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ARTÍCULOS

The Metaphysical Value of Human Nature in Rosmini and Stein. A Dialogue with Transhumanism

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Abstract. This article aims to contribute to overcoming an unproductive debate of dogmatic positions on modern anthropotechnology. To this end, it suggests a foundation of human nature, which should be taken as a normative reference. It does so by drawing on the various insights of philosophical anthropology, especially those of Antonio Rosmini and Edith Stein. Firstly, I address the general meaning of nature, linking it to the notions of species and essence. I then outline the main features of human nature from an observational and synoptic perspective. From this, I deduce three regulative criteria for humanism: the absolute value of personhood, the basic identity of the human being, and the inherent perfection of each individual. This description would serve as a touchstone for the transhumanist project. Finally, I emphasize some ontological and practical contradictions in the materialistic attempt to enhance humanity without respecting the above-mentioned criteria.

Keywords: human nature; dignity; humanism; transhumanism; anthropotechnology; Rosmini; Stein.

[es] Valor metafísico de la naturaleza humana en Rosmini y Stein. Un diálogo con el transhumanismo

Resumen. Este artículo pretende contribuir a superar un debate improductivo de posturas dogmáticas en torno a las modernas antropotécnicas. Con este fin, sugiere una fundamentación de la naturaleza humana como referencia normativa. Lo hace respaldándose en las diversas aportaciones de antropología filosófica, especialmente las de Antonio Rosmini y Edith Stein. Inicialmente, aborda el significado general de naturaleza, vinculándolo con las nociones de especie y esencia. Seguidamente, delinea los rasgos principales de la naturaleza humana desde un enfoque observacional y sinóptico. Desde aquí, deduce tres criterios regulativos para el humanismo: valor absoluto de la persona, identidad básica del sujeto humano y perfección inherente a cada individuo. La descripción resultante funcionaría como piedra de toque para el proyecto transhumanista. En la última parte del trabajo, se subrayan algunas contradicciones ontológicas y prácticas en el intento materialista de mejorar al ser humano sin respetar los criterios mencionados.

Palabras clave: naturaleza humana; dignidad; humanismo; transhumanismo; antropotécnica; Rosmini, Stein.

Contents: 1. Introduction; 2. Outline of the general nature of the human being; 2.1. Nature, species, essence; 2.2. Towards a basic model; 2.3. Material and organic level; 2.4. Animal level; 2.5. Idea of being; 2.6. Intellectual level; 3. Humanism and transhumanism; 3.1. Humanism: between heaven and earth; 3.2. Transhumanism: overcoming the earth from the earth; 4. Aporias of transhumanism; 4.1. Ontology: discretizing the mental; 4.2. Practice: conscious machines; 5. Conclusions; 6. Bibliographical references.

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1. Introduction

Adherents to different points of view often simply formulate their theses, but do not demonstrate or review their assumptions. When facing the questions of technology, humanism and transhumanism rely on conflicting ethical and anthropological constructs. To achieve critical and meaningful responses, it is necessary to dismantle the scaffolding that supports these constructs. Ignoring this fundamental task, both discourses become literary and dogmatic, with no opening to objective validity.

Humanist authors often invoke a notion of human nature as a guideline for assessing modern anthropomorphic techniques. The present study aims to investigate its justification. To do so, it will examine the meaning of "nature", unfold some notes that would characterize human nature and study its regulative character. Moreover, it aims to evaluate the transhumanist aspiration to materially overcome human limitations. It will show that this program presents a series of paradoxes that call into question some of its specific objectives. These paradoxes can be summarized in three areas: ontological, practical, and ethical. Although the main problematic is played out in a strictly ethical framework, in this essay we will focus on the first two areas. Our approach will enter into dialogue with various authors, belonging to both humanism and transhumanism.

2. Outline of the general nature of the human being

First, we shall explore the notion of human nature, drawing in particular on the contributions of Antonio Rosmini and Edith Stein. Although located in different times and contexts, both are concerned with developing their thought with a method that starts from observation, reaching concordant results. We approach them as contemporary figures who assimilate the realist and metaphysical tradition initiated by Pythagoras and Plato, and continued by Plotinus, Augustine of Hippo, Bonaventure of Bagnoregio and Thomas Aquinas; at the same time they dialogue with the empiricist, rationalist and idealist approaches of modernity². Their integrative and contrasting vision of human nature will offer us some key points for the current debate with transhumanism.

2.1. Nature, species, essence

We begin with a terminological and conceptual analysis of what we mean by "nature". If we look to etymology, we can already make a first approximation. From *natus*, past participle of the verb *nascere*, the nature

² A more exhaustive work in this synoptic direction can be found in Caro (2020). I refer to it for the confluences of the authors not mentioned here.

of an entity alludes to the set of elements that this entity brings with it from its origin or birth. The corresponding Greek term, *phýsis*, refers to an internal principle of action or movement (cf. Thomas Aquinas 1911, III, q.2, a.1). Human nature would therefore refer to the original constituents of the human being, to the faculties inherent in his or her first configuration and which evolve spontaneously.

The concept of "nature" is related to that of "species" and "essence". In order to clarify this link, we need to advance minimally the ontological framework, of Rosminian style, which underlies this work. It will be presented in detail below. In his epistemology, Rosmini analyses the data of our knowledge. He distinguishes in them three categories that lead him logically to affirm three respective modes of being in everything that exists: any entity possesses a real form (1) and an ideal or essential form (2), intrinsically linked in a third unitive form that the philosopher calls moral (3). The real form is particular, grasped in sensations; the ideal form is manifested in the universalization of those by the intelligence; the moral form refers to the harmonious connection of the previous ones, originating a pleasant order³. Although in Aristotle these distinctions are at times diluted⁴, with them his system seems to acquire greater coherence.

