

# THE VALUE OF LIFE OF THE EMBRYO. THE ARGUMENT OF POTENTIALITY TO DEVELOP, AND THE CONTEXT IN WHICH IS EMBEDDED<sup>1</sup>

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## Introduction

Ethical and legal discrepancies in the science auditorium over the status of the embryo has always been interrelated with the different interpretations and applied practices of the never ending story about the beginning of the human life. This eternally mystical question has been tackled from philosophers, ethicists and lawyers, but what urges for a precise resolution is the scientific immense progress towards introduction of new ways of life-creating.

The moral status of the human embryo, and therefore the definition of personhood represent core issue for the ethical debate around the techno sciences. By fixing a broader or narrower concept of the human person, the group of human beings that hold an ontological status can be enlarged or diminished.

Under these circumstances, respect for the embryonic life will vary according to the model we follow, in terms of belonging to the group of human persons worth respecting. An extreme position could imply full moral recognition of embryos as already being human persons, and consequently, minor or non existent competence on the progenitors to decide over their parenthood regarding already created embryo, whereas on the other side, we may experience an excessive lack of respect towards embryonic human life, and primary respect for the progenitors and their autonomy in the process of decision making over the life of that very same embryo. Therefore, the determination of the status of the embryo does not affect only the future life of the embryo, but the future life of the progenitors, as being parents or not.

The concept of personhood is ambiguous because of several reasons. As a key element that launches all the other consequential misinterpretations is the context in which a person developed. By investigating cultural pro –attitudes Vasil Prodanov distinguishes between individualists and collectivists, as related to Catholic, liberal and Western tradition on the one hand, and Orthodox, communitarian Eastern European tradition on the other hand<sup>2</sup>. According to him, while “the former sees the person as a bundle of rights”, the latter perception of a person is identified with a “bundle of his social identities, affiliations and roles”. From this quotation, it is understandable why the actualisation of personhood in Western countries begins with the moment when one is entitled to acquire his own rights, and in Eastern countries only when one coexists in the group, class or community and consequently becomes a recognised

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<sup>2</sup> Prodanov, V., ‘Cultural Pro-Attitudes, Reproductive Ethics and Embryo Protection’ in *Conceiving the Embryo, Ethics, Law and Practice in Human Embryology*, Evans (ed), The Hague/ London/Boston: Martinus Nijhoff Publishers, 1996.

subject not as a holder of rights, but primarily as a holder of obligations. Therefore, if for Individualists, the human essence originates from within, as inherited and self-sufficient element for individual development, for Communitarians, the same human essence is a substrate of social identities, affiliations and roles. Bearing in mind this historical background of development of the thought and science, it is easy to understand why some authors hold firmly on ontological properties, claiming individuality as a supreme value and promote observation over isolated oneself, while others always interrelate the individual with society, as a mutual mirror in which both the individual and the society look upon and, therefore shape themselves.

This paper will try to settle both levels of perception by setting forward two perspectives: legal, in a situation where an embryo is already created In Vitro in a divorce dispute, that primarily concentrates the debate on the progenitors as already established human persons, and, therefore, is a rights-oriented approach, as well as moral, that originates from the intrinsic capacity of the embryo itself to develop, from the argument on potentiality. Elaboration of that kind will attempt to explain that both perceptions are important and interconnected for creating overall picture, and even more, that any other restrictive observation will lead to biased conclusions.

### **Legal Introduction: Embryo created In Vitro in a Divorce Dispute**

The immediate society of the embryo is its progenitors, those that participate in the creation with their genetic material. The most evident clash of rights and obligations of the progenitors, as concerned with the procreation, and of the embryo itself, as a goal of the procreation and as a topic of legal and moral controversies, appears in a situation of a divorce dispute. If a divorce dispute is initialised after facilitated creation, the future life of the embryo directly concerns the future fatherhood and motherhood of its progenitors, and therefore the debate has already reached its wider social dimension.

### **Ethical Introduction: An Argument of Potentiality**

In a circumstance where the universe is compounded of you, the others, and I, the task to share same lenses of perception towards the object under observation is difficult<sup>3</sup>. Therefore, the process of articulating and balancing different moral values has to take under consideration all the parties, starting from their intrinsic capacities, and extending towards the contexts in which they appear to act.

To clarify what the concept of moral status means, I will use the definition that Mark T. Brown offers: *“To ascribe moral status to a class of entities is to rank them on an internal scale of moral values that determines how the obligations owed to these entities can be reconciled with those owed to entities located at other points on the*

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<sup>3</sup> As written by Aristotle: „decision rests with perception“, Aristotle, *Nicomachean Ethics II*,9: 1109b 24; IV,5: 1126b 4-5.

scale”<sup>4</sup>. According to this definition, the paper will try to locate the moral position of the embryo in constellation with its peers group, gametes as antecedents, newborns and adult human persons as its descendants from their potential to develop from one to another<sup>5</sup>.

In the ethical deliberation, the paper will focus on observing and analyzing two points of view:

- I. Isolated interpretation of embryo’s potentiality *per se*, in which I will trigger 1. The ontological position of embryo and the application of the term “*potentiality*” in the discussion, 2. relatedness and discrepancies among in vivo and in vitro embryos, and
- II. Broader interpretation of the embryo’s potentiality - the context of realisation of the potentiality.

After clarifying the substantial elements in the terrain for discussion over embryo’s belonging, Brown’s internal scale of moral values, in relation with the other protagonists on the developmental scale and outside of it, will be applied. Comparing different entities on their developmental path for becoming one from another, and even more, comparing embryo with its progenitors, will be instrumental to examine the question if the life of a human embryo, as supported with its own potential to develop, can outweigh the free, private and autonomous decision of an actual person to become/not to become a parent<sup>6</sup>.

## 1. Clarification of the problem. Terminology, Ethos and Legal background

### 1.1. Terminology and clarifications for understanding the attitudes in the discussion

The term “*embryo*” refers to the stage of prenatal development between the time of the implantation of the fertilised ovum in the woman’s uterus, until approximately the end of the seventh or eight week, and from then on, it is instead called foetus<sup>7</sup>. In

<sup>4</sup> Brown, M.T., ‘The Potential of the Human Embryo’, *Journal of Medicine and Philosophy*, 2007, 32: pp. 585-618.

<sup>5</sup> According to Brown, M.T. (supra note 3) „the intrinsic properties of the entity itself justify the ascription to moral status“. Further on, Brown affirms that „a hierarchy of moral status merely reflects a commitment to a background hierarchy of intrinsic moral values“. Therefore, Brown refers to moral status as a general claim about „how moral agents ought to conduct themselves toward entities that have certain kinds of intrinsic properties“, that implies their moral recognition and attitude from/to already established moral agents, and therefore examines their moral position.

<sup>6</sup> Meaning newborn from foetus, foetus from embryo, embryo from zygote.

<sup>7</sup> “/em'brɛxð/ [Gk, *en*, in, *bryein*, to grow], 1. any organism in the earliest stages of development. 2. in humans, the stage of prenatal development between the time of implantation of the fertilized ovum about 2 weeks after conception until the end of the seventh or eighth week. The period is characterized by rapid growth, differentiation of the major organ systems, and development of the main external features”, *Mosby's Medical Encyclopaedia for Health Professionals*, CD Version 1, 2004.

