

LABORATORIO DEI DIRITTI FONDAMENTALI

NOTE BOOK 6

## LABORATORIO DEI DIRITTI FONDAMENTALI

Scientific Committee

Pasquale De Sena, Marie-Claire Foblets, Bianca Gardella Tedeschi

Michele Graziadei, Giorgio Malinverni, Paul Tavernier

Director

Vladimiro Zagrebelsky

*The Laboratorio dei Diritti Fondamentali (LDF) started its activity in Torino in 2011. The Laboratory carries out research on fundamental rights, with a primary focus on the concreteness of their protection in various moments, places and occasions of people's lives. The Laboratory, in accordance with the teaching of the European Court of Human Rights, safeguards "concrete and effective and not theoretical and illusory rights". Through its research, the Laboratory seeks suitable and practicable solutions offered by experience or suggested by the interdisciplinary study of human rights.*

*The Laboratorio dei Diritti Fondamentali works within Collegio Carlo Alberto*



LDF – Laboratorio dei Diritti Fondamentali – [www.labdf.eu](http://www.labdf.eu)  
Campus Luigi Einaudi, Lungodora Siena 100, 10153 Torino

e-mail: ldf@labdf.eu – tel. 0039 011 6709418 – fax 0039 011 6708205

LABORATORIO DEI DIRITTI  
FONDAMENTALI

NEW FORMS OF PARENTING  
Use and abuse of the word ‘nature’

by  
Ilaria Bertini

SOCIETÀ EDITRICE IL MULINO

Readers can find more information on the publications and activities of Società Editrice

Il Mulino on the website: [www.mulino.it](http://www.mulino.it)

---

Copyright © 2018 by Società editrice il Mulino, Bologna. All rights reserved. This  
publication cannot be photocopied, reproduced, stored, memorised or transmitted in any form –

electronic, mechanical, reprographic or digital – unless foreseen by current legislation on author’s rights. For more information see: [www.mulino.it/edizioni/fotocopie](http://www.mulino.it/edizioni/fotocopie)

Editing and production: Edimill srl - [www.edimill.it](http://www.edimill.it)

## Contents

Contents.....	4
Foreword.....	6
Chapter 1	
The evolution of the concept of nature in Western philosophical thinking.....	8
1. Nature: a polysemous concept.....	8
2. The concept of nature in Greek philosophy.....	14
2.1. Nature in the Presocrats.....	15
2.2. Aristotle and the concept of “physis”.....	22
2.3. Final considerations.....	27
3. The concept of nature in the Judaic-Christian tradition.....	28
3.1. Nature in the Holy Scriptures.....	30
3.2 The natural family in the doctrine of the Catholic Church and in the Methodist-Waldensian Reformed Christian Church.....	35
4. Kant: the return of teleology in the conception of nature .....	48
5. Darwin and the theory of evolution: a new way of conceiving nature	
52	
6. Mankind, the master of nature.....	57
7. Nature.....	62
Chapter 2	
The natural family: a controversial definition.....	66
1. The family as a “natural society”.....	66
1.1. The natural family and the principles of the Italian constitution.....	67
2. The natural family and the freedom to procreate.....	76
2.1. Freedom to procreate: nature and individual autonomy.....	78
2.2. The right to procreative freedom from the child’s perspective.....	84
3. The family, the families.....	87

3.1. Same-sex unions and heterologous fertilisation: Italian judges struggle with the definition of family.....	87
3.2. What is the natural family today?.....	93
Chapter Three	
The meaning of nature when ARTs and same-sex adoptions are at stake.....	98
1. Infertility: nature's error?.....	99
1.1. Can sterility be considered an illness? The relationship between the concept of nature and health.....	103
2. What is the place of nature in ART?.....	108
2.1. The concept of nature in homologous and heterologous ARTs.....	113
2.2. The relationship between ART and nature according to the national committees of bioethics.....	115
2.3. Surrogate motherhood and the importance of the genetic bond.....	123
3. The concept of nature in the definition of the status of the human embryo 129	
3.1. The relationship between the definition of the statute of the human embryo and nature, according to the bioethical committees.....	130
3.2. The role of nature in the definition of the statute of the human embryo in the British legislation.....	134
4. Adoption by same-sex couples: nature and parenthood.....	137
4.1. The criterion of 'imitatio naturae': special adoptions and same-sex adoptions.....	137
5. Who am I and where do I come from? Seeking one's biological origins 143	
Conclusions.....	152
Appendix.....	157

## Foreword

This research project is comprised of two parts, published separately, that present the results of the studies carried out respectively by Alice Margaria and by Ilaria Bertini. The project was promoted by the *Laboratorio dei Diritti Fondamentali* and joins the previous studies in exploring various aspects of the right to health (which in this case interact with the right to a private and family life) set out in Article 8 of the European Convention on Human Rights, in the Italian Constitution and in constitutional jurisprudence. The events and experiences linked to the birth of children thanks to medically assisted procreation techniques (MAP) implicate consequences that involve both these rights. The principal object of this study concerns the new forms of parenthood: new because they were made possible by developments in medical science and new because they correspond to the evolution of the social conscience with regard to the notion of family (including same-sex couples) and the right to self-determination.

The research carried out by LDF aims to highlight the reality of human rights, comparing it to the legal decisions and clarifying the reasons for the gap between these two planes. According to a formula adopted by the European Court of Human Rights and taken up by the Laboratory, it is necessary to aim for “concrete and effective rights, not theoretical and illusory ones”. Those guaranteed by the normative texts remain theoretical and illusory, unless they are translated convincingly and effectively into the lives of individuals.

This research report examines the absence or inadequacy of the laws in this field. The rapid advances of medical techniques that open new scenarios

and the swift evolution of society explain the backwardness of the laws and therefore the decisive role played by the courts, whether constitutional or ordinary. The legislator often finds it difficult to regulate phenomena that are unfamiliar and rapidly evolving. These difficulties are certainly also affected by the need to acquire political consensus and a majority vote in parliament, however, there is a more profound and insuperable reason: the legislator can delay and postpone, but the judge cannot refuse to decide, and while the legislator is dallying, life goes on. Controversies arise on which the judge must rule. The legislator will operate when the judges have ploughed the field. In the area that we explore here, it is essential to seek similarities and discrepancies in the arguments of judges from different national systems, called upon to decide on similar situations, in order to see whether it is possible to identify a common reading. With regard to Europe, the contribution of the European Court of Human Rights is fundamental.

The first research project carried out by Alice Margaria joins – independent, but connected – that by Ilaria Bertini. As Italians, in particular, are aware, but as occurs also in other countries, the resistance that has emerged in society and in the political debate with regard to the new developments start from the assumption that they are contrary to nature. Nature is assigned an inborn positive ethical value. The object of the study is the notion of nature, in its philosophical development up to the modern-day meaning, seeking the importance attributed to it by those who cite it in support of their negative or positive opinion with regard to the reality of modern family life.

The two research projects are now published in the series of studies by LDF, and will be followed by another study that examines the ways in which the topic is presented when the woman or the couple, who live in Europe, belong to Islamic culture and religion.

Laboratorio dei Diritti Fondamentali is delighted to express its warm appreciation of the work of Alice Margaria and Ilaria Bertini.

## Chapter 1

### The evolution of the concept of nature in Western philosophical thinking

#### 1. *Nature: a polysemous concept*

*Nature is Over* is the title of an article that appeared in the magazine *Time* some years ago, and it certainly offers interesting and topical food for thought regarding the man-nature relationship. The author aims to show how human activity is nowadays more important than climatic and geological factors in the transformation of our planet. In fact, to use the words of the Nobel for Chemistry, Paul Crutzen, “Human dominance of biological, chemical and geological processes on Earth is already an undeniable reality. [...] It’s no longer us against ‘Nature’. Instead, it’s we who decide what nature is and what will be.”<sup>1</sup> In other words, we could say that technical and scientific progress is such that in many areas of knowledge man has assumed a dominant role with respect to the imponderable course of nature itself. The progress made by medicine in treating illnesses that previously were inevitably fatal, or the discoveries in the field of genetics and human embryology allows us to understand both the biological processes that regulate the prenatal life and how to intervene, even radically, in this prenatal life. When this knowledge is made directly available to humanity, questions inevitably arise that range well beyond

---

<sup>1</sup>\*When the official English translation of a text cited was not available it has been translated according to the translator’s version.

B. Walsh, *Nature is Over*, in «Time», 12 March 2012.



the mere scientific discovery and slither into areas that have a flavour of the moral, the anthropological, the ethical and the psychological. This is where disciplines that express their thoughts in very different, but at times complementary, ways come on stage to offer science a paradigm of reference that is broader than the science itself. As the moral theologian Enrico Chiavacci said,

It is always important for scientific research to progress, in the awareness of its inherent temporariness and the intrinsic uncertainty of the scientific reasoning itself, but it is equally important that this takes place in the constant awareness of its impact on mankind. [...] This is particularly true in the field of biotechnologies, which offer the opportunity to *deliberately* alter certain original characteristics of living beings or of entire species of living beings. Here it is necessary to immediately clear away a centuries-old vision of the relationship between morality and nature: a vision that has a long and noble tradition, but which I believe should be fundamentally reconsidered. [...] The central point is that nature no longer appears – either to the scientist or the philosopher or to the theologian – to be the sum of institutions given once and for all and of unvarying regularity. Nature is today to be seen as a complex system of structures constantly interacting in both a continual and a discontinuous manner. Now mankind, with his increasing capacity to deliberately modify the cosmos and himself, is *part of the system*, a force of nature precisely because of this capacity. The immediate consequence of this new vision is that morality is no longer conceivable as a “do not violate” nature. The central moral problem is not *do not modify*, but rather *how to modify*, in what direction, by which means, within which limits can I or must I modify nature?<sup>2</sup>

Thus, nature can assume a more markedly subjective or objective character. On the one hand, in fact, man can recognise characteristics that are essential and those that can be the object of change. On the other hand, however, it is possible to see nature as a pure object of the technical-scientific progress of mankind, in the sense that man can not only organise it as he wishes, but can set the limits of its manipulation and, at times reproduction. This raises the question of what we mean exactly by the term nature and its derivatives. This question has been the subject of research by some national bioethical

---

<sup>2</sup> E. Chiavacci, *Biotechnologie e tutela della persona: certezze e incertezze nella riflessione etica*, in Atti dei Convegni Lincei, *Bioetica e tutela della persona* (Rome, 4-5 December 1998), Rome, Accademia nazionale dei Lincei, 2000, vol. 159, p. 9 (author's italics).

committees when new forms of parenting have been discussed. The considerations of the philosopher Vittorio Possenti in a document published by the Italian *Comitato Nazionale per la Bioetica* are noteworthy.

