The embryonic discontinuity and the unity of the person in the thought of Saint Thomas Aquinas. Some impacts on current bioethics

La discontinuidad embrionaria y la unidad de la persona en el pensamiento de santo Tomás de Aquino. Algunos impactos en la bioética actual

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Abstract

The human embryo in legislation has no defined status. As for its status in ethical debates, no consensus has been reached between the various parties of the different bioethical currents. What is certain is that in most legislations, in order to circumvent ethical debates, base their

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arguments above all on scientific data. As a result, ethics is limited to the scientific aspect. However, it is urgent to remember that bioethics does not stop solely at the scientific or sociological aspect. Particularly, the Personalist Bioethics approach invite us to consider the human being, including the embryo, in its meta-ontological aspect. The personalist vision is based on the notion of the "person" described by Saint Thomas Aquinas. Could the latter provide answers to the ethical dilemmas of our days? This article aims to answer this question by analyzing the issue of embryonic discontinuity and the unity of the person from a meta-ontological reflection.

1. Introduction

The legal status of the embryo is always a crucial topic in the various bioethical laws. Scientific advancements, as well as, the clarifications offered by genetics have sparked and still spark "lively debates on the status of the embryo, while provoking repeated initiatives to regulate these techniques on the legal level" (1, p. 1): The notions of filiation and parenthood are called into question with providing access of Artificial Reproductive Technology (ART) to female couples which will deprive a child of its father and the possibility of access to surrogacy; eugenics is encouraged through the extension of Preimplantation genetic diagnosis (PGD) to non-hereditary diseases and the extension of abortion —possibly up to nine months— through medical abortion; the creation of chimeric embryos would remove the border between man and animal.

Having a clear vision of these challenges to assess their consequences requires a bioethical reflection combining scientific data with meta-ontological thought. The Personalist Bioethics[1] of Elio

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[1] The Personalist Bioethics approach goes beyond the religious perspective. It is built on the reason to reflect on the objective value and dignity of the human person, including the embryo as a human being.

Sgreccia (2), known as "ontologically grounded personalism" and adopted by the Catholic Church, offers us a return to the thought of Thomas Aquinas. Can the latter shed some light on the debates of this century? Does not his thought pose the problem of embryonic discontinuity through mediate animation by destabilizing the unity of the person? What are the impacts on current bioethics? These few pages offer a line of reasoning in three parts. The first is devoted to the notion of the "person" which is at the center of Personalist Bioethics. The second part analyzes the question of mediate animation which poses the problem of unity in discontinuity. The third part develops, in the light of the first two, some impacts on contemporary bioethics.

2. The concept of the person

We owe Saint Thomas Aquinas the fully philosophical concept of the notion of the person without denying its theological foundation already discussed by Saint Augustine. Aquinas addresses this notion in questions 29-38 of the *Prima pars*[2] of the *Summa Theologica* (ST I), questions devoted to the Trinity (3). Gilles Emery (4, p. 129-156), Emmanuel Housset (5, p. 195-225) and Marie de l'Assomption (6, p. 36-66) comment on these questions asked by Aquinas. The latter defines "person"[3] as "subsisting relationship". By using the expression "subsisting relationship", he modifies Boethius' definition [2.1]

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[2] The *Summa Theologica* (ST) of Saint Thomas is divided into three parts in four volumes: a) *Prima pars* (ST I), b) *Prima secundae* (ST I-II), c) *Secunda secundae* (ST II-II) and d) *Tertia pars* (ST III).
An article of a question in the works of Aquinas generally has 4 parts: objection (ad.), contrary sense (sed ad.), answer (resp.) and solution (sol.)
I will henceforth use references to Aquinas according to the usual methodology: ST followed by the question (q.), article (a.), then —if necessary— by one of the parts of the article.

[3] First, Aquinas applies to the divine Persons —Father, Son and Holy Spirit— the notion of "person"; then, he transposes it to apply it to the human person.

by insisting on the unity of soul and body in order to preserve the unity of the human person [2.2].

2.1. *An individual substance of a rational nature*

In the first article of ST I, q. 29, Aquinas takes up the definition of the "person" given by Boethius, "the person is an individual substance of a rational nature" (3) by excluding three orders of realities (6, p. 24) incompatible with it: accidents,[4] genera and species in the genus of substance and inanimate bodies, plants and animals.