“ /fɛ'tæs/ [L, fruitful], the unborn offspring of any viviparous animal after it has attained the particular form of the species, more specifically, the human being in utero

the historical academic background, the application of this term went through many variations, as used in various medical and legal contexts, and therefore its meaning was interpreted in a very inconsistent manner. In accordance with the afore-mentioned definition, the American Fertility Society (AFS) made a distinctive definition of “*embryo*” and “*pre-embryo*”. They related the second term to pre embryonic stage that lasts until 14 days after fertilization<sup>8</sup>, but that may vary several days (as now referred to *zygote*<sup>9</sup>). Nevertheless, the term “*embryo*” was used very often with a broader meaning, depicting the developing human fertilized ovum from the conception until approximately the end of the second month, and therefore as synonymous with multiple other terms such as “*pre-embryo*” and “*pre-zygote*”. According to Arthur C. Guyton, there should not be a differentiation between the above-mentioned terms, since all necessary chromosomes for developing an embryo in the human body are present from the moment of fertilization<sup>10</sup>. By this, Arthur C. Guyton refers to the comprehension that the pre embryo\zygote already has the same characteristics as the necessary chromosomes do not alter through normal cell division. For the sake of consistency and facilitated discussion, and due to the acceptance of the potentiality argument as a tool for arguing in the following debate, this paper will accept Guyton’s attitude, and the terms “*pre-embryo*” or “*zygote*” and “*embryo*” will be identified and encompassed into the term “*embryo*” only, referring to the state of the embryo from the moment of fertilisation until approximately the end of the seventh or eighth week.

In an attempt to investigate the “investment of genetic material” of the progenitors, and consequently their share in the “joint creation”, Sara Chan and Muireann Quigley distinguished two conceptual components with which the progenitors participate in the newly formed embryo: 1. *physical*, made out of tissue samples, cells, DNA and the atoms that make the nucleic acid molecules that hold genetic code as unique genes, and 2. *informational* - the code itself, the particular arrangement of atoms that make the DNA sequence that forms individual genome<sup>11</sup>. According to them, physical components might be a subject of property rights and from here on, they support the “property-based approach” as an answer to the question “what rights over embryos arise from property in genetic material?” In same line of comprehending goes Steiner, concluding: “*Our bodies are factories: They produce things like blood, skin, hair.. Self ownership gives us the title to these, and protects our liberty to dispose of*

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after the embryonic period and the beginning of the development of the major structural features, usually from the eighth week after fertilization until birth”, *ibid*.

<sup>8</sup> Malo, P.E., Deciding Custody of Frozen Embryos, Many Eggs Are Frozen but Who is Chosen?, *Health Care Law*, DePaul J. (ed), 2000, pp.307- 312 .

<sup>9</sup> /zi'gõt/ [Gk, *zygon*, yoke],(in embryology) the developing ovum from the time it is fertilized until, as a blastocyst, it is implanted in the uterus. Also called **zygocyte** /zi'gæsít/ “, *ibid Mosby's Medical Encyclopaedia for Health Professionals* .

<sup>10</sup> Guyton, A. C. and Hall, J.E., *Textbook of Medical Physiology*, 944 (10<sup>th</sup> edn 2000); see also Hollowell, K. *Cloning: Redefining when Life Begins. Exposing Flaws in the Pre embryo- Embryo Distinction*, Impact, 1999 p. 319.

<sup>11</sup> Chen, S. and Quigley, M., ‘Frozen Embryos, Genetic Information and Reproductive Rights’, *Bioethics* 26, Volume 21, Number 8, 2007. pp. 439 -448.

them...”<sup>12</sup>. Nevertheless, according to them, informational components are controversial.

The property-based approach, as a simple mathematical formula of genetic investment of progenitors in a mutual project is blind towards the project itself – the new complex alive mechanism. Therefore, the following Chapter, will focus on the life during initial stages of prenatal development of the embryo as existing *per se*.

*Prenatal development* is the entire process of growth, maturation, differentiation and development that occurs between conception and birth<sup>13</sup>.

*In Vivo fertilization* is a natural biological fertilization within women’s body. Through a complex interactive process, the embryo or blastocyst becomes imbedded in the uterine<sup>14</sup> by the end of the first week of the prenatal development<sup>15</sup>. Since pregnancy refers to the condition of having a developing embryo in the body, after the union of egg and sperm cells<sup>16</sup>, a woman is considered pregnant after approximately one week of embryo’s prenatal development.

*In Vitro fertilization* refers to the meaning “outside the body” attempts to stimulate in vivo fertilization in a laboratory setting<sup>17</sup>. This process stimulates attempts to substitute the in vivo process to the extent modern science allows<sup>18</sup>.

## 1.2. Ethos

The entire social and political structure in which we live in, stands on some prerogatives that are considered to be inherent and inalienable to all human persons equally. These are the cornerstones of the liberal Western civilization, that is, each human person is entitled to live and not to be harmed by others, and further on, to be free from third party oppression –and in these terms, to build a family through consensual procreation.

<sup>12</sup> Steiner, H., *An Essay on Rights*, Oxford Blackwell, 1994, p.233.

<sup>13</sup> Ibid *Mosby's Medical Encyclopaedia for Health Professionals*.

<sup>14</sup> *Dorland's Illustrated Medical Dictionary* 542, 28<sup>th</sup> ed. 1994; at 581at 327 -32.

<sup>15</sup> Guyton's supra note 9 at 945.

<sup>16</sup> Dorland's supra note 13 at 1347.

<sup>17</sup> Ibid at 856.

<sup>18</sup> The egg is being extracted from the women and laboratory fused on a Petri dish with the sperm. The created embryo divides in approximately 8 cells. These cells can be implanted in a precise day of the women menstruation cycle and afterwards the process takes the same path as In Vivo process. Even more, they can be cryopreserved, frozen in liquid nitrogen, safely preserved in a suspended biological state, kept in containers theoretically forever, but it is considered that their quality diminishes gradually after 5 years.

Interview with Victoria M. Sopelak, Ph.D., Associate Professor of Obstetrics and Gynaecology at University of Mississippi, Medical Centre (UMC), June, 11, 2002, in Langley, L.S. and Blackston, J.W, 'Sperm, Egg and a Petri Dish, Unveiling the Underlying Property Issues Surrounding Cryopreserved Embryos', *The Journal of Legal Medicine*, 2006, 27:167.

### *A. The ethos regarding the moral status of the embryo*

This query can be faced from three diverse ethical positions, among which no sharp boundary exists. Discrepancies among them, mostly depend on the favorable argumentation. Therefore, three focal argumentations are appointing the direction: those based on the biological premises, stressing the genetic unique make up, personhood arguments, that above all, value the autonomy of the rational human beings, and potentiality arguments, emphasizing the growing potential.

At one extreme the embryo is considered as a human subject soon after fertilization because from that very moment it presents all the genetic information that will be present through the entire life. This position entails an obligation to provide an opportunity for implantation to occur and tends to ban any action before transfer that might harm the embryo. Within this perspective, the fertilized egg and the embryo have equal inviolable value as all other human beings, and therefore a right to life<sup>19</sup>.

At the opposite extreme, we find the view that the embryo has no different status from any other human tissue, based on the fact that it is not an individual until is implanted in the female's womb. Then, with the consent of those who have decision-making authority over it, justified with the exclusivity of their own interests, no limits should be imposed on actions taken with it. This approach claims that embryos do not have a right to life, therefore, they do not need any protection<sup>20</sup>.