We know that the notion of nature and that of natural are desperately polysemous in the history of philosophy, which leads us to ask which idea of nature the document quoted is referring to: natural as normal functioning, or, natural according to another meaning? Perhaps we could answer that, according to how we look at it, illness is a quite 'natural' or 'unnatural' event. Natural in the sense that medical science can trace the fabric of natural or physical causes that trigger it and 'unnatural' in the sense that that illness, being a pathological manifestation, indicates a deviation from a 'natural' or physiological normality of functioning that the therapy intends to restore.<sup>3</sup>

In its report on assisted reproductive technology (ART), the Swiss commission on biomedical ethics also clearly showed the lexical ambiguity of the terms nature and natural and the need to define them in order to avoid erroneous interpretations.

In this sense, the Commission identified three ways in which the word nature can be understood and the relative ethical implications. Above all, it can assume a strictly descriptive value in which, as Mill writes, "it either denotes the entire system of things, with the aggregates of all their properties, or it denotes things as they would be, apart from human intervention."<sup>4</sup> Nonetheless,

In this descriptive sense, nature cannot (directly) serve as a basis for ethical judgements: in fact, the function of technology in general, and medicine in particular is precisely to combat diseases, to provide protection against adverse natural phenomena or to improve living conditions – in short, to liberate us from the constraints of the natural world whenever they impede the development of human values.<sup>5</sup>

---

3 V. Possenti, *La bioetica come problema filosofico*, in *Il Comitato Nazionale per la Bioetica: 1990-2005. Quindici anni di impegno*, Atti del Convegno di Studio (Rome, 30 November -3 December 2005). Available online: <http://presidenza.governo.it/bioetica/eventi/BIOETICA15anni.pdf>, p. 130.

4 J.S. Mill, *On Nature*, in Id., *Essays on Religion*, London, Longmans Green & Co., 1885. Available on line <https://www.laits.utexas.edu/poltheory/mill/three/nature.html>.

5 See Swiss National Advisory Commission on Biomedical Ethics, *Medically Assisted Reproduction. Ethical Considerations and Recommendations for the Future*, Opinion n. 22/2013. Available online: <http://www.nek-cne.ch/fileadmin/nek-cne-dateien/Themen/Stellungnahmen/>

The risk of deriving ethical judgements from a definition of the word nature in the descriptive sense would imply, therefore, not being able to operate on nature, because it would be considered a necessarily positive fact and, therefore, any intervention that aimed to modify a natural process would be judged negatively.

Secondly, the Commission observes that the concept of nature can assume an ontological meaning indicating the essence of a being, “The function of this sense of “nature” is to identify certain properties which are especially important in determining what a being is *fundamentally* – properties which do not depend on sociocultural factors.”<sup>6</sup> This means that nature itself must set limits for medicine and, in particular, for reproductive medicine. For example, “it is in this sense that a child should have a father and a mother: the dynamism of reproduction is associated with a man’s inclination towards a woman, and vice versa, which promotes the couple’s stability of the couple and care for the children to be received and raised.”<sup>7</sup> Finally, the term nature can assume an evaluative significance, in the sense that,

A relationship exists between ontology (what *is* essentially) and ethics (what *should be*) dimensions, which, in human beings, interlock. [...] Human nature thus indicates norms of human action and regulates (ethical) choices, both individual and collective: it is in the nature (second sense) of human beings to develop technologies suitable for controlling nature (first sense) so as to promote their flourishing or the realisation of certain fundamental (moral) values (third sense).<sup>8</sup>

In this sense, then, nature seen in general as human nature possesses an ontological meaning and an ethical one: on the one hand, man is made to work (to alter the course of nature through technology) in the sense of the Latin expression *homo faber* for the purpose of realising himself (fulfilling the

---

en/NEK\_Fortpflanzungsmedizin\_En.pdf, p. 25.

<sup>6</sup> *Ibidem*.

<sup>7</sup> *Ibidem*, p. 47.

<sup>8</sup> *Ibidem*, p. 25.

identity of mankind): “*Homo faber*, as a sign of an alternation of the identity of man, of his being in the world: technology is not only as a tool available to man, but it is also the way to a complete codification of the world, that removes its own meaning and desertifies it as a vital ambit of welcoming.”<sup>9</sup> On the other hand, however, man “cannot cease to be *homo sapiens*, that is the custodian of his life and of his own vital environment.”<sup>10</sup> Nevertheless, when the term nature assumes an evaluative meaning it inevitably clashes with the plurality of values that characterise contemporary society,<sup>11</sup> reflected in the progressive change of the family structure and the new forms of filiation. The traditional models and the consequent appeal to their ‘naturalness’ (in the sense that they do not benefit from biotechnological interventions) are no longer argumentations sufficiently cogent and binding at a social level to promote a model or to deny new ones. This does not necessarily imply setting aside traditional models in the name of progress, but rather examining their basis in order to verify their hypothetical relevance in the modern-day sociocultural paradigm. A paradigm in which the substantive ethics (which aims to indicate the correct values and attitudes) has progressively given way to a formal ethics, whose purpose is to set formal ethical principles in order to let everyone pursue their goals without harming anyone else.

In this sense, then, bioethical issues, such as ART, have often been dealt with using the utilitarian ethical principle, according to which an action is right if it benefits more persons than it harms.<sup>12</sup> However, as observed by Mary

---

9 C. Flamigni, *La riproduzione assistita*, in *Il Comitato Nazionale per la Bioetica: 1990-2005. Quindici anni di impegno*, Atti del Convegno di Studio (Rome, 30 November -3 December 2005). Available online: <http://presidenza.governo.it/bioetica/eventi/BIOETICA15anni.pdf>, p. 400.

10 *Ibidem*, p. 401.

11 See J. Rawls, *Political Liberalism*, New York, Columbia University Press, 2005; Italian edition:

*Liberalismo politico*, Torino, Einaudi, 2012.

12 Mary Warnock, in the introduction to her book *A Question of Life* (Oxford, Blackwell, 1985), observes that “many scientists engaged in research using human embryos, or doctors employing new techniques to remedy infertility have recourse, wittingly or unwittingly, to utilitarian arguments to justify what they are doing. The point to immense increase in

Warnock, the British moral philosopher who chaired the *Committee of Inquiry into Human Fertilisation and Embryology* between 1982 and 1984, which led to the drawing up of the important *Warnock Report* – the principle of utility does not *per se* resolve the moral and ethical implications that, for example, underlie the research on human embryos and their destiny which are directly linked to the practices of *in vitro* fertilisation. “In real life, morality is much more complicated and varied than this. There is no single ‘correct’ vision.”<sup>13</sup> Before delving into the bioethical discussion concerning new notions of parenting and the use and abuse of the words ‘nature’, ‘natural’ and ‘artificial’, it is necessary to define these terms and the relative semantic evolution in order to avoid misinterpretations or hasty judgements.

The philosopher Umberto Galimberti, in an introductory note to Annabella D’Atri’s book *Vita e artificio* emphasises that;

[...] the man-nature relationship has been regulated for Westerners by two visions of the world: the Greek one and the Judaic-Christian one which, although very different, agreed in excluding that nature fell within the sphere of ethical pertinence, whose ambit was limited to regulating the relationships between men, without any extension to the elements of nature.<sup>14</sup>

Why did both traditions exclude nature from all ethical considerations? When did nature begin to be part of the dominion of ethics? In order to answer these questions we will look into the concept of nature in general to see how it has developed in the history of Western thinking. We will identify four fundamental historical periods in the evolution of this term (the thinking of Ancient Greece, the scientific revolution, Darwinian evolutionism and modern science) where the parallel examination of the Judaic-Christian tradition will

---

human happiness when hitherto infertile couple [...] manage to have a child; and they argue that there is no pain caused to anyone to weigh in the balance against this happiness”, p. ix.

<sup>13</sup> *Ibidem*, p. x.

<sup>14</sup> U. Galimberti, *Tecnica e natura*, in A. D’Atri, *Vita e artificio. La filosofia davanti alla natura e alla tecnica*, digital edition, Milano, Bur, 2013.

have, so to speak, crosscutting relevance, since it cannot be limited to a specific period of time.

Before we begin, it is necessary to highlight that we are going to take into account the thinkers that others have made a great contribution to the development of the meaning of the word nature over the centuries from both a philosophical and scientific perspective. However, we are not going to offer the general framework behind every philosopher or scientist considered, unless this is essential, so that the research can maintain its *fil rouge* clear and untrammelled. In the same way, the expert reader will notice the lack of certain authors who, in general, are considered keystones in the philosophical thinking of Western society, but for the aforementioned reasons they have remained in the background.

## 2. *The concept of nature in Greek philosophy*

The words of the British philosopher Robin Collingwood efficaciously describe the Greek concept of nature:

Greek thinkers regarded the presence of mind in nature as the source of that regularity or orderliness in the natural world whose presence made a science of nature possible. The world of nature they regarded as a world of bodies in motion. The motions in themselves, according to Greek ideas, were due to vitality or 'soul'; [...] the world of nature is not only alive but intelligent; not only a vast animal with 'soul' or life of its own, but a rational animal with 'mind' of its own.<sup>15</sup>

With this in mind, we are now going to examine the different meanings of the word nature according to some of the Ancient Greece philosophers in order to show their importance for the further assumptions.

---

<sup>15</sup> R.G. Collingwood, *The Idea of Nature*, Mansfield Centre CT, Martino Publishing, 2014, p. 3.