From this understanding of existence, we can reformulate the "biologistic interpretation" and the "essentialist concept" of nature, initially dismissed by Alfredo Marcos (2018, pp. 117-118). The first consists of equating "human nature" with "human species", something that does not convince the author, insofar as the scientific community (biology) sometimes associates "species" with populations of specific individuals. Certainly, empirical science usually classifies these populations largely based on a genetic structure (1)⁵. However, it should be noted that this species, both genetically and morphologically, is conceived and expressed in common notes that conceptually describe these populations (2), and without which we would not be able to classify them. From his Aristotelian approach, Marcos notes this double facet of the concept of "species" when he refers to the "tension present throughout Aristotle's work", based on Jean Gayon's reading. He thus distinguishes a particular species: "physical principle" (1) and a universal species: "logical class of similar entities" (2). Such a tension would speak of a correspondence (3) between the "dynamic and changing world of the living" and the "elements of order and rationality" (2016, p. 2).

Edith Stein also explains the biological species in terms of the three modes of being mentioned above. According to the philosopher, the species would be categorized on the basis of an "inner form [*innere Form*] to which the living being owes its own configuration". This really materializes (1) in some individuals: "the totality of all individuals that

³ For a detailed exposition of this approach in Rosmini, cf. Caro (2014), pp. 172-228. Perhaps this ontological framework could correspond to the "third road", announced by Jonas, which avoids "the dualistic rift" and at the same time saves "enough of the idealistic insight" (2001, p. 340; cf. Marcos 2019, p. 30).

⁴ One perceives in the philosopher a kind of flight from the ideal, universal and necessary, in order to return inevitably to it by a tortuous path. As Themistius interprets it, the philosopher seems to confuse the function of intelligence (agent understanding) and that of sensibility (cf. 1560, II, c. 35, pp. 14-15). The commentator refers to the famous passage from *Posterior Analytics*, II, 19 (2002, 100a-b). As Rosmini points out, there is nothing universal in sensation: "we would have to believe that Aristotle had not grasped the nature of the universal which, as universal or common, is not in particular things" (cf. 2003, § 245). For a critique from ontology, showing the Aristotelian ambiguity between species and real form, cf. Rosmini (1995) §§ 60-72.

⁵ Stein argues that "After all, the unity of the species is not merely collective, but *genetic*" (2004, p. 42). The author explains the formation of new organic species through changes in genetic inheritance (cf. pp. 65-68).

are exemplars of that form"; it is further conceptualized (2) in properties: "type [...] to which [biology] grasps with its descriptions" (2004, p. 60; cf. p. 41-42); both aspects being linked (3), since it is a "*realiter* delimiting form", which includes "a plurality of exemplars", but which "is closed in its delimitations" (p. 94). In the same triadic line, Antonio Rosmini defines "species" as "the relation [3] that the thing [1] has to the idea [2]; and therefore the cognizability of the thing" (1884, p. 143). Likewise, this model is consistent with more recent attempts in the philosophy of science to characterize species in an intermediate sense between the particular and the universal: as "individualistic classes" (Van Valen 1976), "complex particulars" (Suppe 1989, pp. 211-215) or "relations of resemblance" (Stamos 2003)⁶.

A notion of nature parallel to this understanding of species would harmonize with the *changing character* of biological species, in their real configuration and thus also in their ideal category. And it would also fit the *remodeling* established by scientific paradigms, always in terms of material (contingent) and at the same time essential (relatively static) features⁷. This shows how the perspectives of philosophy and science differ, but their languages can converge since they refer to the same global reality. We will therefore embrace the concept of "species" by relating it to that of "nature", without necessarily treating them as belonging "to different language games" (Marcos 2018, p. 117).

This approach would be reinforced by the fact that the real evolution of species has reached a maximum level of completeness. This would give rise to a notion of species in a more fixed and perhaps consequently stricter, sense. Indeed, the dynamic character of the terms genus, species, and variety, according to Darwinian theory, would no longer apply to these levels (cf. Marcos 2016, pp. 3-4). Furthermore, they would serve as the basis for delimiting human (and animal) generic nature in its prescriptive character, thus resolving Marcos's justified reluctance to operate with a strictly biological species concept⁸. According to Lloyd Morgan, "evolutionary advance" does indeed contain "turning-points" where "the emergently new is incompatible in 'substance' with the previous course of events" (1927, p. 207). Reminding us of this theory of emergent evolution, Hans Jonas also understands consciousness as "a qualitative novelty", as an "evolutionary leap" (1984, p. 126)9. Edith Stein alludes to radical evolutionary strata that possess a "primitive form [Urform] from which all the differentiations of that entire realm of being can be genetically derived". On the basis of such forms "the genus itself becomes the species" (2004, p. 94), with the emergence of supreme genera or species¹⁰. Stein delimits these supreme forms. For organic life, a "configuring [Gestaltung] from within" (p. 38), which

⁶ A complete synthesis of the modern discussion on the concept of "species" in: Marcos (2016).

⁷ The essential features will depend on the increasing precision of biological theories: interfertility, geography, morphology, functionality, phylogenetics (cf. Marcos 2016, pp. 4-7).

⁸ Cf. Marcos (2016), p. 15; 2018, pp. 117-118.

⁹ The author develops an argument for this approach in his work on the psychophysical problem (cf. 1987, pp. 47-53).

¹⁰ In fact, Stein has defined the species on the basis of this radical form: "the species should be seen as a primordial form, [...] it is thus the fixed form principle that delimits the internal structure [*Gebilde*] of all individual beings in a realm" (2004, p. 69).

acts in "a larger organic context, in a whole that encompasses everything that is genetically related" (p. 69). For the animal sphere: "sensory openness" (pp. 46-47). For the human sphere: the "free and personal self [...] inner form [*innere Form*] of the [bodily-mental nature]" (pp. 83-84). In the following section, we will suggest a description of each of these primordial forms within human nature.

Let us turn to the relationship between the notion of "nature" and that of "essence". The triple ontological dimension mentioned above also allows us to understand why Marcos initially rejects an "essentialist concept" of human nature because of its fixed character: "universal, timeless"; but after defining it on the basis of real, physical and dynamic elements, he appeals to its perception "as a concept", where "normative indications will gradually appear" (2018, p. 120-121). Certainly, human nature, as a global and also individual reality, is in constant evolution. Therefore, the intelligence of this nature can never "exhaust the exuberance of the real" (p. 120). But it can represent it conceptually or ideally (2). Just as physical reality possesses qualitative aspects, so too the "human essence" assumes the eventuality of the human being, it is not "separated from historical development and biological evolution" (p. 118).