Reformulating Aristotle, Aquinas indicates that the word "substance" can have two meanings: either it expresses the quiddity of the thing, its definition: *ousia*, *essentia* or nature, which is called second substance. Or it expresses the subject itself, the individual henchman subsisting in the genus substance, which is designated by the first substance. By affirming that the person is a substance "taken in a general sense which dominates the subdivisions (first substance and second substance)" (3), he excludes accidents because the substance is "individuated by its own principles and not by any other external thing", as he asserted in article 2 of question 9 in his treatise *De potentia* (7). Analyzing the subdivisions of substance (8), Aquinas affirms that the person is the primary individual substance which bears within itself three characteristics (6, p. 29-35) reported to subject (3): *subsistentia* (exists by itself and not in another), *res naturae* (subject of a common nature) and *hypostasis* (subject of accidents). Therefore, the person as primary substance designates an individuation of a being that exists in itself and not in another or through another. It "possesses its own being in a complete way, in itself and by itself, exercising on its own account the act of existing" (4, p. 31).

As for the term "nature", Aquinas considers it as an intrinsic principle of all movement. Now, since the principle can be formal

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[4] In metaphysics, accident designates what belongs to a substance in a non-necessary way; it does not exist in itself like substance but needs another to exist. For example, a horse is a substance by itself, and the white color of this horse is an accident since whiteness cannot exist in itself.

or material, and since, as Boethius says, "nature is what informs each thing by endowing it with its specific difference", the word "nature" can be understood as a formal principle which gives form or essence to first substance as its formal cause as expressed by Christian Erk (9).

As far as "rationality" is concerned, it implies will and freedom. It is an inclination, this "intellectual appetite" which means that beings endowed with intelligence not only tend towards an end, but "they have the capacity to carry themselves, by their will, towards the end" (4, p. 132) apprehended by intelligence while controlling their actions. How does this substance manifest in humans?

2.2. *The substantial unity of soul and body*

To define the substance of man, Aquinas begins with the foundation: according to ST I, q. 75, a. 1, the first principle of life (3) is the soul as a subsisting reality as Aquinas defined it in the first question of his treatise *De anima* (10). Fabrizio Amerini (11, p. 50-51) explains it this way: a) Since the operation of intellect is immaterial, this supposes that the substance, the soul, endowed with such power is immaterial. b) Since through intelligence the soul can know the nature of all bodies, this assumes that it possesses nothing in itself of their nature according to what Aquinas explains in ST I, q. 75 and in the question 14 of *De anima* (3,10). Therefore, the soul is a subsisting reality through its immaterial intellectual operation in which the body does not intrinsically participate. Can we say that the person identifies with the soul?

Thomas Aquinas is not in favor of this opinion held by other authors (6, p. 88-97). For him, the subsistence of the individual substance of a rational nature is perfect only in God, since in Him there is no division. Whereas in man as a bodily creature, the soul is not confused with the person. The body is "necessary for there to be a human person" (6, p. 99-100). Now, how to understand the soul as a subsisting reality if the body is necessary for there to be a person?

Emmanuel Housset gives an answer to this question by stating that:

> The strength of Saint Thomas here is to question the human person as a whole and not from one of its elements […]. It is by starting from the person as a whole that it is possible to elucidate his own form of existence without making it a simple being endowed with a substrate (5, p. 158-159).

In fact, Aquinas did not invent a new aspect of the person, but he approached it and apprehended it differently by specifying that the person is not only a being endowed with a substrate, is not only a body animated by a soul but that the very essence of the person is this soul-body compound. The soul is the substantial form of the body and the union of the two is not an accidental but a substantial union for three reasons:

a) If the characteristic of the human person is the intellectual operation which differentiates him from plants and animals (11, p. 73-75), this rationality —according ST I, q. 85, a. 1— "is not the act of an organ, but a power of the soul which is the form of the body" (3) which determines the species.

b) The soul is individuated only by the body when it unites with it. It is the formal principle of the body; the body is the material principle of the individuation of the soul.

c) Since the soul is individuated by the body, the latter must be willing to receive its form. Its organization is a prerequisite for being informed/animated, according to ST I q. 75, a. 6 and q. 91, a. 1 (3). As for the operation of intellection, even if it is immaterial, it is never done without the body.