## 2.1. *Nature in the Presocrats*

The first Greek philosophers (VII-VI century BC) were devoted to cosmological studies and this is why Aristotle calls them *physiòlogoi* (thinkers about nature), but commonly known as Ionians. For these philosophers the question of the nature of being coincides with the discovery of the material substance of which all things are constituted:

It is *beginning* not only in the sense that it explains their origin but also and above all in the sense that it makes intelligible and leads to unity their multiplicity and changeableness [...]. From here derives the active and dynamic character that nature, the *phýsis*, has for the Presocrats: it is not the substance in its immobility, but the substance as a principle of action and of intelligibility of all that which is multiple and becoming.<sup>16</sup>

According to Collingwood, we can agree in emphasising that the starting point for their natural investigation has three fundamental aspects. First of all, the awareness “that there are ‘natural’ things”, i.e. that are not the work of human intelligence and, in this sense, the term ‘natural’ is opposed to ‘artificial’; secondly, “that the ‘natural’ things constitute a single “world of nature” and, consequently, it is possible to trace characteristics common to all the products of nature. Finally, “that what is in common to all ‘natural’ things is their being made of a single ‘substance’ or material”<sup>17</sup> and this is precisely the characteristic peculiar to the thinking of the Ionian philosophers. Thales (625-547BC *circa*) founder of the Ionian school of Miletus believed that water was the essential substance out of which every element of nature was made. Since he did not leave any written works, according to Aristotle the reason why Thales thought that things were made out of water is the fact that “the nurture of all creatures is moist, and that warmth itself is generated from moisture and lives by it; and that from which all things come to be is their first principle.” He had, therefore, such an opinion because “besides this, another reason for the

---

<sup>16</sup> N. Abbagnano, *Storia della filosofia*, vol. I, Bergamo, Gruppo editoriale L'Espresso, 2005, p. 20.

<sup>17</sup> *Ibidem*.

supposition would be that the *semina* of all things have a moist nature...<sup>18</sup>. Thales considered nature as a living organism<sup>19</sup> whose existence depended on a transcendent cause: God. According to Anaximander (610/609-547/546 BC *circa*), on the other hand, the substance from which all the elements originate was *apèiron* (infinite, undetermined) since the difference could only be sparked by an undifferentiated primordial mass. In this sense, then, Anaximander became the spokesman for the doctrine of immanence speaking of a creative activity within the *apèiron* itself through circular movements. The importance of his thinking lies in the fact that “he saw the universe as something measurable, as subject to perfectly comprehensible universal laws and not to mysterious forces or the will of divine beings.”<sup>20</sup> Finally, Anaximenes of Miletus (585/580-528/524 BC) recognised in *pnéuma* (air) the primordial substance, which allowed the differentiation through the principles of condensation and rarefaction, therefore assuming, in keeping with his predecessor, immanentism.

Nonetheless, none of these hypotheses was considered adequate for understanding the concept of *phýsis*, not merely for the insufficiency of the scientific means available at that time, but rather for the senselessness of the questions to which the Ionians wanted to provide an answer and “no refinement of laboratory technique would have enabled them to answer: 1. How can we form a clear mental picture of the universal primitive substance? 2. How, from this primitive substance, can we deduce the world of nature.”<sup>21</sup>

However, the reason the Milesians lingered so long on these issues derived from the fact that, in their opinion, to ask what the word nature meant was equal to asking what the things were made of. On the contrary, modern

---

18 Aristotle, *Metaphysics*, 983B, b23-25, available on line <http://www.iep.utm.edu/thales/#H3>.

19 See Collingwood, *The Idea of Nature*, cit., p. 31.

20 M. Bonazzi, R.L. Cardullo, G. Casertano, E. Spinelli and F. Trabattini (ed.), *Filosofia antica*, Milano, Raffaello Cortina, 2005, p. 15.

21 Collingwood, *The Idea of Nature*, cit., p. 43.



man, having to answer the same question, would use a descriptive method that would lead him to list the elements present in the natural world.

As Collingwood said, this is because,

[...] in modern European languages, the word 'nature' is on the whole most often used in a collective sense for the sum total or aggregate of natural things. At the same time, this is not the only sense in which the word is commonly used in modern languages. There is another sense, which we recognize to be its original and, strictly, its proper sense: when it refers not to a collection, but to a 'principle', again in the proper sense of that word, a *principium*, *archè*, or source.<sup>22</sup>

The school of Miletus used the word nature with precisely this meaning. However, it remained inexplicable why, despite the fact that nature was one, its elements acted differently.

The considerations of Pythagoras of Samos (570-495 BC *circa*) and his school show a direct link with the school of Miletus and, in particular with the thinking of Anaximenes, the *master*. In fact, he was already concerned with finding a link between the primitive matter and the differentiation according to the scheme of rarefaction and condensation, but he still lacked a clear reason according to which matter could be separated (indeterminate and without a specific character) from the space that it occupies. To answer this dilemma Pythagoras theorised a connection between cosmology and geometry.

The point of the new theory is that we need not henceforward bother to ask what the primitive matter is like; that makes no difference; we need not ascribe to it any character differing from that of space itself: all we *must* ascribe to it is the power of being shaped geometrically. The nature of things, that by virtue of which they severally and collectively are what they are, is geometrical structure or form.<sup>23</sup>

In this sense, then, the word nature does not indicate the substance its products are made of, but rather their structure, thus making the essence

---

<sup>22</sup> *Ibidem*.

<sup>23</sup> *Ibidem*, p. 52.

intelligible<sup>24</sup>. As Plato wrote in *Phaedo*, with regard to the investigation of nature “[...] I thought it splendid to know the causes of everything, why it comes to be, why it perishes and why it exists.”<sup>25</sup>

Heraclitus of Ephesus (535-475BC *circa*) gave an important contribution to the definition of the concept of nature. Unfortunately, he left behind only fragments from his written works that probably belong to his main opera entitled *On Nature*. He seems to have been a direct heir of the school of Miletus, because he identified fire as the beginning of all things. Nevertheless, this interpretation appears reductive in the light of the famous motto, ‘everything flows’, that characterises his thought. In fact, for Heraclitus, the true principle that underlies all the elements of the cosmos was that everything changes and nothing remains still. However, this principle cannot be seen in contradiction with the experience of unity. This last concept is clearly reflected in the following fragment: “As they step into the same rivers, different and different waters flow,”<sup>26</sup> in the sense that a river can never be identical to itself, but despite this it will always be called by the same name. The same thing is true of man, in fact, although over time the features and the temperament change, the essence that makes a person who they are and not another, remains the same.

Once again, therefore, the philosophical investigation of nature leads to the identification of a single element (fire) as the *archè*.

On the contrary, Parmenides of Elea (first half of the fifth century BC), *master* of the Eleatic school of philosophy, found as starting point of his

---

24 Ibidem, p. 55.

25 Plato, *Phaedo*, 96a, available on line <http://cses.res.in/dataarchive/textfiles/textfile.2010-09-15.2713280635/file>.

26 H. Diels and W. Kranz, *Die Fragmente der Vorsokratiker*, Berlin, Weidmann, 1968; *The Older Sophists*, a complete translation by several hands of the fragments in *Die Fragmente der Vorsokratiker*, edited by Diels-Kranz, with a new edition of Antiphon and Euthydemus. Edited by Rosamund Kent Sprague. Hackett Publishing Company, Indianapolis and Cambridge, 1972, B12, available on line <http://www.heraclitusfragments.com/categories/cosmology.html>.

philosophy the evidence that senses' experience is illusionary and cannot lead to undoubtedly truths. Hence, it would have been impossible to conduct a rigorous study about the concept of nature. As John Philoponus said, "Aristotle blames Parmenides and his followers, because he believes that they do not pay attention to the evidence of things, but only to the consequentiality of the reasoning."<sup>27</sup> At the beginning of his poem, Parmenides imagined standing before a goddess who showed him two ways of thinking, where only the first was feasible, that is the one relating to the investigation of being (that is) because it is not possible to know anything of the not being (that is not).<sup>28</sup> Nonetheless, that *it is*, for Parmenides ,

[...] it is opposed to the reality that appears in the common experience of man: that is the reality subject to generation and corruption, multiple, becoming, etc. [...] In this manner the real world which can be said and rigorously thought is cleft from the effective (but apparent) world in which men live every day, which does not respect the rules of thinking.<sup>29</sup>

So the later thinkers of the Eleatic school still needed to find a rational explanation for becoming and change. In fact, later, the so-called school of 'pluralist' philosophers, maintaining a firm distinction between being and not

---

27 Parmenide, *Sulla natura*, Milano, Bompiani, 2001, p. 95.

28 See, *ibidem*, p. 45. «Ora, io ti dirò – e tu ascolta e ricevi la mia parola – // quali sono le vie di ricerca che sole si possono pensare: // l'una che "è", e che non è possibile che non sia // – è il sentiero della Persuasione, perché tien dietro alla Verità – // l'altra che "non è", e che non è necessario che non sia // e io ti dico che questo è un sentiero su cui nulla si apprende. // Infatti, non potresti conoscere ciò che non è, perché non è cosa fattibile, // né potresti esprimerlo (B2)».

“Come now, I will tell thee—and do thou hearken to my saying and carry it away—the only two ways of search that can be thought of.

The first, namely, that *It is*, and that it is impossible for it not to be, is the way of belief, for truth is its companion.

The other, namely, that *It is not*, and that it must needs not be,—that, I tell thee, is a path that none can learn of at all.

For thou canst not know what is not—that is impossible—nor utter it; . . .

. . . for it is the same thing that can be thought and that can be. (B2)”

*Fragments of Parmenides*, translated by John Burnet, A & C Black Ltd, London, 1920.

29 Bonazzi, Cardullo, Casertano, Spinelli e Trabattoni, *La filosofia antica*, cit., p. 30.

being, no longer identified the *archè* in a single principle, but in many, in an attempt to account for the difference and the change of configuration. Empedocles (495-430 BC *circa*) formulated the theory of the four elements (air, water, earth, fire). These elements, thanks to the action of two antithetic forces (friendship and discord), made up all the elements of the cosmos. Anaxagoras (496-428 BC *circa*) on the other hand, considered the beginning of all things to be an infinite number of 'seeds' that corresponded to the infinite ingredients of the material objects.