In short, human nature, which is real and historical, also shows a specific and essential condition. In turn, the essence and species proper to the human being is grasped by universalizing its spatiotemporal reality. The classical description of nature would be in accordance with this view, as for example, that offered by Thomas Aquinas:

And because the [intrinsic] principle [of any kind of movement] is either formal or material, both matter and form are generally called *nature*. And as the essence of anything is completed by the form; so the essence of anything, signified by the definition, is commonly called *nature*. Ad here nature is taken in that sense (1911, I, q.29, a.1, ad4).¹¹

From the same point of view, Rosmini identifies "species" and "specific essence" (cf. 1884, p. 143, note), and clarifies their relation to "nature":

Let us bear in mind the different signification of the words "essence" and "nature". Essence is properly that which is contained in the idea; by nature we mean the same, but in its realization, we mean the real thing insofar as it is one and identical" (1998b, § 2725 note 2).

We could conclude by insisting on the importance of reaching an essential characterization of human nature, that "we grasp the universal, which we designate with the universal name" of being human (Stein 2004, p. 29), for the accidental of human reality offers no objective rule of conduct. This is precisely what we intend to do in the following section.

2.2. Towards a basic model

¹¹ In III, q.2, a.1, "nature" is again equated with the "essence of the species [*essentia speciei*]". Cf. also Thomas Aquinas (1975), IV, c. 35.

We now move beyond the conceptual clarification of human nature to outline its *general features*. This will help us to identify the normative character of the notion of human nature, allowing us to discriminate when the application of anthropotechnics would put inviolable human capacities at stake. In an attempt to overcome the divergences in nomenclature, we can summarize the constitution of the human being on the basis of a minimal but at the same time holistic model. To do so, we will turn to the currents of positive anthropological thought. It is relatively easy to reconstruct this model, as a certain consensus can be noticed over time¹². Knowing it is a prerequisite for the dialogue between humanism and transhumanism.

To speak of the human being in their totality first requires us to take as broad an observation as possible. The procedure of analysis based on observation can also be called phenomenological, to use Husserlian vocabulary. It is a universal procedure, applied by all kinds of knowledge. It is used by the human sciences, which "obtain empirically, by observation and description, a certain image of human being" (Stein, 2004, p. 18). It has also been "employed by the great philosophers of all ages" (p. 28)¹³. Scientific and philosophical contributions up to the present day seem to delineate a stratified vision of the human being, hierarchically arranging the pieces that make up his essence or nature. This arrangement is carried out by virtue of their mutual dependencies, where each of the higher faculties directs the lower ones. Since Plato, four main levels are usually distinguished: material, organic, sensitive and intelligent; which give rise to four types of entities: physical, living, animal and human¹⁴. In the following, we will approach these levels of human nature, especially due to their relevance in the dialogue with transhumanism.

2.3. Material and organic level

The first thing of note is the property of the human body to be measurable and quantifiable. This property is located in a specific dimension that has been labelled "material nature". Moreover, human matter possesses a structure with coordinated movement that makes it "something alive"¹⁵. We perceive our living, material body as a set of actions and impulses independent of ourselves. Rosmini describes it as a "mechanical organization" that is "admirably connected together" and through the operation of physical and chemical forces interacts harmoniously with the nutrients of the environment (1991a, § 272)¹⁶. This bodily system provokes a movement of its own, a "circular action, because instead of consuming itself provides and unceasing vortex of particles, where, according to Cuvier, life is to be found" (§ 272).

¹² For parallels between the various authors, cf. Caro (2020), chapters 8-10, 14-15, 24-25.

¹³ Observation as a methodological principle runs through Rosmini's entire work; cf. for example: 1998a, §§ 946-969.

¹⁴ Cf. in Stein (2004), pp. II.III.1 and V.II.8-10.

¹⁵ Ibid., p. 30. I rely on the exposition of the material and organic constitution of the human being by Rosmini (1991a, §§ 56-91) and Stein (2004, III).

¹⁶ The author speaks specifically of organized "material forces", connected with the "chemical forces of fluids and solids", and with the "opportune internal stimuli such as the air, electricity, light and every kind of nourishment".

Stein's reflection is along these lines, arguing that "a self-configuring from within is [...] the way of being of the living" (2004, p. 38).

The specific mission of medicine emerges from this: to obtain "health, i.e. the fullness of life". Rosmini considers that life is properly experienced psychologically, as "a satisfactory state of subjective phenomena". It is a "satisfactory subjective state" which shows the "true normal state of the animal", and in which medicine intervenes only through its physical correlates, pursuing a "normal state of extra-subjective phenomena" (1991a, §274). Medicine can be practiced because the various phenomena of bodily nature behave in a causal manner. Anthropotechnologies based on material sciences act directly on this lower level of the human being, but affect higher levels, the body being their physical correlate¹⁷.

2.4. Animal level

Animality installs a qualitative leap in nature. To characterize it, we must continue with the work of observation as introspection, oriented towards experiential or "inner" elements. It is crucial here to integrate the apparently unconnected languages offered by different authors scattered across place and time. Only in this way can their diverse theoretical contributions be assimilated and reconciled. Rosmini in particular helps us in this task, insofar as he makes explicit the first acts that are the foundation of the psychological faculties and their states, something that had already been pointed out since Aristotle¹⁸. It is a matter of clarifying that "something permanent" which "makes actuality and such actuality possible" in the life of the soul, underlying the "potentialities (capacities or powers)" (Stein 2004, p. 53).

The animal factor is often associated with sensations, with the capacity to *feel*. Rosmini points out that external and internal sensation, "principle in the order of reality", is what "constitutes the animal nature" of the person and his "subjectivity" (1991a, § 20)¹⁹. To explain this, he emphasizes the confluence of all sensation towards a sentient, unitary and non-spatial nucleus. Indeed, through inner observation we discover an *awareness center*, a lower, not yet reflective consciousness (cf. Edelman, 1992, pp. 131-136), which springs from a first and fundamental act of feeling ourselves. This fundamental feeling would be the root not only of animal sensibility, but of psychology and of the mind in general, of what has traditionally been called soul (*psyché*)²⁰.