The third view holds that the embryo deserves respect greater than that accorded to human tissue because of its potential to become a person and because of its symbolic meaning for many people, yet it should not be treated as a person, because it has not yet developed the features of personhood, it is not yet established as a developed individual, and may never realize its biologic potential<sup>21</sup>. This concept may be supported with the *gradualist position*, that treats both sperm and egg as living entities, and the fertilized egg as gradually developing human being. Because of that, they affirm significance of the right to life and the right to develop to embryos, though not as rights that originate from an absolute value. Due to this relativity, the gradualist position entitles variable degrees of protection afforded to embryos, progressively increasing through development, until the birth, when they became absolute. Nevertheless, through the continuous process of development, embryo's rights are challenged from the stronger rights or interests of the mother<sup>22</sup>.

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<sup>19</sup> See also *The Protection of the Human Embryo In Vitro. Report by the Working Party on the Protection of the Human Embryo and Foetus*, CDBI –CO- GT3, 13, Council of Europe, Strasbourg, 19 June 2003.

<sup>20</sup> *Ibid The Protection of the Human Embryo In Vitro. Report by the Working Party on the Protection of the Human Embryo and Foetus*.

<sup>21</sup> Hellegers, A., 'Fetal development', in *Contemporary issues in Bioethics*, Beauchamp, T. M. & LE ROY, W., Washington, 1989, p. 126; The American Fertility Society Ethics Committee, *Ethical Considerations of the New Reproductive Technologies. Biomedical research and respect for the pre-embryo*, in 'Fertility and Sterility', Official Journal of the American Fertility Society, vol. 49, n. 2, suppl. 1, Birmingham, Alabama, 02/1988, p.34.

<sup>22</sup> *Ibid The Protection of the Human Embryo In Vitro. Report by the Working Party on the Protection of the Human Embryo and Foetus*.

### ***B. The ethos regarding parenthood***

Parenthood is one of the major role transitions in adult life for both men and women<sup>23</sup>. This means that the experience of sub fertility can be viewed as a non-event transition. A transition is defined as “an event or non event that alters the individual’s perception of self and of the world, that demands a change in assumptions or behavior, and that may lead either to growth or to deterioration”<sup>24</sup>.

In Harry Frankfurt’s scheme, the wish for a child belongs to the category of a constrained volitional need, because it is generated by a very strong and urgent desire that remains present until it is not fulfilled. In addition, Frankfurt stresses that the non-fulfillment of a constrained volitional need causes distress, and in case of involuntary childlessness, one suffers harm<sup>25</sup>.

The strong preference by prospective parents to have their own genetic children is often expressed in terms of reproductive freedom and human rights<sup>26</sup>. The liberty to procreate can be expressed positively – as a right to reproduce, or negatively – as a right not to reproduce. According to Yvonne Denier, if someone has a right to reproduce, than society and medical experts in assisted reproductive technology would have a rights- based duty to provide that to which one has right<sup>27</sup>. Furthermore, she imposes the question “can one legitimately speak of a positive right to a child? Does society indeed has a rights-based duty to prevent involuntary childlessness?” On these bases, the procreation is seen solely from the lenses of the progenitors, those that strive to fulfil their own child wish, and as such the perception and the role of the child is merely instrumental towards satisfying someone else’s wishes and desires.

Contrary to that, this should not imply that such desire has to be fulfilled at all costs, in particular when it might harm others. Indeed, parenthood, and thus procreation, is a private matter. We will agree that nobody can interfere in the private sphere of an individual without his or her consent. Then, the decision to procreate and form a family is a basic and intimate human prerogative that requires consensus between the parties involved. However, it also happens to be fundamental to the very existence and survival of the human species.

In Western culture, parenthood is widely accepted as a matter of bilateral consensus, thus in the case one of the parties refuses to become a parent, then the negative decision should prevail over the

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<sup>23</sup> Demyttenaere, K., ‘Anxiety and Depression in Sub fertility’, in *Mood Disorders in Women*, pp. 371-379.

<sup>24</sup> Koropatrik, S. *et al*, ‘Infertility: a non-event transition’, in *Fertility and Sterility*, n. 59, 1993, pp. 163-171.

<sup>25</sup> Frankfurt, H. G., ‘The importance of what we care about’, *Cambridge University Press*, 2004, p.104.

<sup>26</sup> Chan, S and Quibly M, ‘Frozen Embryos, Genetic Information and Reproductive Rights’, *Bioethics* 26, Volume 21, Number 8, 2007, pp. 439 -448.

<sup>27</sup> Denier states that “A positive right is generally defined as “a right to”. To this right corresponds a duty to provide that to which one has a right. Opposed to this, there is a negative right: “ a right not to be harmed” To this right corresponds the duty to protect this legal area in order to legally obstruct illegitimate interference” Denier, Y. ‘Need or Desire? A Conception and Moral Phenomenology of the Child Wish’, *International Journal of Applied Philosophy*, 20 (1), pp. 81-95.

other's desire, because nobody can impose to others a personal wish on their detriment. Hence, we must respect the free choices of other individuals. The problem appears when the decisions of others affect the growing life of the embryo. Whether this intrusion is morally justified or not, will depend upon the answer on the question if the embryo's life should be treated equally as the life of other human persons? In order to investigate if the growing life is relevant for treating embryo as it was another human person, the following Chapter will deal with the argument of potentiality of the embryo on its path of becoming one.

### 1. 3. Categorisation of the embryo in the legal domain

Macedonian Law on Bio-medically Assisted Fertilisation, in its article 12, stipulates the rights of the parents and the status of the one that undergoes the in vitro procedure<sup>28</sup>. Under this provision, the prior consent for initiating the procedure of the couple\woman that wants to undergo the in vitro, has a significance of a statement for acknowledging parental rights of both progenitors, after the birth of the child. Nevertheless, the couple\woman are allowed to withdraw the consent before the implementation in the woman's uterus. This article clearly depicts the standpoint of the Macedonian legislator that does not recognise the sort of life beginning at the stage of embryo. Therefore, the purpose of in vitro procedure is appointed solely towards satisfying progenitors' wishes for progeny, and the status of the embryo during the procedure and prior implementation in the woman's womb, is merely instrumental.

The Law<sup>29</sup> is new and does not shed light on the issues to be discussed in this precise context, nor there has been a case law that has dealt with similar situations. Then the legal and ethical questions, whether parenthood can be imposed to an individual, and whether supernumerary embryos can be discarded, has to be ethically discussed and undertaken.

In the Council of Europe's Report regarding the Protection of the Human Embryo in vitro, it is recognized that in developing laws and regulations over in vitro fertilization, legal questions within the field of Family Law, such as concerning the parentage of a child to be born, will need to be additionally considered<sup>30</sup>.

In the wider arena, legislators, courts and medical ethicists categorize the embryo in three categories:

1. Personal property of the couple facilitating the creation, with full ownership responsibilities and obligations, that nevertheless, for some other categorisations, refers to the

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<sup>28</sup> Law on Bio medically Assisted Fertilisation, Republic of Macedonia, Official Gazette of RM, 37/08, (Zakon za biomedicinsko potpomognato oploduvawe, Sluzben Vesnik na R. Makedonija, br. 37, 19.03.2008).

<sup>29</sup> Ibid.