Hence, the diversity could be explained by the numerical prevalence of one seed over others and the *nous* (intellect) is not only the first cause, but it also keeps the order among natural processes. So, Anaxagoras differed from his contemporaries, because he introduced the final cause, so dear to later thinkers. In fact, until then, movement had determined the blind forces and a first cause had never been mentioned.

Finally, Democritus (460-370 BC *circa*) is considered the father of atomism or natural philosophy, since, according to his thinking, the substance could never be divided infinitely. In fact, Democritus's model consisted in atoms (indivisible particles that compose the natural world) and a void (empty space). He drew a distinction between the primary qualities like shape, arrangement and position (which are inherent to the atoms) and secondary qualities (deriving from the combination of the atoms). For example, the sensation of sweetness could not be attributed to the atoms themselves, but derived from their shape (smooth, round atoms carry the sweet taste, while angular atoms carry the bitter taste). As Trabattoni writes:

On the one hand, he reduces the inherent differences to the minimum: its atoms stripped of all the secondary qualities constitute the kind of principles that are most similar to Parmenides' being [pure, distinct from natural phenomena]. On the other hand, [...] he was forced to downgrade the phenomena relative to the being. However the lower ranking of phenomena could not be mistaken for what *it is not* (against

Parmenides) since the characteristics of phenomena derive necessarily come from nature as something that *it is*.<sup>30</sup>

Nevertheless, as Aristotle stressed:

[...] but as men thus advanced, the very facts opened the way for them and joined in forcing them to investigate the subject. However true it may be that all generation and destruction proceed from some one or (for that matter) from more elements, why does this happen and what is the cause? For at least the substratum itself does not make itself change; e.g. neither the wood nor the bronze causes the change of either of them, nor does the wood manufacture a bed and the bronze a statue, but something else is the cause of the change. And to seek this is to seek the second cause, as we should say that from which comes the beginning of the movement.<sup>31</sup>

In general, we could say that the Pre-Socratic school regards nature as something without any final cause (except for Anaxagoras who introduced the idea of an ordering intellect). This conception could be defined as an anticipation of the modern mechanism, even though this expression would not be the most suitable. In fact, according to the mechanism older doctrine the machine could not be held as the mirror of nature dominated by human rationality. As Heraclitus said, in one of his fragments: “This world, which is the same for all, no one of gods or men has made. But it always was, is, and will be: an ever-living Fire, with measures of it kindling, and measures going out.”<sup>32</sup>

In the same way, it is misleading to call the Pre-Socratic theories, relating to the conception of nature, simply materialistic:

For the Pre-Socratics the opposition spiritual-material did not exist. So saying that their theories are materialistic is a modern definition. Just as considering their theories as a form of materialism is a modern definition. The true problem is what the word *arché* meant. Let's return to the Pre-Socratic positions regarding the problem of nature: they cannot be called materialistic in view of what we just said. However, thanks to Aristotle and Theophrastus's testimonies, those philosophers offered scientific

---

<sup>30</sup> *Ibidem*, p. 37, author's italics.

<sup>31</sup> Aristotle, *Metaphysics*, Book 1, translated by W. D. Ross, 984 (a). Available on line <http://classics.mit.edu/Aristotle/metaphysics.1.i.html>.

<sup>32</sup> Heraclitus, B30 fragment, available online, <http://www.heraclitusfragments.com/B30/index.html>.

theories. The solutions, as I said, are twofold: on the one hand the monistic consideration of nature, where the matter is a single reality that acquires the aspect of multiplicity through quantitative changes. And on the other hand [...] a pluralistic explanation, endorsed also by modern sciences: there is a variety of elements that constitutes the sensitive multiplicity through qualitative processes of reciprocal conjunction and separation.<sup>33</sup>

## 2.2. Aristotle and the concept of “*physis*”

The concept of nature in Aristotle of Stagira (384-322 BC) can be considered a *unicum* in the thinking of Ancient Greece and, more generally, in the history of philosophy. Here we will try to show its importance not only for that historical period, but also for contemporary thinking. As Martin Heidegger states, when the Stagirite pondered the meaning of the word nature, he wanted to offer a wide explanation of it having in mind that the Pre-Socratic philosophy had already given a hint that was almost unconceivable for the present era:

The meaning of the Greek φύσις is like the Latin *natura*, from *nasci*, to be born, arise, develop, and grow. Here we mean by growth the growing in its widest and most elementary sense, which comes to light in the original experience of man: not only the growth of plants and animals, their birth and death as a mere isolated process, but rather the growth as it occurs with the changes in the seasons, permeated and dominated by it, in the alternation of day and night, in the course of the constellations, of hurricanes and storms and the fury of the elements. All this is the growing. [...] this φύσις, this prevailing of the entity in its totality is, instead, experienced by man, in an equally immediate manner linked with things, on himself and his similar, those who are with him. The vents that man experiences, procreation, birth, infancy, maturity, aging, death, are not events in the modern sense, limited, of natural and specifically biological processes, but rather part of the universal prevailing of the entity, which conceptually contains the destiny of man and his history [...] Φύσις indicates this entire prevailing, by which man himself is penetrated and dominated and of which he is not master and in this manner he understands it and manifests it. What he understands, although it can be mysterious and obscure in the particulars, he understands because he approaches, supports and oppresses it as what it is: φύσις, the entity, the totality of the entity. . [...] φύσις [...] meaning that comes before nature and history and embraces both these concepts, and to some extent also includes in itself the divine entity.<sup>34</sup>

---

33 G. Colli, Gorgia e Parmenide: lezioni 1965-1967, Milano, Adelphi, 2003, pp. 125-126.

34 M. Heidegger, *Die Grundbegriffe der Metaphysik. Welt-Endlichkeit-Einsamkeit*, Frankfurt am Main, Vittorio Klostermann Verlag, 1983; English translation: *The Fundamental Concepts of Metaphysics World, Finitude, Solitude*, W. McNeill & N. Walker (trans.), Indiana University Press,

In general, we can identify two distinct meanings of nature, on the one hand, nature means everything not made by man. “Yet such is the vault of the heavens, the stars, the ocean, the earth, that which constantly threatens man, yet at the same time protects him too, that which supports, sustains, and nourishes him; that which, in thus threatening and sustaining him, prevails of its own accord without the assistance of man.”<sup>35</sup>

Then, by nature, we can mean no longer a collection of entities, but their own essence:

the *nature of beings*. Nature now has the meaning of *innermost essence*, as when we say: the nature of things, and in so doing mean not only the nature of natural things, but the nature of each and every being. [...]. What is now decisive is that one of these two concepts of Now the decisive aspect is that neither of these two concepts of φύσις does not, for instance, suppress the other, but that they both continue alongside one another, [...] expressing something equally essential.<sup>36</sup>

This Heideggerian description of the Greek concept of nature seems almost theatrical, but it is the necessary prelude to the many Aristotelian definitions of the word nature. They can be considered individual brushstrokes that taken together reveal a single representation.

In his dictionary of philosophy, that is Book 5 Chapter 4 of *Metaphysics*, Aristotle in defining the term *physis*, clearly refers to his prior speculations, giving six meanings. 1. The origin, the genesis of things. 2. The original principle of things, “their seed”<sup>37</sup> 3. “The source from which the primary movement in each natural object is present in it in virtue of its own essence.”<sup>38</sup> And it is precisely towards this direction, in fact, that the Pre-

---

Bloomington, 1995, pp. 25-26.

<sup>35</sup> *Ibidem*, p. 30.

<sup>36</sup> *Ibidem*, p. 31.

<sup>37</sup> Collingwood, *The Idea of Nature*, cit., p. 81.

<sup>38</sup> Aristotle, *Metaphysics*, Book 4, Chapter 5, cit.

Socratics conduct their inquiry into nature.<sup>39</sup> 4. “‘Nature’ means the primary material of which any natural object consists or out of which it is made [...]” ‘for example, the nature of a wooden chair is the wood itself.’<sup>40</sup> 5. “‘Nature’ means the essence of natural objects, as with those who say the nature is the primary mode of composition.” 6. “By extension of meaning, from this sense of ‘nature’ every essence in general has come to be called a ‘nature’ because the nature of a thing is one kind of essence.”<sup>41</sup> According to Aristotle, the form (that makes an object the way it is and that will be its dynamism) would make the object itself ‘natural’. From this, therefore, we can deduce that the form itself is the nature.

In the light of these definitions, Aristotle concludes that the nature “in the primary and strict sense is the essence of things which have in themselves, as such, a source of movement; for the matter is called the nature because it is qualified to receive this, and the processes of becoming and growing are called nature because they are movements proceeding from this. And nature in this sense is the source of movement of natural objects, being present in them somehow, either potentially or in complete reality.”<sup>42</sup> This statement requires some further comments.

This last definition not only summarises the six previous meanings of nature. It also shows that the original separation, between nature seen as a set of entities and nature seen as the essence of them, is recomposed where

[...] it unitarily conceives precisely the questioning about φύσει ὄντα in their totality (φύσις in the first sense) and the question of the οὐσία, of the being of the being (φύσις in the second sense) [...]. If the fundamental character of this entity and its being is movement, the original question goes back to the Prime Mover, the last and extreme, which is at the same time defined θεῖον, the divine, without which a certain religious meaning transpires from it.<sup>43</sup>

---

39 See Collingwood, *The Idea of Nature*, cit., p. 81

40 Aristotle, *Metaphysics*, Book 4, Chapter 5, cit.

41 *Ibidem*.

42 *Ibidem*.