According to these authors, we must differentiate this principle of feeling from the vital configuration of the body, which refers to discrete and spatial elements of a material kind. In fact, the body itself acts on the mind, on our sensibility,

¹⁷ For the relationship between mind and body in Rosmini, cf. §§ 197-246. Particularly relevant in this respect is Rosmini's concept of the "sensiferous principle", the meeting point of psychological feeling and the material body acting from the outside (cf. §§ 235-237). Also noteworthy is the concept of the "extensive end [*termine*]" (cf. § 200), based on the "unlimited solid space", the end of the fundamental feeling (cf. §§ 148, 165). Cf. also 1999, §§ 554-559, 747-769.

¹⁸ Cf. footnotes 20 and 24.

¹⁹ I rely on the development of the animal constitution of the human being by Rosmini (1991a, §§ 91-498) and Stein (2004, IV and VI.1).

²⁰ The "fundamental feeling of oneself", of one's own body, is a central concept in Rosminian psychology. Cf. also Stein (2004), pp. 52-53.

with extra-subjective laws, independent of us (cf. Rosmini, 1991a, §§ 254-255). So the animate body and the soul appear to us as opposing natures. In this sense, the Aristotelian proposal that identifies the soul with an act of the body²¹ could be readjusted. The soul would not be merely "a mode of being of the body", which, being alive, produces in me particular sensible signs and stimuli, but "that which feels and possesses sensation in itself" (§ 63)²².

From the fundamental feeling of oneself emanates various psychological faculties with their own states. On the one hand, the modifications of this act brought about by external stimuli enable the *perception* of the world by means of sensible representations; these representations have the typically psychological qualities of unity, intentionality and non-spatiality. There are also modifications originated by the action of the mind itself, by means of the capacity commonly designated *imagination*. Imaginative representations reproduce external sensations and appear especially in sleep. The sentient principle would also give rise to *instinct*, a spontaneous movement "starting from within" (Stein, 2004, p. 45), which is capable of learning by itself. In this active dimension of the mind, two original forces can be distinguished: one would cooperate in the production of feeling, the vital instinct, the other in seeking pleasure and avoiding pain, the sensuous instinct (cf. Rosmini 1991a, §§ 367-498).

Rosmini calls the capacity to feel and its spontaneous movement "life" in the strict sense, "subjective life" (cf. 1991a, §§ 86-88)²³. The new anthropotechnologies can affect the sphere of animality, especially due to the experimental evolution of psychology. The latter analyses the conditions of external behavior not only to describe, but also to predict and control the animal's reactions and their mental functions.

2.5. Idea of being

The analysis of inner experience also reveals the existence of universal representations, that is, concepts or ideas, with characteristics opposed to sensations, which are particular. In his epistemology, Rosmini reduces the universal property of these representations to a first ideal element. Testing the possible origins (sensation, self-consciousness, reflection or mental spontaneity), he shows the incongruity of trying to extract it from each of these sources, concluding as a last alternative in an innate and intuited origin (cf. 2001, §§ 413-472). This would open the ontological gap between the real (1) and the ideal (2), the innate element (2) being incompatible with the physical and subjective world (1). Since Parmenides, it has technically been designated as "form" or "being", and

Aristotle literally states: "The substance [*ousía*] is actuality [*enteléchia*]; therefore the soul is the actuality of a [natural living] body" (1999, 412a-b). The Aristotelian term *entelécheia* refers to a state or mode of existence of something acting towards an intrinsic end.

²² In the same perspective, the Aristotelian defense of the plant soul should be rectified. The plant would be explained as an organized body, but with merely mechanical movement; physical and chemical. Cf. § 55; also §§ 81-83. The same direction is followed by Stein (2004), pp. 40-41, 45.

²³ The philosopher is not opposed, however, to calling the movement of an organism, under certain laws and stimuli coordinated from a center, "organic life".

analogically as a "light of understanding"²⁴.

Nesting within the human person, the being is identified with an ideal object, not to be confused with any material or psychological factor. It would inaugurate an impulse towards the absolute, projecting itself to all other human capacities, especially the innermost desires or tendencies. The various schools of philosophy have in one way or another contemplated this transcendent magnitude of the human person, from Plato's positive allusion to authors who point out its pernicious version, such as Nietzsche or Sloterdijk. Inspired by the former, Sloterdijk attempts to describe how this ontological difference has been managed over time: "to characterize historically more precise the ecstatic clearing [*Lichtung*] in which man allows himself to be addressed [*Ansprechen*] by being" (2009, p. 20; cf. p. 18); warning of "the other, the veiled, face of the clearing", which generates "unavoidable battle" (p. 22).

2.6. Intellectual level

With the presence within the human being of an ideal object, a second qualitative leap in the chain of natural entities takes place. As a "principle in the order of ideas", such an object "rules and constitutes the intellectual nature" of the person (Rosmini, 1991a, \$20). To the material and mental basis, which can be found in the animal, other psychological faculties will then be added without which it would be impossible to explain human behavior. These are usually grouped under the category of *spirituality*, as distinguishable from the bodily, and are proposed to justify the formation of concepts and the actions derived from them²⁵.

Strictly speaking, *intelligence* or *intellect* would allude to the primary act of incessantly intuiting the universal and objective dimension of being. *Reason* would designate the capacity to apply this universal dimension to reality, grasping the essence of things by means of general representations or ideas. *Will* would emerge in the contact of intelligence and sensibility, as the active faculty that tends to want a known reality, in which it discovers its objectively agreeable order. Finally, *freedom* would appear as the capacity to choose that objective order or an immediate instinct of pleasure.

3. Humanism and transhumanism

Human beings have always meditated on themselves, on their identity, their value and their destiny. This reflection was originally recorded in the very terms of language and also in mythological stories through which different cultures tried to understand themselves. These early sources of popular experience bring us closer to the various interpretations of humanity and the paths open to it.

²⁴ Already Aristotle considers the agent intellect as "active cause" and "positive disposition" in relation to a light (1999, 430a). Following Augustine of Hippo, Thomas Aquinas speaks of the "lumen intellectus". Rosmini tries to "lift the veil" of this metaphor (2001, §§ 269-272, 467 note). In the same vein, Stein states: "the original form [ursprüngliche *Form*] of knowledge [...] is like a light [*Licht*] through which spiritual life as such is transilluminated [*durchleuchten*]" (2004, pp. 78-79).