<sup>30</sup> *The Protection of the Human Embryo In Vitro. Report by the Working Party on the Protection of the Human Embryo and Foetus*, CDBI – CO- GT3, Council of Europe, Strasbourg, 19 June 2003.



connotation of not affording moral recognition to embryos as to the other human persons<sup>31</sup>.

2. Already human person, with all legal status afforded to legal entities as human persons<sup>32</sup>.
3. Interim category, neither person nor property, entitled to special respect due to the embryo's possibility for human life<sup>33</sup>.

Under such legal background, legal observation over the moment of conception is appointed towards progenitors as already established active human agents. The embryo's deliberation in the same competing context with the progenitors is neglected. Therefore, the following Chapter will examine the moral status of the embryo through its biological possessions, and the driving force of the argument of potentiality that aims to bring the 46 chromosomes of the embryo to the state of a human person.

In the observed problem, we encounter a clash between the following core prerogatives: the respect for growing a human life, and the autonomy to decide for one's own procreation in the light of building a family, and responsible parenthood, respectfully.

<sup>31</sup> For instance, United States Supreme Court delivered an opinion in the leading case on abortion *Roe v. Wade* by favoring the mother's right to privacy, over the right to be born and the right to life of the unborn. The judges argued that during the first trimester of gestation, the mother is entitled to be free of an unjustified state intrusion in matters strictly related to her/his moral self. The Court justified such a decision by advocating that life is a exclusive privilege of the person, and that such a recognition does not extend to the embryo. Consequently, the Court refused to hold that the embryo possesses independent human rights under law, 410 U.S. 124, *Roe v. Wade*, 22/01/1973, VIII.

<sup>32</sup> For instance, Argentinean Civil Code in its art. 30, 51, 63 and 70 states that any entity capable of acquiring rights and obligations, who shows characteristic signs of humanity, without taking under considerations any distinction about particular qualities or accidents, from the moment of conception in the mother's womb, is a natural person. Bearing in mind that the Civil Code was enacted 140 years ago, when In Vitro techniques were conceivable, then, the interpretation would infer that the embryo conceived *extra corpore* and not yet implanted in the woman's uterus is an unborn person in the terms of the art 63 of the Civil Code. See CNCIV., sala I, causa n.49.760, Rabinovich Ricardo D. s/Fecundacion in vitro, 03/12/1999, in „Le Ley“, 2001, Tomo C, p.827. Even more, we can find case law from the Argentinean Supreme Court of Justice stating that human life begins with the fusion of the chromosomes contributed by the gametes cells. See CSJN, *Jorge Ricardo Romero y Otro v. Villber S. A. C. I.*, 03/09/1981, Buenos Aires, T. 302, p. 1284ss; CSJN, *María del Carmen Bariclla de Cisilottov v. Nación Argentina, Ministerio de Salud y Acción Social s/ Amparo*, 27/01/1987, Buenos Aires, T. 310, p. 112ss; CSJN, *Asociación Benghalensis y Otros v. Ministerio de Salud y Acción Social, Estado Nacional s/ Amparo*, 01/06/2000, Buenos Aires, T. 323, p. 1339ss; CSJN, *Portal de Belén – Asociación Civil sin fines de lucro c/ Ministerio de Salud y Acción Social de la Nación s/Amparo*, 05/03/2002, Buenos Aires, T. 325/I, p. 303ss.

<sup>33</sup> Langley, L.S. and Blackston, J.W., 'Sperm, Egg and a Petry Dish, Unveiling the Underlying Property Issues Surrounding Cryopreserved Embryos', *The Journal of Legal Medicine*, 2006, 27:167, referring to Brandimarte L., *Sperm Plus Egg Equals One "Boiled" Debate: Kass v Kass and the Fate of the Frozen Pre Zygotes*, 17 N. Y. C. Sch. J. Hum. Rts, 2000, p. 767, 775-81.

## 2. Isolated interpretation of embryo's potentiality *per se*

The following Chapter will abstract the existence of the progenitors and their autonomy to decide over their own procreation, and will focus solely on the biological construction of the embryos, and the potentiality as a characteristic of a human life that strives for development. Therefore, it will be examined whether potentiality is a criterion strong enough to claim that embryos should be treated as they were human persons already, and therefore, if their beneficence outweighs any decision that may cause them harm.

### 2. 1. Relevancy of the biological construction of the embryo for its potential as a criterion that stresses respect for growing life

An ontological concept requires to investigate what characteristics are being *qua* being, already possessed by embryos, and how do they correlate with the different potentialities that drive them to develop into the next stage.

Logical explanation of the potentiality to develop is offered by Michael Lockwood and his thesis about transitivity of potentiality: "if x has an active potentiality for giving rise to Y, and Y has an active potentiality for giving rise to Z, then it must follow that X itself has an active potentiality for giving rise to Z"<sup>34</sup>. According to this formula, gametes, embryos, newborns and adult human beings are on the same path to develop from one to another. *Argumentum ad absurdum* follows, that gametes should be treated as persons already just because they have the possibility to develop into a human embryo.

An opposition to this notorious distortion is offered by Gomez Lobo who affirms: "respect for embryos does not logically entail respect for gametes"<sup>35</sup>. In defending his stand point, he elaborates the biological essence of both entities. Notorious fact is that biological configuration of the gametes is represented with 23 chromosomes of the sperm and ovum separately, while embryo is completed with the structure of 46 chromosomes, same as possessed by newborn, infant or an adult human person. From this point, Gomez concludes that biological code infiltrated in embryos, and later in humans is what makes them the same, and grants them belonging to the same state of beings - "embryos deserve respect because they already possess potentially the features that in adults are fully actualized"<sup>36</sup>. According to Gomez, and according to all Human Being theorists<sup>37</sup> that grant full

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<sup>34</sup> Lockwood, M., 'Warnock vs Powell (and Harradine): When Does Potentiality Count?', *Bioethics* 2 (1988): pp. 188-213; Warnock, M., *A Question of Life: The Warnock Report on Human Fertilisation and Embryology*, Oxford: Blackwell, 1985 cit., n.1, p. 197.

<sup>35</sup> Gomez-Lobo, A., 'Does Respect for Embryos Entail Respect for Gametes?', *Theoretical Medicine*, Vol. 25, 2004, pp. 199-208.

<sup>36</sup> Ibid.

<sup>37</sup> Human Being theorists hold firmly to the intrinsic biological essence of all members of the group of *homo sapiens*, as a threshold condition for ascribing moral status to an entity. Therefore, for them a newborn or an infant, is a human being deserving respect and protection just because of its unique DNA as a hallmark of the human kind, and despite of the cognitive capacities. On the other side, Person theorists, represented by Utilitarian and Kantian traditions, glorify rationality, as a

moral status to the embryo, the biological code of 46 chromosomes is a feature that is inherited from conception, the gradualists afford variable degrees of protection preciously kept and preserved till death, a characteristic that distinguishes one person from any other and that will never repeat again. In this so much, Human Being theorists are right, but the question if this biological code is the criterion for being a morally recognized human person, remains open. If so, one can argue that every cell of our body should be respected as a human person, even when separated from the body from which originated. In these terms, Stephen Hanson disagrees with Gomez's argument, stating instead, that same (genetic) potential is also possessed by every cell in the body, and this fact does not lead us to the conclusion that every drop of our blood has the same moral status as adult humans, comparing it with the totally absurd position to consider blood transfusion as immoral<sup>38</sup>.