In this sense, with Aristotle:

[...] the old Presocratic *physis*, a bottomless reservoir from which everything comes and to which everything returns, as well as Nature itself as the set of manifold combinations of elements, is not relegated to the shadows of myth. On two conditions the ancient physics continues to tell its share of truth. First, in Aristotle's closed, finite, and eternal world the very idea of the emergence of the total being of things from nonbeing, or of cosmic order from chaos – which Parmenides had shown we could not even evinsage – disappears.<sup>44</sup>

Movement thus becomes the key to understanding the world of nature in relation to that of technology, which are two different worlds since the origin of their movement is different too (in nature dynamism originates in itself, while it is the craftsman who *draws out* from the matter the products of his art): In fact, as Francesco Viola reveals:

[...] we say 'tree' and we say 'table' and we think that one is a natural thing and the other is manmade, but we don't think that their difference lies fundamentally in the way in which motility occurs within them, in the way in which they are in movement. It is rather the artefacts that suggest the idea of motility, because they are products drawn out by human activity. Nonetheless, we think that this activity is more successful when its products are stable and durable, closer to 'natural' things.<sup>45</sup>

The analogy between the products of art and nature allows us to better understand the meaning of the latter. For Aristotle nature "is like a good property-owner who organises, we are tempted to say who repairs, things to the best of his ability."<sup>46</sup> In this sense, nature not only tends towards change, but this tension moves in a precise direction. Nonetheless, Aristotle is far removed

---

43 Heidegger, *The Fundamental Concepts of Metaphysics World, Finitude, Solitude*, cit., p. 34.

44 P. Pellegrin, *Aristotele*, in *Le savoir grec*, vol. II, ed. J. Brunschwig e G.E.R. Lloyd, Paris, Flammarion, 1996; English translation: *Greek Thought – A Guide to Classical Knowledge*, ed. Jacques Brunschwig and Geoffrey E. R. Lloyd, translated by Catherine Porter, Belknap Press of Harvard University Press, Cambridge (MA), 2000, p. 564.

45 F. Viola, *Il ritorno della natura nella morale e nel diritto. Lezioni di filosofia del diritto*,

a.a. 1993-94. Available online:

[http://www1.unipa.it/viola/Natura\\_diritto\\_morale.pdf](http://www1.unipa.it/viola/Natura_diritto_morale.pdf), p. 45.

46 Pellegrin, *Aristotele*, cit., p. 570 (translator's version).

from wanting to explain the entire world of physics and biology exclusively according to the finalistic principle: “Not only not all the traits of the living can be explained by final causes, but Aristotle never misses the opportunity to recall that the scholar of biology must also study the vital *mechanisms* due to the necessary interaction of the properties of matter.”<sup>47</sup>

According to Aristotle, the finalistic conception pervades nature. In fact, since nature is essentially the shape of things, this means that it can be considered both the direction of the change and the cause of the change itself. Therefore, it is possible to assume that nature is both the purpose and the final cause. Nevertheless, this does not mean that necessity is extraneous to nature itself, in fact, nature is the object of science and “science’s claims are necessary, so that its products – given the objectivistic character of science itself – must present this necessary condition.”<sup>48</sup>

Before Aristotle, Empedocles and Anaxagoras also mentioned the final cause, later ignored for a mechanistic explanation of nature. Nevertheless, “understanding nature only through a mechanical processes, raises the doubt that the final cause itself can be resolved in the mechanistic necessity.”<sup>49</sup> The Stagirite confutes this theory demonstrating above all how the final cause belongs to nature itself since it would be possible to justify the anomalies of nature only within a finalistic perspective. “Abnormalities and monstrosities can be explained as nature’s mistakes only because we think that nature has certain purposes (a kind of skills resulting from an intelligent will) that can go missing along the way.”<sup>50</sup> This does not mean that the necessity is in any case an inherent principle of nature itself. In the *Metaphysics*, he states that it is a hypothetical necessity and not an absolute one. In fact, according to the latter, what is necessary is the result of certain conditions (for example, in order to

---

47 *Ibidem* (translator’s version).

48 M. Zanatta, *Introduzione alla Fisica di Aristotele*, in Id. (ed.), *Fisica di Aristotele*, Torino, Utet, 1999, p. 25.

49 *Ibidem*, p. 26.

50 *Ibidem*, p. 28.

attain health – a necessary result – it may not be necessary to take medicines); while with regard to the hypothetical necessity, the material conditions are necessary to attain a given result (for example the availability of wood is necessary for the making of a bed, but the fact that wood is available does not necessarily imply that a bed will be made). In this sense, then, the purpose and the necessity can not only coexist in nature, but also are essential to each other, “Since indicating the end (formal cause) and the means necessary to realise it (material cause) is nothing more than giving the explanation (the condition of its rationality) without the need to postulate any transcendental entity.”<sup>51</sup>

In conclusion, according to Aristotle the word nature means

[...] a living world: a world characterised not by inertia, like the world of seventeenth-century matter, but by a spontaneous movement. Nature as such is process, growth, change. This process is a development, i.e. the changing takes successive forms  $\alpha$ ,  $\beta$ ,  $\gamma$ ... in which each is the potentiality of its successor; but it is not what we call ‘evolution’, because for Aristotle the kinds of change and of structure exhibited in the world of nature form an external repertory, and the items in the repertory are related logically, not temporally, among themselves. [...] Since nature is self-moving, it is illogical to postulate an efficient cause outside nature to account for the changes that take place in it.<sup>52</sup>

### 2.3. *Final considerations*

So far, we can say that according to the Ancient Greek philosophy nature means a ‘pure’ knowledge, without any type of ethical, religious, etc. mediation. This may certainly be considered a *unicum* in the panorama of Western philosophy.

When this orientation ceases we have reached the advent of modern philosophy: moving towards an amalgamation of pure knowledge with a utilitarian purpose. It is not so much the pure knowledge that matters, as the knowledge as an instrument of domination of man over nature. The crucial point of this development is to

---

<sup>51</sup> *Ibidem*, p. 34.

<sup>52</sup> Collingwood, *The Idea of Nature*, cit., p. 82.

be found in Descartes, who opened the way for Leibniz and Newton. As a contrary episode to this utilitarian tendency, we have Kant who, however, remains episodic.<sup>53</sup>

Moreover, according to Greek philosophy nature is always something dynamic, as it was a living animal:

Nature, for the Greeks, was characterised not merely by the change but by effort or *nisis* or tendency to change in certain definite ways. [...] This conception of *nisis* as a factor running through the entire natural world, with its teleological implications about ends towards which natural processes are directed, was at one time rejected by modern science as a piece of anthropomorphism. But it is by no mean an anthropomorphic idea, unless we falsely identify *nisis* with conscious volition.<sup>54</sup>

### 3. *The concept of nature in the Judaic-Christian tradition*

With Judaism, and later Christianity, radical changes were introduced in the conception of nature and its relationship with mankind. In particular, the absolute break with the Greek tradition consisted in the idea of a creation out of nothing by a transcendent God. This means a clear separation between nature and the divinity (God is more present in the history than in nature itself) where man occupies an intermediate position. By the Middle Ages the metaphor of the two books was well rooted: on the one hand, the Holy Scriptures, that is the book that contains the Word of God and, on the other, the book of Nature, that is the Creation, the work of God,. As the theologian Tanzella-Nitti wrote,

There are basically two ways in which this metaphor can be used. In the more general way, it refers to the comparison between the knowledge of nature achieved by science and the one we achieve reading the Judeo-Christian revelation, and thus understanding nature as creation. [...] However, there is a second, and more intriguing way, to use it. We actually can refer to the term “book” in a specific and definite

---

53 Colli, *Gorgia e Parmenide*, cit., p. 117.

54 Collingwood, *The Idea of Nature*, cit., p. 83.

manner; that is, as a document written by someone and addressed to someone else; a document that is intended to convey an intelligible content; a text that might require a certain effort to be properly interpreted and explained according to its author's original and genuine meaning. But, we ask, how could this second way of understanding the metaphor be truly meaningful? In fact, if it is clear to everyone what we mean when we speak of the book of Scripture, it might be less clear what we mean when we speak of the universe as a "book".<sup>55</sup>

Before delving into this book of Nature, it is necessary to say that by the Middle Ages the Church had elaborated a clear way of interpretation of the Scriptures, that distinguishes between four different levels of understanding. As Dante reveals at the start of the second book of the *Convivio* (1307) when we approach a text we can identify a first level of comprehension that is prevalently semantic, a second moral, then an allegorical sense that, in the case of the Holy Scriptures, could concern the questions relating to the Church. Finally there is an eschatological level that, always remaining in this ambit, refers to the events relating to the return of Christ, God becomes man, to the earth. In the medieval period, only the clergy could interpret the Holy Scriptures, an authority that was challenged by the protestant reform of the sixteenth century. In fact, Martin Luther advocated the so-called universal priesthood, according to which every man of faith could exercise his interpretative capacity. The Church responded to this with the Counter-Reformation, fruit of the Council of Trento (1545-1563), in which it confirmed the clerical authority on matters of exegesis. It would then be Galileo who again challenged the authority of the Church. In his letter of 1615 addressed to Christine de Lorraine, the mother of the Grand Duke of Tuscany for whom he worked as a mathematician and philosopher, he writes regarding the recent astronomic discoveries of Copernicus. In particular, Galileo lingers on the authority of the biblical teachings where they contrast with the new scientific discoveries:

---

<sup>55</sup> G. Tanzella-Nitti, *The Two Books Prior to the Scientific Revolution*, in «Annales Theologici», 18, 2004, pp. 51-52.

This being granted, I think that in discussions of physical problems we ought not to begin from the authority of scriptural passages, but from sense-experiences and necessary demonstrations, for the Holy Bible and the phenomenon of nature proceed alike from the divine Word the former as the dictate of the Holy Ghost and the latter as the observant executrix of God's commands. [...] For the Bible is not chained in every expression to conditions as strict as those which govern all physical effects; nor is God any less excellently revealed in Nature's actions than in the sacred statements of the Bible.<sup>56</sup>

### 3.1. *Nature in the Holy Scriptures*

The Church has worked extensively on the apparent contradiction between the Holy Scriptures and nature, a science subject, producing a variety of documents. It is sufficient to recall that the topic of the Synod of Bishops in 2008 was *The Word of God in the Life and the Mission of the Church – Instrumentum Laboris* and that Pope Benedict XVI, in his post-Synodal Apostolic Exhortation *Verbum Domini*<sup>57</sup>, dealt in depth with this topic and resumed the dogmatic Constitution of the divine Revelation, the *Dei Verbum*<sup>58</sup>, fruit of the Vatican Council II (1962-1965). Then, in 2014 the *Pontifical Biblical Commission* produced a text entitled *Ispirazione e verità della Sacra Scrittura*<sup>59</sup> which explicitly dealt with all those doubts that the Holy Scriptures arouse, when they appear to be in contrast with the results of the natural sciences. It also took into account the stories of the creation, allowing the reader

---

<sup>56</sup> G. Galilei, *Opere*, Firenze, Giunti-Barbera, 1968, vol. V. Available online: <http://disf.org/galileo-lettera-a-madama-cristina-di-lorena>. English translation: <http://www4.ncsu.edu/~kimler/hi322/Galileo-Letter.pdf>.