Thus, the substance of the person resides in the union of the soul with the body which "could not be accidental. […] The person therefore ceases to be considered simply as a spirit which incarnates itself in a particular matter" (5, p. 156). Substantial union is an onto-

logical necessity which, according to Elio Sgreccia, establishes the dignity of the human person from conception. However, this foundation comes up against the problem of the mediate animation of the embryo.

3. The mediate animation

After a long reflection in several of his texts [3,7,12-14],[5] Aquinas begins by affirming that the human soul does not find its origin in the paternal seed nor is transmitted from parents to children. In doing so, he dismisses mainly two theories (1, p. 1-9; 6, p. 195-209; 11, p. 8-104; 15, p. 7-9; 16, p. 469-478) of his time: Traducianism[6] and the pre-existence of the soul. In chapter 87 of the *Summa contra Gentiles* (SCG), Aquinas asserts that the soul originates from God (14). And "since it is a part of human nature, the soul has its natural perfection only insofar as it is united to the body" (3). Now, if the body must be disposed to receive the soul, what about animation in its relation to embryonic development [3.1]? How to conceive it in relation to a formal discontinuity? Can we thus speak of a unity of the subject [3.2]?

3.1. *Formal discontinuity*

Thomas Aquinas is among those who support mediate animation with a succession of substantial forms in the embryo. Based on the biological conceptions of Aristotle and Albertus Magnus (Saint Albert the Great), Aquinas explains —in article 9 of question 3 of *De*

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[5] Commentary on the Sentences, Book II. (II Sent.), distinction (dist). 18, q. 2, a. 1; *Compendium theologiae I*, ch. 93; *Sum against the Gentiles, Book II*, chap. 86-87; *QDP*, q. 3, a. 9; ST I, q. 90, a. 2; q. 118, a. 2.

[6] This is a doctrine due to Tertullian according to which the soul of children is created by their parents. As a result, this doctrine is opposed to creationism according to which the soul is created by God. Traducianism is considered heresy by the Catholic Church.

potentia— that the process of generation is a series of corruption in four phases (7):

a) After coitus, the paternal seed begins to actively act on feminine matter, hence the emergence of the first substantial form (14); however, the two subjects remain distinct. Not containing the soul, the paternal seed has an exclusively material role (1, p. 34) as a power, a formative virtue, *virtus formativa*, which arranges the maternal matter and the form to receive the rational soul.

b) and c) When the first substantial form is rejected by the corruption of the two paternal entities, the vegetative soul arises and the embryo/fetus comes into existence. However, the paternal entities remain in a virtual way (7) and the active virtue of the sperm —according to ST I, q. 118, a. 1— continues to exert its role on the organization of the matter (3). Then, when the embryo reaches a certain organic development —such as the appearance of the heart (12) according to the II Sent. dist. 12, q. 1, a. 2, resp. 6— the sensitive soul emerges. With the emergence of this soul, a new indivisible entity exists whose form ensures —in addition to the nutritive functions— the sensory and motor functions.

d) According to the III Sent. dist. 3, q. 5, a. 2, resp. 3, when the embryo reaches a higher stage of development (17) with the appearance of the heart and the brain (11, p. 103), the infusion of the rational soul occurs.

It is clear that Aquinas cannot accept immediate animation (18). This theory of stages, or graduality according to Elio Sgreccia (2, p. 460-461), is taken up by certain contemporary authors such as Claudio Antonio Testi (19, p. 8), Aline Lizotte and Ernst Haeckel cited by Pascal Ide (20, p. 30-31). However, from a metaphysical point of view, such a process of generations, corruptions and succession of souls poses the problem of the appearance of new species (11, p. 99-101) and the embryonic identity and unity of the subject.