According to the established relation between gametes and embryos on the one hand, and embryos and each cell of one's body on the other hand, the conclusion is as follows: gametes cannot possess remote potentiality to drive changes from within and to develop into an embryo, due to the lack of half of the chromosomes, while embryos and human cells have the complete chromosomal structure, and therefore, possess the same remote potentiality<sup>39</sup>. Nevertheless, their way on the path toward human persons is incomparably different. Obviously, something is wrong with the established connection between the biological essence and the exclusivity of the remote potentiality to develop, since ascribing moral recognition and respect to every human cell as being a human is absurd.

From this perspective, one cannot oppose Lockwood's transitivity of potentiality just by ascribing different potential for developing from gamete to embryo, and from embryo to human person due to the "basic natural capacity" as a necessary condition for possessing the remote potentiality. Nevertheless, one cannot avoid the validity of the *argumentum ad absurdum* of Lockwood's conclusion that "x has active potentiality for giving rise to z", analogously that gametes have active potentiality to give rise to human beings as totally incongruous. Therefore, we should examine instead, what is the meaning and application of the term potentiality as such.

Potential properties are dynamic properties always appointed towards the future events that determines their development into what they cope to be. According to Mark T. Brown, "potential has consequential moral value, not because of what it is, but because of what it can become"<sup>40</sup>. Western philosophical tradition has always associated personhood with qualities already captured in the observed

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cognitive capacity standard for full moral status as a person. For Kant, personhood is absolute and possessed equally by all rational beings and only by them. According to this view, newborns do not fulfil the condition of being rational, and therefore, fail to classify as being worthy for moral respect as the rest of the other human persons.

<sup>38</sup> Hanson, S.S., 'More on Respect for Embryos and Potentiality: Does respect for Embryos Entail Respect for In Vitro Embryos?', *Theoretical Medicine and Bioethics*, 2006, 27: 215-226.

<sup>39</sup> as explained by Gomez, Lobo, A., *On Potentiality and Respect for Embryos, A Reply to Mary Mahowald*.

<sup>40</sup> Brown, M.T., *The Potential of the Human Embryo*, *Journal of Medicine and Philosophy*, 2007, 32:585 -618.

persons, and therefore an existing organism cannot become a person, because either is, or is not. Ascribing potentiality to an embryo is just a pathway to get to the aim. If the aim is becoming a human person, then the argument of potentiality is just a mean to get there, even though it is obvious that the aim is in the future and not in the present moment.

H. T. Engelhardt argues: “If X is potential Y, it follows that X is not Y. Consequently, it follows that X does not have the actual rights of Y, but only potentially rights of the Y<sup>41</sup>. If an embryo is only a potential person, and not yet a person, then it follows that the embryo does not have the rights of a person, but only the potentiality to gain the rights of a person, once it becomes a person. Therefore, if X has the potential to become Y, it does not follow that we can treat X as if it was already Y. In these terms, a Doctoral student that “has potentiality” to become a professor, does not hold the rights and duties of the professor he/she is “potential to be”. While “having potentiality,” describes possession of features already captured in the entity, being a reason that grants possibility of growth and change, “being potential” is a static feature of the current moment that very precisely describes what one is not. If possession of the potentiality is appointed towards becoming something that now is not, it is very clear that the dynamic force of potentiality is just a way of becoming something that one strives to become, as guided by already determined agenda. Without significance if one agrees with Kantian’s element of rationality, or Human Being theorist’s element of biological features as key prerogative for being a person, one will always agree with both of the opposite theories that they join together in the juncture where they ascribe the afore-mentioned determinants in the present time and not in the future. We may decide to treat X as it was Y, supported with a good reason for doing so, but still the decision will fail to be logically supported, since it will remain only a political act of consensus.

This elaboration clearly depicts that the future moment of development is desired, but not actualized yet.

From this argument, the conclusion follows that, even if the embryo possesses intrinsic biological properties as a driving force to become what at the moment is not, as prescribed merit to its potentiality, still the argument of advanced qualification in the personhood world is forced and its argumentation weak. Biological configuration of 46 chromosomes of the embryo is a necessary condition and initiator for its growing potential to be realised, but not sufficient one to treat the embryo as person already.

From here on, the problem of our ethical deliberation appears on another level. Namely, once we have the essence of what is considered to be a growing life, but not a person already, the ethical question requires us to investigate when does this growing life appear to matter morally? As John Harris has described it, “life itself does not begin at fertilisation, since egg and sperm are alive also<sup>42</sup>. Life

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<sup>41</sup> Engelhardt, H.T., ‘The Context of Health Care: Persons, Possessions, and States’ in *Contemporary Issues in Bioethics*, Beauchamp T. and Walters L. (eds), 3<sup>rd</sup> ed. Belmont, CA: Wadsworth, 1989, p. 171.

<sup>42</sup> Harris J., *The Value of Life*, Routledge London and New York, 1985.

continues, and so what we need is not an account of when life begins, but of when life begins to matter morally". Therefore, the question is not if the life has begun at the stage of an embryo, but rather if that life matters morally, as morally matters the life of all other human persons. That is the reason why the following Chapter will try to interrelate the embryo, in order to see how the life of the embryo matters, and which are the components relevant to make it matter. For the sake of completing the argument on potentiality and its application on embryos, the text that follows will compare its manifestation of the very same biological entity, but in two different settings: in vitro and in vivo, and pose the question of the relevancy of the context.

## **2.2. Relatedness and discrepancies among in vivo and in vitro embryos**

The value and meaning of the process of becoming a human person are being initially triggered in the discussions over embryo's protection in abortion cases. With assisted creation of the embryos the "final product" is the same, in terms of holding the same biological construction, though the process is facilitated from In Vitro technology, and therefore the creation is just "assisted" and not "artificial". This fact does not allow us to draw a conclusion that In Vitro embryos are being "less natural" than those created by coition, but the relevancy of the question that confronts us is inevitable. Namely, is the potentiality of those embryos during the facilitating process still on equal moral footing with those already created and implanted in the woman's womb with the very same assistance? Is the process of assistance part of the internal driving potentiality of embryos, or is it the final outcome of the implantation that grants them with such a capacity?

Even if one starts from the position of Gomez attributing biological properties to embryos, does that "necessary condition", for being a human person is in the same time a sufficient one to prescribe same potentiality to embryos in different settings - in vivo and in vitro<sup>43</sup>? Gomez coincides the meaning of active and remote potentiality as being the same, while on the other hand, from Aristotelian point of view, their similarities are only in the field of their intrinsic nature, while the other element that grants them with significant differences, and is crucial when observing the potentiality of the embryo, is being cast away. According to Aristotle, active potential refers to the independence from the external causes and as such, drives the changes from within and is a sufficient element for the further development without any other external facilitators<sup>44</sup>. Could one state that in vitro frozen embryos can trace their path towards development into human person without the assistance of complex in vitro procedure that includes their artificial preservation in frozen condition, disruption of their frozen state and reversal process

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<sup>43</sup> Ibid., Gomez-Lobo, A., 'Does Respect for Embryos Entail Respect for Gametes?.'