²⁵ I rely on the presentation of the intellective constitution of the human being developed by Rosmini (1991a, §§ 499-763) and Stein (2004, VI.II).

3.1. Humanism: between heaven and earth

Although difficulties arise in linking the etymology of the adjective "humanus" with the noun "homo", scholars relate them semantically. Human is that which "concerns man", which is "truly worthy of a man" (Ernout and Meillet, 2001, p. 298). The term "man", in the general sense of "human being", goes back to "an Indo-European word meaning 'earth". It would then "properly" denote "born of the earth' or 'earthly' [...] as opposed to the gods, who are 'heavenly'" (p. 297). But ancient anthropological accounts also reveal a transcendent character in the person. Such a character is represented, for example, in the myth of Prometheus by fire (2006a, pp. 48-49 and 2006b, pp. 90-91). In the book of *Genesis* it appears with the divine "image and likeness" in creation (Wansbrough 1990, 1:26, pp. 18) and with the "breath of life" (2:7, p. 18)²⁶. In them we are told how this absolute and divine category leaves the human being in a situation of ambiguity, between sublimation and (self-)destruction.

Conceptually, philosophy has also described this plural structure of the human being: at once earthly and transcendent, material and immaterial, physical and metaphysical. In the above exposition of human nature, these ontological dimensions of the person have emerged. On the one hand, the particular elements that make up its material reality (1). On the other, the ideal object (2), which configures human intelligence, the capacity to universalize. Finally, both dimensions are united in the human mind (3). This anthropology is also shared by a large number of transhumanist authors²⁷, although, as we shall see, their approach is different.

From this literary and conceptual characterization of the human person, we see an elementary understanding of humanism that tries to bring together its various dimensions. Across its many variants and applications, humanist theories generally manifest a respect for human values²⁸. In the current debate on transhumanism, humanism is presented as an anthropological and ethical stance, arguing that human nature acts both as a limit and as a reference in the evolution of the person. Limited insofar as bodily reality cannot expand indefinitely, despite the propensity of human intelligence to project itself towards the infinite. As reference, in that there is a development of the individual that advances, guided by its natural essential characteristics. Although it has sometimes been used to group humanist authors together, the category of "bioconservatism" (Carrico 2004) does not accurately categorizes humanism, which goes beyond the protection of organic life.

The prescriptive scope of humanism assumes two perspectives. Both would result from that ontological union between reality and universality, which generates an agreeable order,

²⁶ A work on these narratives within the transhumanist debate in: Franssen (2014). For other cultural expressions of the divine in the human being, see also: Rosmini (1991b). Here the author distinguishes between the transcendence intrinsic to human nature and the transcendence of a personal divinity that reveals itself to the human being. The latter fills the naturally absolute void of the former, but can only be accepted through an act of faith. In the same sense, Postigo differentiates between an "ultramundane element of human nature" and a "properly ultramundane external region" (2019, p. 5).

²⁷ Cf. for example Huxley's reflection on the three dimensions of reality: "Natural Power", "Pure Spirit or Idea" and "Incarnate Spirit" (1927, pp. 328-332).

²⁸ Cf. Ferrater (1991), pp. 1566-1570.

of a good manifested to the intelligence and the will²⁹. In the first place, a comparative order (CO) is alluded to, where the absolute superiority of the human being in relation to any other being is emphasized. Such superiority or dignity of the human being can only be rooted in an infinite aspect consubstantial to him. Rosmini identifies in the idea of being the root of that human infinity: "in the initial objective being, which is as much as to say: in the idea, [the intellective individual] sees being virtually infinite, and feels and knows himself infinite" (1998b, § 2717). The unity of animal consciousness would already be a qualitative leap, but not a strictly transcendent one. This would solve the problem pointed out by Jonas, considering it "it is awkward, not to say grotesque, to carry dualism, and with it a share in transcendence, into the amoeba or wherever else 'feeling' begins" (1984, p. 67)³⁰.

Secondly, a natural, internal order to each entity (IO) would also arise from the harmony between the real and the ideal. This order or intrinsic goodness then has a real basis, so that it appears pleasing to the senses, but it is also configured ideally, with certain characteristics. Just as the quality of an artificial product depends on it conforming to certain design properties, so the harmony of the natural entity arises from its essential characteristics. From this perspective we find in each entity a general identity (IOa) and a perfection of its own (IOb). In the previous section we have suggested some fundamental notes that would constitute the natural essence of the person, on its material, animal, and intellectual levels. Lacking these notes we could not even think or speak of being human. This is what we can call his "abstract essence" (IOa)³¹. Moreover, the features that lead to the fullness of this general essence for each individual entity are grouped together in a notion that we call "complete essence" (IOb)³². Humanism promotes the safeguarding of these two degrees of human essence: its identity and its natural perfection.

From the two perspectives outlined above, we see that the normative value of the human being is certainly attributed to its real existence, but it proceeds and is intelligible from the ideal in him. Humanism must therefore preserve the "Platonic" dimension of human nature, with its essential, "universal, timeless" character (Marcos 2018, p. 118; cf. 2019, p. 31)³³.

3.2. Transhumanism: overcoming the earth from the earth

The particle "trans" comes from the Latin homologous preposition meaning "beyond". In our language it functions as a prefix which also translates as "further".

²⁹ For a development of this ontological framework of the good, see: Caro (2014), pp. 141-306.

³⁰ Marcos cites Jonas as a representative of an ethics with this comparative ontological perspective: "the human being, because he *is* more, is worth more" (2018, p. 121). However, for this philosopher, the good is primarily intrinsically grounded: protecting living nature in general and its proper inclination. Although he does not seem to recognize a transcendent distinction between human beings and all other entities, Jonas does identify a tendency of natural evolution towards subjective consciousness (cf. 1995, pp. 130, 134, 148).

³¹ Cf. Rosmini (2001), §§ 648-652.

³² Cf. ibid., §§ 653-656. Marcos appeals to a "human nature, in a secondary sense, as a concept" by referring to these same two normative axes: some general "traits or aspects", "in common", for all humans (IOa) and some traits of "human nature in each person" (IOb) (2018, pp. 120-121).