<sup>57</sup> Benedict XVI, Post-synodal apostolic exhortation *Verbum Domini*, Rome, Libreria

Editrice Vaticana, 2010. Available online:

[http://w2.vatican.va/content/benedict-xvi/en/apost\\_exhortations/documents/hf\\_ben-xvi\\_exh\\_20100930\\_verbum-domini.html](http://w2.vatican.va/content/benedict-xvi/en/apost_exhortations/documents/hf_ben-xvi_exh_20100930_verbum-domini.html).

<sup>58</sup> Text available online:

[http://www.vatican.va/archive/hist\\_councils/ii\\_vatican\\_council/documents/vat-ii\\_const\\_19651118\\_dei-verbum\\_en.html](http://www.vatican.va/archive/hist_councils/ii_vatican_council/documents/vat-ii_const_19651118_dei-verbum_en.html).

<sup>59</sup> Pontifical Biblical Commission, *Ispirazione e verità della Sacra Scrittura. La parola che viene da Dio e parla di Dio per salvare il mondo*, Rome, Libreria Editrice Vaticana, 2014. Available online (English version not available):

[http://www.vatican.va/Romen\\_curia/congregations/cfaith/pcb\\_documents/rc\\_con\\_cfaith\\_doc\\_20140222\\_ ispirazione-verita-sacra-scrittura\\_it.html](http://www.vatican.va/Romen_curia/congregations/cfaith/pcb_documents/rc_con_cfaith_doc_20140222_ ispirazione-verita-sacra-scrittura_it.html).

to go beyond the literal interpretation of the text. Here it is necessary to emphasise how “inasmuch as they are ‘tales of the creation’, they do not illustrate ‘how’ the world and man began, but they speak of the Creator and his relationship with the creation and the creature. [...] The truth of the biblical stories of the creation concern the coherence, full of meaning, of the world as a work created by God.”<sup>60</sup>

It is known that the Scriptures speak of the creation as the effect of the divine Word, which, in turn, created mankind in his image and master of nature. “The God the Creator spoken of in the Bible, is oriented to relate to the creature, just as his creation, as it is described in the Bible, emphasises that relationship. By creating mankind ‘in his own image’ and entrusting to him the task of caring for the creation, God shows his fundamental saving will.”<sup>61</sup>

This leads to an anthropocentric vision of the cosmos which, according to some, establishes the Judaic-Christian tradition as a philosophical presupposition of the exploitation of the natural resources inaugurated by the civilisation of the machines, according to which mankind has the right to ruthlessly obtain the maximum yield from nature. The supporters of this theory offer the biblical account of the creation as proof of their arguments: “God created man in the image of himself, in the image of God he created him, male and female he created them. God blessed them, saying to them, ‘Be fruitful, multiply, fill the earth and subdue it. Be master of the fish of sea, the birds of heaven and all the creatures that move on earth’.”<sup>62</sup> These verses from *Genesis* clearly show the breakaway of Judaic thinking on the conception of nature from the Greek tradition: in fact, while for the latter nature was the dominion of necessity and mankind had no predominant power, now, instead, nature was the object of a creating will and at the service of mankind.<sup>63</sup> This last passage demands further comment.

---

<sup>60</sup> *Ibidem*, § 67.

<sup>61</sup> *Ibidem*.

<sup>62</sup> *Genesis* 1, 27-28 New Jerusalem Version.

<sup>63</sup> See Galimberti, *Tecnica e natura*, cit.

First, it is necessary to examine in more detail the bond between nature and the concept of creation. As the passage from *Genesis* clearly illustrates, the Judaic-Christian religion places nature as the product of God's creating will which not only made it out of nothing (a position widely criticised by Greek thinking), but it also distinguished among the elements. As Viola reveals:

Nature is not made by mankind, who is called upon to collaborate in the development of the creation. Since nature is the work of God, it bears the signs of its creator. We can indirectly know God through nature. This means that nature moves beyond itself, it is not a closed and self-sufficient universe. It depends constantly on its creator. Indeed, we speak of "continuous creation". If something is drawn from what *it is not*, this means that the *nothing* is always waiting for something and can swallow up the reality. God, the creator, continually supports the existence of his creatures. The stability and the order of the universe lie in this permanence of the divine will towards the creation.<sup>64</sup>

The fact that God sustains in his existence every element of the Creation means that through the understanding of the natural world we can finally *substantially* know its creator. In fact, "this presence is quite different from that of human craftsman in relation to a mechanical object. In the human work, there is undoubtedly the idea of the artisan, but not his being. In the divine creation there is also the presence of God himself who wants a thing to exist and participates in its being."<sup>65</sup> Nonetheless, it is important to note that the nature is not divine, although participating to God's being, in the sense that the natural world cannot be understood in a pantheistical way.

With regard to the position of mankind in the creation, it is necessary to consider the meaning of the biblical expression "subdue the earth". On this issue Pope Francis' second encyclical entitled *Laudato si'* offers an important contribution. Above all, he invites us to read the biblical texts within their perspective because this is the only way to ensure a correct interpretation. In fact, some verses after the ones quoted above, the book of *Genesis* offers this new image. "Yahweh God took the man and settled him in the garden of Eden

---

<sup>64</sup> Viola, *Il ritorno della natura nella morale e nel diritto*, cit., p. 11.

<sup>65</sup> *Ibidem*, p. 12.



to cultivate and take care of it.”<sup>66</sup> Thus, in relation to nature and the use that man can make of it, the term ‘subdue’ must be read together with the expressions ‘cultivate’ and ‘take care’; and “Instead, our ‘dominion’ over the universe should be understood more properly in the sense of responsible stewardship.”<sup>67</sup> It is a complex vision that aims to combine anthropocentrism and respect for nature. Thus, two needs emerge that, according to Giorgio Israel, “can be clearly found in the concept of Shabbat (the Jewish Sabbath) like abstention from work, which is sensible because the other days of the week are workdays and, necessarily also the exploitation and manipulation of the natural world.”<sup>68</sup>

Nonetheless, all that has occurred in modernity clearly shows a link with the anthropocentric conception of nature endorsed by the Judaic-Christian tradition, which could be better defined as an “anthropocentric excess,”<sup>69</sup> where the idea of respect and care for nature has been considered to be in opposition with technical-scientific progress.

Paradoxically, modern anthropocentrism has placed the faith in technology above reality, “because this human being no longer sees nature as a valid norm, or as a living sanctuary. He sees it without hypothesis, objectively, as space and matter in which to realize a work in which to throw everything, and it does not matter what will result.”<sup>70</sup>

As the theologian Jean-Michel Maldamé observes, the fact that nature is subordinate to the will of mankind does not necessarily imply a devaluation of the former, but, rather, it is precisely through the human person that nature best realises its potential. In this manner, the natural-artificial opposition no longer

---

<sup>66</sup> *Genesis* 2, 15 New Jerusalem Version..

<sup>67</sup> Francis, *Encyclical Letter Laudato si'*, Città del Vaticano, Libreria Editrice Vaticana, 2015. Available online: [http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20150524\\_enciclica-laudato-si.html](http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html), § 67.

<sup>68</sup> G. Israel, *L'ebraismo e la natura*, articolo Available online: [http://www.jewishheritage.org/jh/upload/edjc/pdf/ebraismo\\_natura.pdf](http://www.jewishheritage.org/jh/upload/edjc/pdf/ebraismo_natura.pdf), p. 13.

<sup>69</sup> Francis, *Encyclical Letter Laudato si'*, cit., § 116.

<sup>70</sup> *Ibidem*, § 115.

assumes the character of a negative moral judgement of human activities, if human actions go along with the ideas of ‘supervising’ and ‘preserving’ nature.

The position of mankind within the world of living beings rests on a *rupture instauratrice*. We can therefore recognise that what is specific to human nature is thought. Contemplation is a decisive aspect; it implies a relationship between the individual and one other than self (as in the relationship between parents and children, in couples, within society...); for this reason, the mediation of the word is essential. Thought makes use of language, but at the same time transcends it – this does not occur in animal communication. The ontological dimension of the notion of nature recognises the objectivity of this fact; human nature is linked to a *logos* that takes the form of *nomos* to express normative needs. Nevertheless, the openness of the human being places him beyond the merely biological laws; it places him before the need and the challenge that is his realisation. Nature is not an intangible fact, but a broader opening, with an inclination towards the infinite – modern philosophy swings between insistence on respect for that which is given and the need to overcome it. The modern notion of a person holds together these two ontological needs: the respect for that which is given and the desire to overcome it in order to measure up to one’s vital momentum. For this reason, the opposition between natural and artificial cannot be absolutized. The natural datum is a material available to human action; it must be elaborated by art in order to become useful to man. It is at the service of the good of each human being, of his irreducible dignity, and of society in its justice, that the value of the fruit of human industry is determined: utensils, tools, food, medicines... They cannot be disqualified because they are artificial.<sup>71</sup>

Thanks to the features that the concept of nature assumes in Judaic-Christian thought, a new aspect emerges that the Greek tradition could not even consider: nature enters the domain of ethics.

Until man was able to change the order of non-human nature, this appeared to him as *necessary*, that is, a set of physical and biological laws that could not be violated without falling into chaos. This necessity was provided with moral value only to the extent that it was interpreted as divine will. Nevertheless, modern science did not need this *hypothesis* and, therefore, this need was seen as completely lacking in ethical meaning. However, since the technique has shown the possibility of modifying and even replacing the order of nature, then one wonders whether it is *right* to protect that order. Therefore, it makes sense to ask whether this "necessity", which has become unnecessary, must be respected and to what extent. In fact, insofar as the "necessity" is

---

71 J.M. Maldamé, *The Concept of Nature at the Articulation Point of Various Types of Knowledge*, in «Recherches de Science Religieuse», 98, 2010, 2. Available on line : [https://www.cairn-int.info/article-E\\_RSR\\_102\\_0217--the-concept-of-nature-at-the.htm](https://www.cairn-int.info/article-E_RSR_102_0217--the-concept-of-nature-at-the.htm), p. 238.

linked to the impossibility of choice and the lack of alternatives, it is totally subtracted from the legal regulation, if anything it is itself productive of a right.<sup>72</sup>

Having said this, then, the question that arises concerns the link between the concept of nature (borrowed from the Judaic-Christian tradition or, as we will see later, from modern science) and the concept of ethic that derives from it. Clearly, it is a much broader question that, given the principal interest of this work, can be narrowed to the family and human reproduction's ethics field of study.