<sup>44</sup> Aristotle, *Metaphysics*, translated by H. Tredennick. Cambridge, MA: *Harvard University Press*, 1936 and Aristotle, 'Metaphysics' translated by W.D. Ross in *The Basic Works of Aristotle*, R. McKeon (ed) New York: Random House, 1941.

to their normal condition, nutrition and implementation in the women's womb as steps prior to in vivo embryos? What is important for in vivo embryo to develop is the current situation to remain the same, therefore, none of the external factors should modify from the position where they are. On the other hand, in vitro embryos have to change their environment if they are under attention to develop.

Stephen Hanson argues that embryos in frozen state have no meaning in preserving their current condition since at that point they are neither capable for growth, nor for development over time<sup>45</sup>. According to him, their dynamics is being paralyzed by the fact that they are frozen and their developmental process has been "switched off". Therefore, the need for external "activator" is out of crucial importance for activating their potentiality in the first place.

Monika Bobbert's attempt to stress the argument on potentiality as powerful enough to establish recognized personhood of embryos draws a very clear distinction between in vitro and in vivo embryos, but at the same time counter strikes her own argument. Her observation that "*embryos are self purposeful in a reproductive context, because they have the status of potential human being who could have developed an existence*", depicts very clearly what is the difference between embryos in different contexts<sup>46</sup>. This paper is in consistency with the statement that "the context in which an embryo develops is crucial for its potentiality"<sup>47</sup>. Nevertheless, the problem appears again on the level of who determines the context? The meaning of the "reproductive context" is variable in vivo and in vitro circumstances, due to the tendency to be lost in during in vitro fertilisation, once the consent of its progenitors is withdrawn or re-directed, the purpose accomplished and spare embryos still remained, or even in the case of extreme approach when embryos are being created completely outside any "reproductive context"<sup>48</sup>.

One might argue that even in vivo embryos are not self sufficient but dependent from the biological environment of the mother. What makes the dependency different is precisely the unity of the embryo and the mother established with the biological tie so that a physical separation at this level cannot be claimed. Therefore, if a situation like this continues to exist, the potentiality for development will be executed, and no additional external changes are needed.

With regard to the dependency of the nutrition provided in the natural in vivo environment, Mary Mahowald states that the biological tie is not equivalent with the genetic tie and the "actual connection between a woman and an embryo is as crucial to the latter's biological potentiality to become a person as is the fusion of sperm and ovum"<sup>49</sup>.

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<sup>45</sup> Hanson, S.S., 'More on Respect for Embryos and Potentiality: Does Respect for Embryos Entail Respect for In Vitro Embryos?', *Theoretical Medicine and Bioethics*, 2006, pp. 215-226.

<sup>46</sup> Bobbert, M., 'Ethical Questions Concerning Research on Human Embryos, Embryonic Stem Cells and Chimeras', *Biotechnology Journal*, 2006, 1, pp.1352 - 1369.

<sup>47</sup> Ibid .

<sup>48</sup> if embryos are self sufficient only in a reproductive context, than it would mean that they are not self sufficient in a different context. Does that imply that one is authorised to avoid the reproductive context and generate embryos for other purposes?

<sup>49</sup> Mahowald, M.B., 'Respect for Embryos and the Potentiality Argument', *Theoretical Medicine and Bioethics*, Volume 25, Number 3, 2004, pp. 209-214.

According to her, only if successful human gestation is accomplished *ex corpore*, or within a non-human's body, the genetic code, all together with the biological configuration, can be sufficient condition for possessing active potency.

This paper does not reject the fact that biological construction in both settings is the same. Nevertheless, one cannot rely on biological construction only, as independent from the context in which exists. The environment is not an additional element to the biological configuration of embryos, but is an essential component of their becoming.

Therefore, the problem is shifted once again, on another level, and that is not the embryo as such but the environment in which it exists and flourishes. That is the field where the discrepancies arise in first place, and that is where the further argumentation should be focused.

### **3. Broader interpretation of the embryo's potentiality- the context of realisation of the potentiality**

Observing the life of the embryo in an isolated *per se* framework appeared to be almost impossible due to the dependency of the potentiality to develop from its context. In these terms, The Report of the Council of Europe on Protection of the Embryo In Vitro, emphasized the necessity of the wider social consideration as a background to medically assisted procreation, and therefore, warned that protection of the embryos in Vitro should not be seen in an isolation<sup>50</sup>.

From the above elaborated Chapter, the necessity to introduce the external relevant factors almost imposes itself in the discussion. In these terms, the external factors are not limited by the environmental elements, essential from biological point of view, but enriched with the context in which the purpose to execute different human practices is embedded, as well as with the complex network of parties that participate with their interests and cause direct clash of moral rights between confronted fronts of those that claim to enjoy such moral rights. In same line, Kathrien Devolder and John Harris affirm that "solely dependence on an entity's inherent dynamic to become a human person ignores the immense importance of diverse external factors that play a role in the actualisation of this potential, as well as the substantial differences in potential at various stages of development"<sup>51</sup>.

#### **3.1. Different human practices in the context of realisation of the potentiality of the embryo**

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<sup>50</sup> Ibid., *The Protection of the Human Embryo In Vitro. Report by the Working Party on the Protection of the Human Embryo and Foetus*.

<sup>51</sup> Devolder, K. and Harris, J., 'Compromise and Moral Complicity in the Embryonic Stem Cell Debate', Athanassoulis N., (ed) in *Philosophical Reflections on Medical Ethics*, Palgrave Macmillan, 2005, pp. 88 -108.

Ontological philosophical approaches deal exclusively with the intrinsic structure of the subject of perception. This kind of observation appears to be too narrow for ethical deliberation over the status of the embryo, especially if the argument of potentiality is the key concept. Potentiality as such, strives to develop into something that is not at the moment. Martin Heidegger embedded the embryo in the “totalities of relevance”<sup>52</sup>. For him, the ontological and ethical status of the embryo is determined by the way human activities shape the embryo’s place in a horizon. Therefore, Fredrik Svenaeus interprets phenomenological tradition of Martin Heidegger, urging for phenomenological back-up for potentiality argument in the determination of the embryo’s destiny<sup>53</sup>. According to him, the context is always predetermined by the human practice and the goal of the embryo will depend upon the goal of the human practice as such. This approach insinuates that the purpose of the human practice tends to appear as an arrow that determines the final goal of becoming. In a situation like this, the embryo’s moral significance is predetermined by the attitudes established towards it, in the course of specific human activities. He even goes further, by interpreting Aristotle’s active and passive potentialities from the perspective of their predetermined goals, ascribing active potential to things that when left alone can develop in predictable way, and ascribing passive potential to embryos, as entities that can develop in a number of different ways, dependent on what will happen to them. In these terms, he identifies in vitro embryos with stem cell lines, due to the reasons that both must be combined with concrete activities, in which humans play part and predict their goal of development. Although this point of view might be considered as instrumental, the defence of Fredrik Svenaeus justifies his way of reasoning under the cover of “phenomenological life-world tradition”. He argues within Martin Heidegger’s concept of “totality of relevance” that being a tool means more than being an instrument. In this sense, the observed entity acquires meaning in the totality of relevance, but in relation with the practices in which is engaged. He transferred the internal ontological reality of the embryo into the phenomenological world of practices and culture as being totally interdependent and influential to one another. This way of reasoning, according to him, is on the same line with Aristotelian *phronesis* as practical wisdom that articulates the goals of a practice central to the making of the ethical choices.