³³ To reject the ideal dimension would be to concede the existentialist position, from which Marcos seeks to distance himself. This position only admits real existence, considering that "human being is neither to be nor to realise any essence" (Agamben 1996, p. 43).

there" and "through". It is linked to the Indo-European root *terə-, meaning "to go through, to cross" (Ernout and Meillet 2001, pp. 699-700). Like any other evolutionary movement, the intention of "transhumanism" is to overcome an established structure or value. For those who consider that structure or value as absolute, this overcoming will be judged unethical, as a transgression. For nihilistic materialism, which denies all absolutes, such transvaluation is viewed positively. Often, the aspect or value to be transcended is fixed by nature, especially biological nature. This is the case, for example, of the transgender, transsexual, transracial or trans-species movements. As far as transhumanism is concerned, the aim is more ambitious. It seeks an anthropological trans-formation, to establish a different human configuration. It does not, therefore, seek to overcome a single aspect, but the whole human being, in obedience to the Nietzschean exhortation already often quoted in this context:

I teach you the overman [\ddot{U} bermensch]. Human being is something that must be overcome. What have you done to overcome him? / All creatures so far created something beyond themselves; and you want to be the ebb of this great flood and would even rather go back to animals than overcome humans?³⁴

As Jesús Ballesteros argues, the modern scientific revolution assimilated a physicalist and efficient conception of reality, marginalizing its essential and dynamic facet (2016, pp. 175-179). We can say that science disregarded the formal (essence) and final (perfection) cause of natural processes. The subsequent development of empiricist and subjectivist philosophies will lead to a critique of humanism and anthropocentrism. This nihilistic current, led by Friedrich Nietzsche, connects with the theoretical movement that Antonio Diéguez calls "cultural or critical transhumanism" and associates with "posthumanism" (2017, p. 43). It shares the contestation of an objective "moral world order", of a "morality as such", and welcomes the terrible turn in history that Nietzsche announces with the "transvaluation of all values [*Umwertung aller Werte*]", by a type of person that reaches a specific higher level, "relatively overhuman [*relativ übermenschlicher Typus*]" (2007, pp. 143-148; cf. pp. 120-121).

There is also an eminently practical version of transhumanism, what Diéguez calls "technoscientific transhumanism", which is divided into two aspects: engineering and biological (2017, pp. 43-45). This modality of transhumanism aims to bring about the improvement of the human species, to the point of surpassing even its natural condition. Transhumanism could be defined in this sense as a scientific and cultural current that aspires to overcome human limitations through technology, especially using new emerging and converging technologies (nano, bio, info, cogni). Nick Bostrom describes it as:

³⁴ Nietzsche (2006), p. 3. These principles are taken up in the earliest writings of the transhumanist movement, cf. More (1990), pp. 9-10. For a more complete overview of the links between transhumanism and Nietzsche, cf. Tuncel (2014).

The intellectual and cultural movement that affirms the possibility and desirability of fundamentally improving the human condition through applied reason, especially by developing and making widely available technologies to eliminate aging and to greatly enhance human intellectual, physical, and psychological capacities³⁵.

Peter Brietbart and Marco Vega (2014) conceive the project as a new stage beyond "unguided" biological evolution. It is therefore "the drive to fundamentally revolutionise what it means to be human by way of technological advancements". And they summarize its scope of action in three main domains: "superlongevity', 'superintelligence' and 'superwellbeing', dubbed 'the three supers' because of their extraordinary transformative potential"³⁶.

Relativizing philosophical questions³⁷, and with an "empirical-factual concept" of nature (Paladino 2021), transhumanism finds no normative criteria in the natural (cf. Bostrom 2003, p. 35). Although it sometimes presents itself as a standard-bearer for the values of humanism³⁸, it adopts a radically different stance. Indeed, humanism is open to the restorative and welfare functions of technology, not limiting itself merely to the use of "educational and cultural" means, contrary to what Max More contends (2013, p. 4; cf. Sloterdijk 2009, pp. 12-16). It is true, however, that humanism conceives of "human nature as an end in itself [...] having a claim on our allegiance", opposing the intention to "reshape it" (Ibid.). As Ballesteros states, most transhumanist authors move within a materialist framework³⁹ that leads them to omit the absolutely superior value of the person, to the "denial of the ontological difference" of the human being with respect to the rest of entities (2016, p. 175), a difference that can be considered to have emerged in biological evolution itself. It should be noted that there are moderate readings of the transhumanist movement, reluctant to redesign the human, and thus often converging with humanism (cf. for example Göcke 2018). This essay will not address them.

However, transhumanism does not exclude a desire for the absolute. On the contrary, from its inception the project sets a goal that responds to a dimension of "transcendence of the personal self", pushing it irreversibly to "drive human nature on towards an ideal", in the words of Julian Huxley (1927, p. 69). In line with Western philosophical tradition, such a desire for transcendence is rooted in intelligence, in the "human faculty of conceptual thought" (p. 72). According to Peter Sloterdijk, the transhumanist program is precisely a consequence of the ontological difference of the human being, of its projection into being.

³⁵ Bostrom (2003), p. 4. There is also talk of an expansion of "human potential" in "The Transhumanist Declaration" which incorporates: Bostrom (2011), p. 26. Cf. also Max More's original formulation advocating "radical alterations in nature and possibilities of our lives" (1990, p. 6).

³⁶ Cf. also Pearce (2014). For a more complete characterization of transhumanism from a historical and conceptual point of view, see the works of: More and Vita-More (2013), Diéguez (2017), Asla (2020).

³⁷ Cf. Diéguez and Sandberg (2015), pp. 382, 387.

³⁸ Cf. Bostrom (2011, p. 159), Diéguez and Sandberg (2015, p. 376).

³⁹ Cf. More (2013, p. 7). Ballesteros (2016) uses the term "naturalism" as a synonym for "materialism". Marcos shares this terminological line (cf. 2018 and 2019). We believe this category may be misleading, since it is precisely human nature that incorporates a mental and transcendent ingredient, and which holds the normative criterion in a comparative and intrinsic sense. It would take us too far to discuss the pertinence of qualifying human transcendence as "supernatural".