### *3.2 The natural family in the doctrine of the Catholic Church and in the Methodist-Waldensian Reformed Christian Church*

When nature enters the dominion of ethics, the adjective 'natural' assumes a moral connotation, an equation that raises a number of perplexities, which we will discuss later. In fact, the concept of natural family has always been considered equivalent to that of the traditional family and the tradition, as far as the Western world was concerned, was rooted in the Judaic-Christian thought. This is why we intend to consider, first of all, the concept of natural family borrowed from the magisterium of the Catholic Church, because this, amongst the Christian confessions, is the one that has been most extensively elaborated over the course of the centuries and which presents considerable official documentation to which, during the presentation that follows, we will attempt to remain faithful.

According to the Catholic doctrine, "the family is the image of God."<sup>73</sup> This is why the magisterium considers specific features regarding the concept of

---

<sup>72</sup> F. Viola, *Stato vincoli natura*, Relazione al XIX Congresso nazionale della Società italiana di filosofia giuridica e politica (Trento, 20-30 September 1994). Available online: [http://www1.unipa.it/viola/Stato\\_vincoli\\_natura.pdf](http://www1.unipa.it/viola/Stato_vincoli_natura.pdf), p. 129.

<sup>73</sup> Final speech to the Synod of Bishops, 24 October 2015, *La vocazione e la missione della famiglia nella Chiesa e nel mondo contemporaneo*. Available online (no official English version available): [http://www.vatican.va/roman\\_curia/synod/documents/rc\\_synod\\_doc\\_20150623\\_instrumentum-xiv-assembly\\_it.html](http://www.vatican.va/roman_curia/synod/documents/rc_synod_doc_20150623_instrumentum-xiv-assembly_it.html).

family essential. Above all, the Christian family is the sacred union of one man and one woman in the sacrament of marriage and normally blessed by the children who shall be given to them by God: “Children are a gift, they are a gift: understood? Children are a gift. Each one is unique and irreplaceable; and at the same time unmistakably linked to his/her roots. In fact, according to God’s plan, being son and daughter means to carry within oneself the memory and hope of a love which was fulfilled in the very kindling of the life of another, original and new, human being. And for parents each child is original, different, and diverse.”<sup>74</sup>

At the same time, the Christian God is a communion of persons because he combines in himself the Trinitarian vision of Father, Son and Holy Spirit and, similarly, “In matrimony and in the family a complex of interpersonal relationships is set up – married life, fatherhood and motherhood, filiation and fraternity – through which each human person is introduced into the ‘human family’ and into the ‘family of God’, which is the Church.”<sup>75</sup> Thus, the family is considered the privileged place where the meaning of ‘common good’ can be experienced. As Pope Benedict XVI wrote in the encyclical *Caritas in Veritate*:

It is thus becoming a social and even economic necessity once more to hold up to future generations the beauty of marriage and the family, and the fact that these institutions correspond to the deepest needs and the dignity of the person. In view of this, States are called to enact policies promoting the centrality and the integrity of the family founded on marriage between a man and a woman, the primary vital cell of society, and to assume responsibility for its economic and fiscal needs, while respecting its essentially relational character.”<sup>76</sup>

---

74 See Francis, Udiienza generale *La famiglia. I figli*, Piazza San Pietro, 11 February 2015. Available online (no official English version available): [http://w2.vatican.va/content/francesco/it/audiences/2015/documents/papa-francesco\\_20150211\\_udienza-generale.html](http://w2.vatican.va/content/francesco/it/audiences/2015/documents/papa-francesco_20150211_udienza-generale.html).

75 John Paul II, Apostolic Exhortation *Familiaris Consortio*, Città del Vaticano, Libreria Editrice Vaticana, 1981. Available online: [http://w2.vatican.va/content/john-paul-ii/en/apost\\_exhortations/documents/hf\\_jp-ii\\_exh\\_19811122\\_familiaris-consortio.html](http://w2.vatican.va/content/john-paul-ii/en/apost_exhortations/documents/hf_jp-ii_exh_19811122_familiaris-consortio.html), § 15.

76 Benedict XVI, Encyclical Letter *Caritas in Veritate*, Città del Vaticano, Libreria Editrice Vaticana, 2009. Available online: [http://w2.vatican.va/content/benedict-xvi/en/encyclicals/documents/hf\\_ben-](http://w2.vatican.va/content/benedict-xvi/en/encyclicals/documents/hf_ben-)

Following this line of thought, in the encyclical *Lumen Fidei*, the current Pope Francis emphasises the link between family and faith:

The first setting in which faith enlightens the human city is the family. I think first and foremost of the stable union of man and woman in marriage. This union is born of their love, as a sign and presence of God's own love, and of the acknowledgement and acceptance of the goodness of sexual differentiation, whereby spouses can become one flesh (cfr. *Genesis 2:24*) and are enabled to give birth to a new life, a manifestation of the Creator's goodness, wisdom and loving plan. [...] In the family, faith accompanies every age of life, beginning with childhood: children learn to trust the love of their parents [...] Faith is no refuge for the fainthearted, but something which enhances our lives. It makes us aware of a magnificent calling, the vocation of love. It assures us that this love is trustworthy and worth embracing, for it is based on God's faithfulness, which is stronger than our every weakness.<sup>77</sup>

Then, since the Christian God is the Creator, in the same way, “[...] husband and wife through that mutual gift of themselves, which is specific and exclusive to them alone, develop that union of two persons in which they perfect one another, cooperating with God in the generation and rearing of new lives.”<sup>78</sup> Accordingly couples should be open to become parents, although it cannot be the sole purpose. In fact, Pope Francis, in his last apostolic exhortation, criticised a way of presenting marriage “[...] in such a way that its unitive meaning, its call to grow in love and its ideal of mutual assistance are overshadowed by an almost exclusive insistence on the duty of procreation.”<sup>79</sup>

---

[xvi\\_enc\\_20090629\\_caritas-in-veritate.html](http://www.vatican.va/encyclicals/20090629_caritas-in-veritate.html), § 44.

<sup>77</sup> Francis, Encyclical Letter *Lumen Fidei*, Città del Vaticano, Libreria Editrice Vaticana, 2013. Available online: [http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco\\_20130629\\_enciclica-lumen-fidei.html](http://w2.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20130629_enciclica-lumen-fidei.html), §§ 52-53.

<sup>78</sup> Paul VI, Encyclical Letter *Humanae Vitae*, Città del Vaticano, Libreria Editrice Vaticana, 1968. Available online: [https://w2.vatican.va/content/paul-vi/en/encyclicals/documents/hf\\_p-vi\\_enc\\_25071968\\_humanae-vitae.html](https://w2.vatican.va/content/paul-vi/en/encyclicals/documents/hf_p-vi_enc_25071968_humanae-vitae.html), § 8.

<sup>79</sup> Francis, Post-Synodal Apostolic Exhortation *Amoris Laetitia*, Città del Vaticano, Libreria Editrice Vaticana, 2016. Available online: [https://w2.vatican.va/content/dam/francesco/pdf/apost\\_exhortations/documents/papa-francesco\\_esortazione-ap\\_20160319\\_amoris-laetitia\\_en.pdf](https://w2.vatican.va/content/dam/francesco/pdf/apost_exhortations/documents/papa-francesco_esortazione-ap_20160319_amoris-laetitia_en.pdf), § 36.

Nonetheless, he notes that “Young couples need to be encouraged to be essentially open to the great gift of children.”<sup>80</sup>

The Christian vision of the family set out so far certainly assumes a decisive meaning for those who profess this religion, but at the same time, it claims to be important for all humanity. This intention stands within the attempt to define a universal ethic that, according to the teaching of the Catholic Church cannot fall outside the concept of nature previously described.

Person is not opposed to nature. On the contrary, nature and person are two notions that complement one another. On the one hand, every human person is a unique realization of human nature understood in a metaphysical sense. On the other hand, the human person, in the free choices by which he responds in the concrete of his “here and now” to his unique and transcendent vocation, assumes the orientations given by his nature. In fact, nature puts in place the conditions for the exercise of freedom and indicates an orientation for the choices that the person must make. Examining the intelligibility of his nature, the person thus discovers the ways of his own fulfilment.<sup>81</sup>

Here arises, the concept of natural law which “presupposes the idea that nature is for man the bearer of an ethical message and is an implicit moral norm that human reason actualizes.”<sup>82</sup> Nevertheless, precisely because human reason (not mere instinct) is at stake, natural law also implies personal freedom:

It is above all essential to develop a non-competitive conception of the connection between divine causality and the free activity of the human subject. The human subject achieves fulfilment by inserting himself freely into the providential action of God and not by opposing himself to this action. It is his prerogative to discover with his reason the profound dynamisms that define his nature, and then to accept and direct these dynamisms freely to their fulfilment. In fact, human nature is defined by an entire ensemble of dynamisms, tendencies and internal orientations within which freedom arises. Freedom actually presupposes that the human will is “activated” by the natural desire for the good and for the last end. Free will is exercised then in the choice of the finite objects that allow the attainment of this end. As regards these goods, which exercise an attraction that does not determine the will, the person retains mastery of his

---

<sup>80</sup> *Ibidem*, § 223.

<sup>81</sup> International Theological Commission, *In Search of a Universal Ethic: A new look at the Natural Law*. Available online: [http://www.vatican.va/roman\\_curia/congregations/cfaith/cti\\_documents/rc\\_con\\_cfaith\\_doc\\_20090520\\_legge-naturale\\_en.html](http://www.vatican.va/roman_curia/congregations/cfaith/cti_documents/rc_con_cfaith_doc_20090520_legge-naturale_en.html).