Even the above elaborated Bobbert’s argumentation over independency of embryos within reproductive context, emerges the opposite effect than the one that was meant to be achieved<sup>54</sup>. It clearly indicates that the concept can be reproductive but also can be other, and that the development is dependent precisely of the context, as determined by the human practices.

Just by accepting the existence and importance of different human practices in relation with embryo’s determination, one leans

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<sup>52</sup> Heidegger, M., ‘Being and Time’, trans. J. Stambaugh, Albany: *State University of New York Press*, 1996, p.83.

<sup>53</sup> Svenaeus, F., ‘A Heideggerian Defence of Therapeutic Cloning’, *Theoretical Medicine and Bioethics*, 2007, 28:31-62 DOI 10.1007/s11017-007-9025-1.

<sup>54</sup> Ibid supra note Bobbert, M., ‘Ethical Questions Concerning Research on Human Embryos, Embryonic Stem Cells and Chimeras’;



towards phenomenological outer world of embryo, as opposite to embryo's ontological predisposition as an isolated island, self-sufficient for survival, development and elaboration, and therefore respectful for life. Accepting the middle ground in between these two extremes is facilitated by the notion of transferring the harsh instrumental role into the role that attributes a meaning, and therefore the context in which the role is played determines the position of the particular embryo under investigation.

### **3.2. The potentiality of the embryo in the context of the other concerned protagonists**

The developmental energy of growing from one form to another in an interrelated world is being interrelated itself. One thing does not develop into another in a moment, but rather it is a process. During this process, the "thing" may participate in the modification with its own intrinsic energy, or may be left to be modified by others, but it is almost impossible in an interrelated world, such as the one in which we live, to discuss about any independency. Whenever life exists, it is embedded within interconnected world in which we confront interests and values of the others.

Joel Feinberg proposes "interest principle" as a suggestion for interpretation to the question "what kind of being can have moral rights"<sup>55</sup>. According to his "interest view", we owe moral duties to only and all those beings capable of having interests, no other being can be harmed in a morally relevant way. In the discussion over embryo's moral perplexity, it cannot be avoided that interests are being possessed by its progenitors. In such a structure, avoidance of the existence of the interests of all other protagonists is equivalent to avoiding the moral discussion over embryo's place in the horizon, in the first place.

Deckers, proposes a double moral standard, in dependence of the justifiable reasons and beneficiaries that might be gained as measured with those that might be lost<sup>56</sup>. He stresses that "there is a morally relevant difference between sacrificing an embryo for the sake of those who may benefit from the embryo's research, and sacrificing an embryo to save the mother".

It might seem, that having a double moral standard for embryos in different contexts does not offer neither unique and equal, nor profound moral deliberation, but on the other hand, not having one will mean total ignorance of the progenitors and the rest of the alive world in which the embryo strives to live in. It follows that the moral deliberation of the embryo is interconnected and as such cannot be observed isolated from all the other participants. In a situation like that, favourable moral recognition of the embryo will infringe upon moral rights of the human persons that are not external actors but intrinsically part of the same mosaic.

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<sup>55</sup> Feinberg, J., *Abortion in Matters of Life and Death*, 2d, Regan, T. (ed), New York, Random House, 1980, pp.183-216.

<sup>56</sup> Ibid.

Potentiality of the very same embryo discussed in Chapter 2, the one with firm biological configuration of 46 chromosomes, is once again challenged by the context of its existence. This external virulence may infringe its potentiality in many different ways, as well as can promote it. The possibility of such disruption in the context of the other parties concerned cannot be ignored, and the moral acceptability will have to deal with promotion of best interests of the overall situation in the context in which appears. Once again, human practices in the totality of relevance appear to be determinant for appointing the direction of development.

#### **4. Applying Brown's internal scale of moral values in the ethical classification of the embryo: Bridging both observations: the isolated analyses over embryo *per se*, and the context of the other protagonists concerned with their rights and obligations in the discussion**

Mark T. Brown's internal scale for ascribing moral prerogatives may be very versatile and therefore a useful formula in the embryo's ethical deliberation. According to his concept of moral status<sup>57</sup>, the following text will navigate the moral position of the embryo in constellation with on one hand, its peers group-zygotes as antecedents, newborns and adult human persons as its descendants from their potential to develop from one to another, and on the other hand, with the other protagonists - potential mother and father, as immediately concerned with the outcome.

##### **4.1. Brown's internal scale of moral values with the peers group of zygotes, embryos, newborns and adult humans from their potentiality to develop from one to another**

Potentiality as such, urges for comparison of the different stages of the development that in the case of embryo stretches from what once was a less developed biological form, to what now may be a much more developed one. Therefore, comparison within its peers group in the process of inevitable interaction might purify our moral sight. Even more, the proposed scale ranks the moral capacities of the protagonists that are already human persons and of those that manifest life, by the power of development from one to another. The argument of potentiality facilitates their connectedness and belonging to the same internal scale, bridging two different worlds: the world of those that are "still developing" in a dependent way, and the world of those that are already developed and independent human agents, separated from the body of their "facilitator".

The embryo is located on the middle path of the developmental scale, in between the position of the zygote (that lacks even the biological essence), and the newborn, and further on, adult

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<sup>57</sup> Ibid., Brown, M.T., 'The Potential of the Human Embryo', *Journal of Medicine and Philosophy*.

person that at this stage might only be an imaginary goal of the development.

What makes the boundary of difference between, on one side zygotes, as subjects towards which humanity does not owe the same obligations as to human persons, and on the other side, newborns and adult humans as subjects worth the moral respect, are the following two components: 1. The biological construction of 23/46 chromosomes as described in the first chapter, and as trigger component for launching the argument on potentiality in the discussion, and on the other hand, 2. the set of interactions with the other already recognised moral subjects in which zygotes cannot participate, and humans not only that can, but they are automatically participating solely by their fact of being. Therefore, what constitutes moral rights is always interconnected with moral obligations, respectively. While enjoying moral respect and protection of their being, lifted up on the level as their moral right, human persons have the obligation to restrict themselves from performing infringing activities towards other morally recognised subjects that hold the same moral rights, in order not to offend the same moral status of the other human persons.

The embryo, as a transitional form from zygote to human person, has fulfilled the first necessary element of the biological essence, but still lacks the capacity to execute the moral obligations as related to the moral rights for which it applies. In these terms, Alicia Przyłuska – Fiszer underlined: “biological essence is considered a necessary condition but not a sufficient one, while rationality is usually treated as a sufficient but not necessary a condition for moral standing”<sup>58</sup>. Consequently, the question that is imposed in the discussion is as follows: on which grounds may we ascribe that moral obligation is owed to the embryo? One might argue that a newborn does not have the same capacity to execute moral obligations as well, but the only evident difference with the capacity of embryo, under the same circumstances, is the one that the newborn is already separated from the body of the woman that carried it, and as such, moral obligations are not owed to the woman anymore with any competing interests in relation to her offspring. Therefore, obligations owed to the newborn are being already differentiated to someone that is a unique individual, while on the other hand, obligation owed to the embryo is still under postponed condition –its development and further individualisation. This condition is less physical in terms of separation of the woman’s body, and more metaphysical in terms of referring to the connotation of identifying embryo’s and mother’s interests into mother’s only, and separating them into embryo’s and mother’s, respectively.