Transhumanism would translate this difference as a drive towards maximization, played out by the "breeders for maximization of human being [*Grosszüchter des Menschen*]", as opposed to the "breeders for minimization [*Kleinzüchter*]" (1999, p. 40). As far as transcendence is concerned, the difference between humanism and transhumanism lies in interpretation. The latter understands it, on the one hand, from a monistic and subjective point of view, in terms of constant unlimited self-improvement (cf. Huxley 1927, p. 356)⁴⁰ and on the other, to achieve this ideal, transhumanism relies on the "direct application of technology" (Diéguez 2017, p. 40) over and above education and culture.

4. Aporias of transhumanism

Promoting the quantitative modification of human characteristics through empirical science and technology, transhumanism often relies on a reductionist conception of the human being that omits fundamental differences. It is thus confronted with a series of contradictions that call into question some of its main claims. We can summarize these contradictions in three fundamental areas: ontological, practical, and ethical. We will consider the first two below.

4.1. Ontology: discretizing the mental

In presenting the various levels of human nature, we have identified areas with irreducible features. This opposition has manifested itself especially between the material level and the psychological level. On the one hand, we have seen that the animal experiences sensations, unitary representations, intentional and not located in themselves in any corner of the brain⁴¹. The human being also forms ideas or concepts, representations that include the property of universality, that is, of bringing together in themselves indefinite similar elements. On the other hand, the material and organic world has so far only provided us with discrete, spatial, closed, and singular elements, also on an atomic scale. It therefore seems impossible to equalize these material and mental levels: that exclusively from a few singular particles, or from a singular combination of them, can emanate the quality of unification, of direction towards a distinct end or of synthesis of infinite ends. This apparent impossibility, already announced by Leibniz⁴², and studied by 20th century phenomenology⁴³, has been reformulated again in the context of the philosophy of mind,

⁴⁰ "The human species can, if it wishes, transcend itself [...] in its entirety, as humanity. We need a name for this new belief. Perhaps *transhumanism* will serve: man remaining man, but transcending himself, by realizing new possibilities of and for his human nature" (Huxley 1959, p. 17). Cf. Monterde's (2020) study on Huxley's transhumanism.

⁴¹ We use "intentionality" in a general sense. It is not only attributed to universal concepts, but also to a sensation or image insofar as it is directed to an object. This is how it is understood in the scholastic tradition (cf. for example: Aquinas, 1911, I, q.78, a.4). In this line, I distance myself from the specifically human character given to it by Stein (cf. 2004, pp. 80, 87). Concerning "unity": cf. Rosmini (1991a), § 271.

⁴² This is the so-called "Leibniz gap" or "windmill argument" (2014, § 17).

⁴³ Cf. Brentano (1995, II, I, §§ 4-8, pp. 65-74), Husserl (2008, Prolegomena, VII, §§ 36-38, pp. 78-83) and Jonas (1987, II, 3, d, pp. 53-57)

by categorizing conscious experiences as "further facts"⁴⁴. It is indisputable that there is a material and organic basis in the appearance of psychic phenomena; if we eliminate the brain and its physical structures, psychological experience disappears. However, the irreconcilable attributes of the two levels lead us to think that this basis, although necessary, is insufficient.

It is often argued that our characterization of the material realm is provisional, and that we should not be closed to the discovery of special properties in the physical world that we have so far attributed to the psychological world. To go so far as to argue that all psychological phenomena are reducible to matter, science would have to answer important questions: how is a neuron capable of feeling, imagining, or having ideas? If one appeals to complexity: why is one neuron not capable but a certain number is? Is there some physical effect that changes substantially when a certain number is reached? By refining our observation, it is foreseeable that we will find new scientific hypotheses. Perhaps in the future we will find the connection between these two opposing worlds, the point of intersection between brain and mind, between body and soul⁴⁵. Or perhaps qualities that reduce matter to psychology, showing a psychological background in matter⁴⁶. However, it will still remain a logical impossibility to extract psychology from matter as described by physics and chemistry today, both having incompatible characteristics. Materialism as we currently understand it is, in this sense, untenable. Jonas is emphatic in this respect: the "inability [of natural science] to ever account, from its premises, for consciousness, nay, for the most elementary case offeeling [...] is an essential, not a provisional inability" (1995, p. 72)⁴⁷.

Considering these qualitative leaps in the strata of reality, the transhumanist endeavor to essentially improve the human species (or to bring about a new one) by means of technological components, which belong to a lower stratum, seems fruitless. In his reflection on the origin of the species, Stein dismisses this attempt. At each level "a new principle of form arises" (2004, p. 70). Therefore, she concludes, "it will never be possible to derive the origin of entities [*Gebilde*] of the higher realm of being solely from the laws of the lower: the origin of the living not from the laws of material nature, that of the animal not from the laws of the organic" (p. 72)⁴⁸.

4.2. Practice: conscious machines

The ontological contradiction between the physical and the mental points, as the most immediate consequence, to the difficulty of directly linking a mechanical device

⁴⁴ Cf. Chalmers (2014, p. 104). The expression can be traced back to the major works of Parfit (1984, p. 189) and Chalmers (1996).

⁴⁵ Physicist Edward Witten is more pessimistic in this regard: "I can't conceive of it [understanding consciousness] not remaining a mystery unless there is some modification of the laws of physics that is relevant to understanding the function of the brain, and I think that is very unlikely" (2000, 1:12:18-1:12:28). Cf. 1:10-36-1:12:52.

⁴⁶ Jonas would point to this when he alludes to "unconscious wishes and struggles" in organic life, to a "psychic" aspect" in that matter, different from "selfhood" (1995, p. 73).

⁴⁷ Along these lines, the reflection of Chalmers (1996).

⁴⁸ Stein calls for a corroboration of science: "The task of empirical science [...] is to establish these facts as completely as possible" (p. 72).

to consciousness. Achieving this would mean having reached the technological singularity, strong artificial intelligence (AI). John Searle defines it as a situation in which "any physical system whatever that had the right program with the right *inputs* and *outputs* would have a mind in exactly the same sense that you and I have minds" (1984, p. 28).