3.2. Subject unity

To be able to solve this dilemma, Thomas Aquinas offers two solutions.

a) The succession of forms should not be understood as if it would make a plant, an animal then a man succeed one another. In the first phases of development, the embryo possesses in an incomplete way, the form of the vegetative (13) and sensitive soul: therefore it does not represent the species in a perfect way. Moreover, the form not only replaces the one that precedes it but also assumes its functions, like a sort of reabsorption each time the matter is sufficiently organized. The rational soul replaces the vegetative soul and the sensitive soul by ensuring the three functions: vegetative, sensitive and rational. This differentiation between souls would be possible only through an act of mental abstraction (3,12), as he explains in ST I, q. 77, a. 4 and II Sent. dist. 18, q. 2, a. 3, ad. 2 and ad. 4.

b) The embryo retains its unity despite "the succession of souls, due to the development of the same matter of the parents" (6, p. 217) which ensures the continuity of the same subject. On the one hand, naturally and according to the teleological order (7), the human embryo is part of the process of human generation and its ultimate end is to become a man. On the other hand, even if the embryo continually modifies its matter, it remains one and formally the same (21) like the community which remains one and formally the same despite the change of its individuals. The image of the community that Aquinas gives in IV Sent. dist. 44, q. 1, a. 2, and a. 4 allows us to understand that community unity remains despite the changes of individuals. Therefore, he asserts in his treatise *Super Boetium De Trinitate* q. 4, a. 2, resp. that embryonic matter has an indeterminate dimension (22) and ensures a formal continuity and a numerical identity without any interruption of its existential history (11, p. 185-191).

4. Impacts on bioethics

However, the mediate animation presented by Aquinas seems to create a bioethical problem nowadays, particularly with regarding abortion [4.1], rationality [4.2] and twinning [4.3].

4.1. *Abortion*

Based on the question of mediate rational animation, we could be in favor of abortion before this period because we do not consider the embryo as a human being. It seems that Aquinas goes in this direction by limiting himself to two explanations. On the theological level, he affirms that before rational animation, the embryos are excluded from the final resurrection (21), from the protection of the guardian angels (3,12) and from the possibility of sanctification (23). Legally, although abortion is considered a grave sin, Aquinas considers it less than a homicide (11,21, p. 212-213, 218; 24).

Even with mediate animation, modern thinkers like Fabrizio Amerini (11, p. 211-212) and Bruno Saintôt (25, p. 19) consider abortion as an act against nature because embryos are not the end of a generative process; they are not created to remain "embryos" but to generate a human being. Others like Gianfranco Basti (26, pp. 356 ss.), Noël Simard (27), Tommaso Scandroglio (28, p. 3) and John Meyer (29, p. 18-19) —to reject abortion— consider that in the light of scientific and genetic discoveries, it is possible to affirm immediate animation. They consider that at the time of the fusion of the male and female gametes during fertilization, a new cell emerges carrying in it all the information (the 46 chromosomes) necessary to generate a human being.

4.2. *Rationality*

What about rationality in the embryo? Maurizio Mori categorically rejects it. For him, there is no rationality without the presence of an

adequately formed cerebral cortex (30, p. 71-72) and some neurological activity (29, p. 24-25). Jacques Maritain agrees with this idea by identifying the presence of the soul with the development of the nervous system and the advanced sensory-motor psyche (31, p. 115).

However, Aquinas in ST I, q. 76, a. 8, resp. affirms that the rational soul is not localized in a determined part of the body but, as a substantial form, it is found in the whole body as in each of its parts (3). To identify the soul with the capacity to develop an operation, shows the misunderstanding of two Thomasian principles explained in ST I q. 77, a. 6, resp. and in his work *Quodlibets* chap. ix, q. 2, a. 3, ad. 2. These are the principles of the operation and the powers of the soul which are accidents and which do not enter into the constitution of the substance of the individual (3,32).

In addition, in the transition from potency to act in the embryo, we must distinguish between the first act and the second act according to Aristotelian metaphysics. In *De anima* q. 12, arg. 14 and in book ix of *Sententia libri Metaphysica*, Thomas Aquinas affirms that, for there to be a human being in act, it suffices that there is the rational soul; this is considered as the first act. The exercise of operations is considered as a secondary act (10,33). Saying that the embryo is a potential person (11, p. 204) is to affirm that the passage from the embryo to the man, from potency to act, does not mean the passage from non-exercise to the exercise of rationality. The latter is not the fact of having the possibility of possessing the capacity to reason, nor the possession of the capacity to reason in action, but the possession of the capacity to be able to reason. In ST I, q. 77, a. 1, Aquinas affirms that being a man does not depend on the use but on the possession of the capacity to be able to reason (3) realized either in a more or less perfect way, or never (23) according to ST III, q. 68, a. 12. In this sense, Christian Erk affirms that a "person can only act rationally because he was a rational being from the start. […] There is no potential person but people with a potential […] to become the rational beings that they already are" (9, p. 108) while Meyer does not seem to agree with this approach (29, p. 27-31).