When applying Brown’s internal scale of moral values, one might conclude that the privilege to owe obligations to zygotes is not justified. Anyhow, one will due obligation to respect newborns. The embryo, as on the middle path of development, should be respected as a growing life when its own biological possessions will be supported with additional elements – reproductive context to execute the

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<sup>58</sup> Fiszer, A.P., *The Criterion of Moral Standing*, in *Conceiving the Embryo; Ethics, Law and Practice in Human Embryology*, Martinus Nijhoff Publishers.

potentiality within the reproductive purpose, and only when the overall situation will grant rights that will outweigh the rights of the progenitors. That would be when, within in vivo environment, the embryo claims greater rights over the rights of the woman that carries the embryo, or within in vitro environment, when the best interest of the overall situation will balance the beneficence of such a growing life with the autonomy of the progenitors. However, the potentiality argument is not sufficient to ascribe personhood prematurely to the embryo, only due to its agenda of becoming one in the future dimension of existence.

#### **4.2. Brown's internal scale of moral values with embryo and other protagonists immediately concerned with the ethical outcome**

**Ethical question: Can the life of a human embryo (potential person) outweigh the free, private and autonomous decision of an actual person to become/not to become a parent?**

For Soren Holm what determines the moral importance of an entity is not only the properties of the entity, but also its relationship with the other entities<sup>59</sup>. On the same line of comprehension are Simon Beteman and Tania Salem stating that the number of protagonists in the conception of the embryo is already a network, even more in the case of assisted reproduction where the number of actors conceiving the embryo increases. They even distinguish the number of parties involved in assisted fertilisation from the dual number in a sexual intercourse. While the natural conception is followed by the couple only, reproductive technologies include “unprecedented protagonists into the network, couple, physicians, and biologists, sometimes even donors contributing genetic material or physical processes”. They furthermore state that “each protagonist puts forward different criteria to justify and establish its relationship with the embryo, the infertile couple –their genetic link, and the woman - her bodily implication in the embryo's coming to life”<sup>60</sup>. Therefore, the actualisation of the potentiality of the embryo is at least dependent at two levels: 1. parental level compounded of genetic parents, man and a woman, and 2. woman's only level, additionally supported with her bodily integrity.

When applying Joel Feinberg's interest criterion for ascribing moral relevance to a subject, what strikes our attention is that all of the participants in the story of the embryo already have well established interests that strive to protect and even more, are entitled to do so<sup>61</sup>. On a woman's only level, their interest does not manifests in a form “my right against yours” or “the right of a human person against a right of another human person” but are intrinsically interrelated in a way one cannot divide them as being separate. The following example should illustrate the point: abortion decision of the woman made upon

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<sup>59</sup> Holm, S., *The Pre Personal Human Being*, in *Conceiving the Embryo, Ethics, Law and Practice in Human Embryology*, Martinus Nijhoff Publishers.

<sup>60</sup> Novaes, S.B. and Salem, T., ‘Embedding the Embryo’, in *The Future of Human Reproduction, Ethics, Choice, and Regulation*, Harris, J. and Holm, S. (eds).

<sup>61</sup> Ibid., Feinberg, J., *Abortion in Matters of Life and Death*.

estimating her poor chances of survival, as prevailing to her wish to bring the child into the world. The pregnant woman is already a moral agent that represents her own interests and the interests of the embryo at the same time, as intrinsically connected with her own. Under these circumstances, the interest of the embryo is interconnected, dependent and represented by the mother. The mother not only represents hers and the interests of the embryo, but both interests coincide into one.

Furthermore, Joel Feinberg, observes that the concept of potentiality is too “promiscuous”<sup>62</sup> to be used as a universal point making outcome, backed up with Aristotelian premises that any matter is potentially anything<sup>63</sup>. Because of that, he distinguishes between physical possibility, as in accordance with the law of the nature, and logical possibility, as additionally needed to actualise the existing possibility. In these terms, whenever human rational agents are involved, the process of actualisation depends upon exercising discretion in the decision making. Therefore, on a parental level, whenever embryos are created in an artificial setting, their reproductive or not reproductive context is predetermined by the human practices in which it is engaged by the parents. Whenever the legitimacy of their right to procreate, as positively or negatively expressed, is respected, the actualised potentiality will depend on their decision. In these terms, the parents are the main agents that determine the context, and therefore, the cradle of totality of relevance of the embryo, not as omnipotent to decide about life destruction, but as parents who decide about life creation of their offspring.

In a situation like that, it seems as if the obligations that are being owed in the parental level to the potential mother and father as potential parents, and in the woman’s only level - to the woman that carries the embryo inside her own body, are prevailing over the obligations owed to the embryo. Obligations owed to them in the discussion over the embryo cannot be waived, but instead have to be reconsidered altogether with the rights that the embryo strives to claim for. The embryo’s location on the scale will be dependant upon the context in which is embedded by the main protagonists – progenitors. Therefore, obligation is owed to the embryo only when within the reproductive context its rights are not confronted with greater rights of its progenitors.

## Conclusions

In ancient Greece, the very broad and ambiguous term of life was specified and narrowed down into two categories as described by two words: *zoe*, with meaning of physical or biological life, and *bios*, with meaning of life as “lived, and made upon actions, decisions, motives and events that compose what we now call a biography”<sup>64</sup>. In

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<sup>62</sup> Feinberg, J., ‘The Rights of Animals and Future Generations (Appendix: The Paradoxes of Potentiality)’. in *Philosophy and Environmental Crisis*, Blackstone, W.T. (ed), Athens, Georgia: University of Georgia Press, 1974, pp. 67-68.

<sup>63</sup> Aristotle, *Metaphysics* IX 7, 1048b35-1049b1.

<sup>64</sup> Dworkin, R., *Life’s Dominion, An Argument about Abortion and Euthanasia*, Harper Colons Publishers, referring to the distinction made by Rachels, J. and Ruddick, W., *Lives and Liberty, in The Inner Citadel: Essays on Individual*

order to overlook the value of life of the embryo, this paper analyzed both of the terms as used in ancient Greece: the biological configuration of the embryo, and its contextual constellation, as bridged with the potentiality to develop. The eternal energy to develop and grow, as ascribed to potentiality, is part of the never ending *perpetuum mobile* process of life as energy that exists and modifies constantly. Therefore, life beginning and life ceasing should be considered as processes of this transformation, not a simple moment. What should morally matter in the deliberation over the embryo's importance to be respected and protected, should not be reduced to the moment of life beginning, or in its biological configuration, supported with the potentiality to develop, but rather should be contextualised in the world in which exists, where its own *tabula rasa* biography is about to be written, as dependent on the overall context in which it exists.

The legal background introduced the problem of embryo's deliberation as an "object" under discussion, from the lenses of the progenitors, as already established human persons with rational capacity. In order to set the equal footing with the embryo, the ethical justification of such an approach was re-examined. Therefore, the problem was lifted up on two levels: the ontological one, where the biological structure of the embryo claims potentiality for development *per se*, and on phenomenological level, where the embryo manifests its potentiality in a relation with its own world. Conclusions are made in the direction that the potentiality of the embryo is not a sufficient argument to claim that the embryo should be treated as it was already a human person, even more when such obligations are interrelated with its progenitors as autonomous human persons. On the contrary, any separation of the intrinsic and extrinsic components in the embryo's deliberation is narrow in scope and furthermore myopic for the consequences that might invoke. Nevertheless, embryonic life should be respected when the best interest of the overall situation will balance the beneficence of such a growing life with the autonomy of the progenitors within the reproductive context.

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