve this, it would be necessary to free ourselves from the «deception of utopia» (Jonas, 1979, 386) to be capable of preserving humanity’s image from its errors, «hidden misguidance (of which indolence is one and arrogance, another)» and even from the «gross misguidance of misery» (Jonas, 1979, 386).

Protecting the image, in this case, would be a *sine qua non* strategy, since «a degraded heritage would equally degrade its heirs»: any alteration that risks the image of the human being (whether in relation to nature, the one provided by nature over the ages, or the one humanity constantly forges for itself) must be radically rejected. For Jonas, «the protection of heritage in its demand to remain similar to what it is, that is, protecting it from degradation, is the task of every moment», and responsibility depends on this. If freedom is at risk in meliorist projects, so too is its corollary, responsibility. Not coincidentally, alongside freedom, Jonas considers responsibility as part of humanity’s image and, as such, part of its ethical obligation: humanity must, after all, remain capable of responsibility. To achieve this, «not allowing any interruption in this task is the best guarantee of its endurance» and, consequently, «if it is not a guarantee, it is at least the prerequisite for the future integrity of the “image and likeness”» (Jonas 1979, 393).

The integrity of the image therefore demands an appeal to responsibility and, consequently, to caution and humility in the acquisition and use of technological powers. For the philosopher, preserving the integrity of the human being «is nothing more than the manifestation of its appeal to humility, increasingly refined and heightened by its representatives, who are always quite deficient» (Jonas 1979, 393). The ethics of responsibility is, therefore, an ethics whose central task is the protection of the human image against the threats arising from modern technological advancement, and this requires the safeguarding of the inherited genetic heritage. This, after all, is what it means «assuming responsibility for the future of humanity», that is, to preserve this future, to keep the heritage intact – and not, as the meliorists propose, to improve it without limit. It is precisely in this way that Jonas concludes his magnum opus, with an appeal that is, above all, a task: «To keep such a heritage intact against the dangers of time and against humanity’s own actions is not a utopian goal, but neither is it such a humble one. It is a matter of assuming responsibility for the future of humanity» (Jonas 1979, 393).

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