4.3. Twinning

Biologically, twinning can take place after fertilization and during the first two weeks of embryonic development. According to Pascal Ide and Angelo Serra (20, p. 165; 34, p. 593), it could be the result of a genetic error, but It can also considered "an exception" (20, p. 164). The possibility of such an event also comes down to the potentiality of totipotent cells, the blastomeres, to become an independent being by separating themselves "from the extracellular material that holds them together" (20, p. 165).

From the metaphysical and ontological point of view, the problem arises at the level of animation. For those who support mediate animation, the argument of the preservation of embryonic individuality and the impossibility of the division of the rational soul (14) is advanced in chapter 86 of SCG II. If the person is an "individual substance of a rational nature", the animated embryo is an individual one, and undivided by itself. Twinning is only possible before the rational animation of the embryo. Pascale Ide (20, p. 21), relying on Xavier Thévenot, and Bertrand de Margerie (35, p. 129) are supporters of this concept.

Those who support immediate animation admit the individuality of the embryo from fertilization, even if twinning occurs. For them, the soul is present in the whole as in each part of the body as affirmed by Thomas Aquinas (10). During twinning, they prefer to speak of a phenomenon of loss or separation and not of division of the embryonic material which is made up of totipotent cells. According to Jason Eberl, shortly after the separation of the totipotent cells, the latter are immediately informed by the rational soul (36, p. 39). For Pascal Ide, "grasping the appearance of the twin requires reasoning no longer in metaphysics but in philosophy of nature". For him, "the living body cannot be devoid of soul" (20, p. 167). Monozygotic twins are ontologically identical. The only difference lies in how they appear (20, p. 169).

It is difficult to decide between these two currents which put forward well-founded but also questionable arguments.

5. Conclusions

Certainly, Thomas Aquinas cannot offer all the answers to current questions. But his ideologies remain a foundation for solid bioethical reflection. In light of the preceding pages, the seven final points are presented below:

1) The concept of "the person" presented by Thomas Aquinas, as soul-body unity, constitutes the fundamental basis of Personalist Bioethics where the human being must be approached and treated as a whole. Corporeality and the spiritual dimension are intimately linked; separating one from the other undermines the existential identity of the person from conception.

2) The embryology in the works of Aquinas constitutes a philosophical rather than a biological explanation of the phenomenon of generation. His scientific knowledge and his embryology were based in particular on Aristotelian biology which is no longer accepted today (11, p. 283). His concern was to reconcile both the "theories of Aristotelian biology, the metaphysical requirements of the unity of form and the coherence of the great Christian dogmas" (37, p. 303).

3) It should be noted, as Claudio Testi points out (19, p. 1-2), that scientific thought —which wishes to recover the dignity of true knowledge— must take into account the meta-scientific reflection of first principles, notably metaphysics. As for metaphysical thought, it must consider new scientific discoveries.

4) Regarding the animation of the embryo, neither science nor metaphysics can prove when the embryo is animated. It is always a question of preference based on this or that argument, scientific or metaphysical. What is certain is that the soul is not detectable in its substance, but one can know its existence through its operations, not only rational but also vegetative and sensitive.

5) Neither philosophy nor current embryology can help us "to decide whether the embryo can be qualified as a person" (25, p. 19). The Catholic Church has not yet decided definitively on the status of the embryo as a person. However, in the *Donum Vitae* instruction, it's recommended that "the human being must be respected and treated —as a person— from the moment of conception" (38, I-1). Thus, the embryo "must be defended in its integrity" from the very first instant of his existence and it has the right to life as every human being.

6) Unity in embryonic discontinuity can only be found by being part of a continual process, the end of which is the human being (18). If the human embryo cannot be considered as a person, it nevertheless remains an individual human entity whose natural purpose is to become a human being through the process of its development (11, p. 169).

7) Finally, as Robert Pasnau points out (39), even if we cannot explain everything, there is no excuse for abusing the embryo. Its potential is not an obstacle to its actuality. Observed from a scientific point of view and meditated on from a philosophical point of view, the embryo —from the first moment of its existence— deserves respect in the same way as the human person, and its dignity remains ontologically founded.

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