The paradoxes that arise when trying to conceive such a synthesis are due to an ambiguous use of language: denying the distinction between mind and brain while at the same time assuming it. This is the case, for example, when we think of the teleportation of consciousness or the uploading of the mind: would we still be the same subject, even if the body from which we are separated is still alive?⁴⁹ In these discussions, subjectivity is spoken of in two different senses, one material and the other mental. On the one hand, it is understood as an emergent element of physical structures, considering it feasible to make a similar copy of it. On the other hand, it is interpreted as a psychological unit that uniquely defines the identity of the person. But the two representations have opposing properties: the material copy can never be the same, since everything material consists of discrete elements, closed in on themselves and subject to the fluctuations of time and space. The mental, on the other hand, can incorporate multiple aspects in a complex that maintains its unity in time and, in turn, its direction towards these aspects.

At the level of intelligence, the paradox moves to the field of semantics. Certainly, we can design the machine to combine or (re)order its material components. We can also design the machine to process immense amounts of input data and provide answers from it. The problem is that these operations, although autonomously multipliable, are always driven by particular instructions and directed at particular components, making it incongruous for them to attain the universality of concepts, a unity of meaning referring to an infinity of diverse aspects. The machine seems, therefore, powerless to understand and compare external information on its own, as John Searle argues (cf. 1984, pp. 30-31). This limitation of the machine would not be of a functional nature, since it manages to simulate and quantitatively surpass intelligent operations, as shown by the "Chinese room" experiment proposed by Searle himself. It lies in its lack of intentionality, of self-direction towards meaning. Ray Kurzweil, advocate of the stage of "impending merger of our biological thinking with the nonbiological intelligence" (2005, p. 4), attempts to refute Searle's objection by resorting to the common argument of complexity of elements or organization: "Part of the philosophical sleight of hand in Searle's simple analogies is a matter of scale" (Ibid., p. 430). However, as we are arguing, this is a qualitative problem.

We have previously put forward the thesis of a homogeneity between the material and the organic (or biological) levels. Accepting this thesis, transferring the ontological exclusivity of the mental to the biological becomes inconsistent. Searle tries to defend this solution. He criticizes the possibility of strong AI for the difference between the material and the mental, but considers the latter as a mere aspect of the biological brain: "on my view, the mind and the body interact, but they are not two different things, since mental phenomena just are features of the brain" (1984, p. 24). It is thus understood that, supporting the impossibility of strong AI,

⁴⁹ For an exposition of the various issues in this debate, see Blackford and Broderick (2014).

Roger Penrose judges that Searle is "not able to explain" the "reasons" why the essential features of the mind would emerge from biology: "What is so special about biological systems [...] which sets them apart as the objects allowed to achieve intentionality or semantics?" (1999, p. 29).

Let us end by remarking that, in view of the ontological disparity between the material and the mental, the symbiosis between the machine and the human mind, a fundamental objective of the transhumanist project, remains a distant prospect. It is conceivable that technology can reorganize and stimulate the neural structures that manage learning, but not merge consciousness with a collection of cells, molecules, atoms, and electrons. It is equally logical that while it can override or modify the specific levels of psychology (perception, instinct, conceptualization and decision-making) by altering their physical correlates, it cannot produce them or transfer them to a material device.

5. Conclusions

Let us recapitulate the course and results of our study. First, we analyzed the concept of nature in relation to that of species and essence. Next, we explored the structure of human nature; and with Rosmini, four relevant components have been detected: "in finite perfect [=intelligent] entities nature results from four elements" (1998b, § 2724, note 2). Specifically, these components were: "1°. the idea [=ideal being], 2°. the *reality*, 3°. the *mind* in which they are knotted [...], 4th. the *end* [*fine*] or good to which it tends" (§ 2718).

We have made explicit the second and third components, real and mental, unfolding the faculties and states of the material, animal, and intellectual levels. In addition, two value-generating perspectives on human nature have been presented. The first perspective was based on the ideal component of the human being, the criterion of his superiority, comparative order (CO). The second perspective, corresponding to the fourth component, consisted of its intrinsic order (IO), its own goodness and purpose, with a general (IOa) or dynamic (IOb) character.

This outline of human nature revealed a series of ontological and practical contradictions that were not resolved by the transhumanist project. It seems that, given the limitation of matter, technologies could intensify the psychological traits of the person, but would never be able to mimic them. This limitation would radically relativize some of the most ambitious objectives of the project, that is, the overcoming of the human species, or the connection between machine and mind. From the axiological components of human nature, transhumanism presents a further series of ethical contradictions arise that we have not been able to elucidate here.⁵⁰

Finally, let us underline that the ontological and ethical aspects suggested in this paper serve as coordinates for the evaluation of any initiative pursuing human restoration and enhancement. It is therefore recommended that the transhumanist movement assume an epistemological and metaphysical foundation of the person (cf. More 2013, pp. 6-7). On the one hand, to become aware of the insurmountable frontiers of matter and thus of technology. On the other hand, to recognize

⁵⁰ These contradictions are discussed in Caro (2022), pp. 109-114.

the qualitative height reached by the human species in evolution, a species understood in a strict sense: absolutely specific (CO). Finally, to recognize the natural dynamism of the person towards individual perfection, which goes beyond the material (IO). These are the general conditions that would prevent the erratic progress of technology and the main risk of global catastrophe (*existential risk*)⁵¹.

Humanism calls for the cooperation of all fields of knowledge to safeguard our species (cf. Marcos, 2018, pp. 121-122), in constant danger of self-extinction. To use Sloterdijk's expression, it is necessary to create "human parks", where "human dignity deserves to be spoken about" and individuals "keep themselves in them [...] as self-caring and self-protecting beings" (1999, p. 48). It is still time to unapologetically promote a second way, questioned by Sloterdijk himself insofar as it is led by "breeders for minimization of human being [*Kleinzüchter des Menschen*]" (p. 40). For "klein" is now understood as the minimum to protect each person, their basic essence, and at the same time as the only thing that makes the human individual transcendent, able to develop freely and genuinely.

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⁵¹ Postigo warns of these possible consequences "in the face of ignorance of what man is" and his intrinsically dynamic nature (2016, pp. 239-241). Existential risk has been introduced and extensively studied by Nick Bostrom.

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