<sup>82</sup> *Ibidem*, § 69.

choice by reason of an innate openness to the absolute Good. Freedom is therefore not an absolute creator of itself, but is rather an eminent property of every human subject.<sup>83</sup>

These considerations are particularly important when the new forms of parenting are at stake, subject of the following chapters. In particular, the teachings of the Catholic Church condemn in general all assisted reproductive techniques (ART) since they challenge,

[...] the inseparable connection, established by God, which man on his own initiative may not break, between the unitive significance and the procreative significance which are both inherent to the marriage act. The reason is that the fundamental nature of the marriage act, while uniting husband and wife in the closest intimacy, also renders them capable of generating new life – and this as a result of laws written into the actual nature of man and woman.<sup>84</sup>

Therefore, the Catholic doctrine states that the unitive conjugal moment cannot be positively separated from the procreative moment, on the contrary to what would occur with ART. “Human procreation requires on the part of the spouses responsible collaboration with the fruitful love of God; the gift of human life must be actualized in marriage through the specific and exclusive acts of husband and wife, in accordance with the laws inscribed in their persons and in their union.”<sup>85</sup> This means that “Homologous artificial insemination within marriage cannot be admitted except for those cases in which the technical means is not a substitute for the conjugal act but serves to facilitate and to help so that the act attains its natural purpose.”<sup>86</sup> This means that neither heterologous insemination nor surrogate maternity can be considered acceptable ways to procreate.

---

<sup>83</sup> *Ibidem*, § 77.

<sup>84</sup> Paul VI, *Humanae Vitae*, cit., § 60.

<sup>85</sup> Congregation for the Doctrine of Faith, *Instruction on Respect for Human Life in its Origin and on the Dignity of Procreation Replies to Certain Questions of the Day*, Città del Vaticano, Libreria Editrice Vaticana, 1987. Available online:

[http://www.vatican.va/roman\\_curia/congregations/cfaith/documents/rc\\_con\\_cfaith\\_doc\\_19870222\\_respect-for-human-life\\_en.html](http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html).

<sup>86</sup> *Ibidem*, § 6.

Nonetheless, not all the Christian Churches agree with the magisterium of the Catholic Church about family's definition and human reproduction. For example, the Methodist-Waldensian Church shows a degree of approval of these new possibilities of parenting.<sup>87</sup> The reasons for this attitude lie above all in the meaning that this doctrine attributes to the concept of family that is "a human and not a divine institution."<sup>88</sup> Therefore, not sharing the sanctity of marriage, dear to Catholicism, means that the family is an institution that can adjust itself according to cultural changes.

Studying the family today means taking into account a concept of nature in the Gramscian sense – as in the Constitution – that is as a set of social relationships that determines a historically defined conscience, not as something unchangeable. [...] For much of historical Protestantism, the new models and the new forms of family are not a problem, but rather a way to enhance a renewed and fecund consideration of the vocation of the believers.<sup>89</sup>

In particular, the document regarding the Synod on the family, referring to the Italian political situation, emphasised that:

[...] in our country, the public debate on the family is often conditioned by a representation of the family as a 'natural' institute, unchangeable in time and space, in the face of a variety of convictions, amongst which the protestant approach, which considers marriage a fundamental institution of the human condition, experienced by men and women in a different way, and admitting a historical-cultural component subject to transformation.<sup>90</sup>

---

87 The Methodist and Waldensian Churches are part of the Protestant or Evangelical Christian Churches born after the sixteenth century Reformation. The Waldensians have been present in Italy since the Middle Ages, particularly in Piedmont and, through their work of evangelisation, their teachings spread to South America. The Methodist Church was born in the United Kingdom in the eighteenth century. Co-operation between these two churches increased after the Second World War, culminating in the signing of a Covenant of Federation in 1975. They are members of the World Council of Churches (WCC) and of the Federation of Protestant Churches in Italy. For more information: <https://www.chiesavaldeese.org/index.php>.

88 Waldesian Evangelical Church, *New Document: Families, Marriages, Couples and Parenthood. Synods 2012*, p. 7. Available online:

[https://www.chiesavaldeese.org/documents/docum\\_famiglie2017\\_ingl.pdf](https://www.chiesavaldeese.org/documents/docum_famiglie2017_ingl.pdf).

89 *Ibidem*, p. 6.



In this sense, according to the Methodist-Waldensian doctrine, nature is invariable and therefore cannot be compared to the concept of family, which changes over time. Hence, dealing with the more strictly bioethical discourse, the Waldensian Synod expressed its opinion on ART and surrogate motherhood. With regard to the former, the starting point must be the concept of family without any reference to the sacred<sup>91</sup>; in particular, the official document relating to ART states that “within the church, sexuality and the decision to procreate lie within the field of free determination of the individual<sup>92</sup>.” However, with regard to surrogacy, the Waldensian Synod pronounced as follows:

Using a surrogate mother must be considered very carefully, not merely because it presents intrinsic ethical problems, but above all for the inadequate relationship between the gestational mother and the child to be born, and therefore the consequences (for both!) of the separation immediately after the birth. The above practice appears unacceptable in cases where, apart from the problems already mentioned, there are elements of exploitation of a situation of need.<sup>93</sup>

#### 4. *The great metaphor of nature*

---

90 Waldensian Evangelical Church, *New Document: Families, Marriages, Couples and Parenthood, Synods 2015*, Available online:

[https://www.chiesavalde.org/documents/docum\\_famiglie2017\\_ingl.pdf](https://www.chiesavalde.org/documents/docum_famiglie2017_ingl.pdf)

91 See the Waldensian Work Group on ethical matters, *La procreazione medicalmente assistita*, July 1999, p. 9. Available online: [https://www.chiesavalde.org/documents/proc\\_med\\_assist.pdf](https://www.chiesavalde.org/documents/proc_med_assist.pdf).

In particular, with regard to the meaning of ‘sacred’: “The standpoint that emerges today in the protestant culture considers the family in its social, lay context, presented in the modern world. This point of view is facilitated by the fact that in Christianity of protestant culture, reference is made to the family without any sacramental conception of marriage. Since God is *Other* and the world is not sacred, nor is the family in itself sacred. However, the family belongs to the ethical sphere and cannot become a terrain open to any will or preference [...] Becoming a parent does not only mean biologically giving life, it also means committing to creating for the child an ethically suitable environment, where they can develop their personality. We must prepare to relate to these children, being accountable to them for our choices and answering their questions, since they will certainly ask us about the inheritance they have received.”

92 *Ibidem*.

93 Waldensian Work Group on ethical matters, *Bioetica, Ricerca e orientamenti*, June 1995, page 2. Available online: <https://www.chiesavalde.org/documents/bioetica.pdf>.

After this brief digression on the concept of nature in the Catholic Church and in the Union of Methodist and Waldensian Churches, which has led to the discourse of the present day, it is now necessary to make a temporal leap backwards to the Middle Ages. In fact, the thirteenth century marked the start of major developments in the scientific field. Previously, the School of Chartres (X century) had considered nature an integral part of the divine creative cycle and, for this reason, nature had been a subject of philosophical thinking. This meant that nature was addressed from a theological and poetical perspective and it was not yet subjected to any experimentation. The same happened in the Middle Ages, when nature was confined to the privileged subject of alchemy and magic. From the middle of the fourteenth century, then:

[...] the rebirth of man, revelation and hope of the Renaissance, is the rebirth of man *in the world*. The relationship with the world is recognised as an integral part, constitutive of man. During the Renaissance man achieves a clear understanding of his own nature and, at the same time, his relationship to the world. Man understands himself as part of the world, distinguishes himself from it to claim his own originality, but at the same time takes root in it and recognises it as his own domain.<sup>94</sup>

A dominion that first of all would mean looking for a method of knowledge that could reveal the secrets of nature herself. In this sense, the work of Francis Bacon (1561-1626), one of the founding fathers of modern science, introduced the idea of an experimental scientific method aimed at elevating man to *dominus* of reality. In fact, the period between the fifteenth and the seventeenth centuries saw important changes in the way of conceiving the world, which led to the so-called 'scientific revolution' that we will try to briefly describe. It began with the publication of Copernicus' work *De revolutionibus orbium coelestium* (On the Revolutions of the Celestial Spheres, 1543) according to which rather the Sun and not the Earth was the centre of the cosmos. Hence the work of Newton, *Philosophiae Naturalis Principia Mathematica* (Mathematical

---

94 Abbagnano, *Storia della filosofia*, cit., vol. II, p. 627.

Principles of Natural Philosophy, or Principia) published in 1687, presented the theory of universal gravitation, while Galileo Galilei (1564-1642) introduced the scientific method as we now know it.

The starting point for this radical change in the way of conceiving reality was certainly not immune from a conception of man and his relationship with nature, which was the prerogative of the Judaic-Christian tradition and developed throughout the Middle Ages. As Giorgio Israel, historian of science noted:

The scientific revolution presents a historical paradox with regard to the position of man in the cosmos. In the Ptolemaic cosmos, man had a central position, while in the Copernican cosmos he is only a crumb lost in the infinite. Yet in the Copernican universe, man acquires a new importance and a new role, a power that he never even imagined he could have, the power to know and transform the world around him. How does the purchase of this theoretical and practical power, in principle unlimited, be reconciled with the loss of the central position that made man and his Earth the centre of the entire cosmos? [...] Let us recall what is the structure of the mediaeval cosmos: a closed sphere, perfectly ordered and hierarchically structured in sub-strata that are contained in one another as layers. This hierarchical order is not only physical but also moral. In the scale of moral and physical perfection the eighth sphere, which encompasses the entire cosmos and generates its motion, represents the highest level, the lowest level being that of the Earth. The Earth is, therefore, the centre of the cosmos, but this privilege manifests a twofold aspect: God's special attention for his creature that he animated with his breath, but also the fact that the earth and man are the place of all the maximum physical imperfections and moral abuses.<sup>95</sup>

In this manner, modern science breaks away from the idea of a 'hierarchical' cosmology opening to a homogeneous, open and infinite conception of the universe that only man can understand, since he is gifted with the faculty of reason. A faculty that makes him similar to God, but that, at the same time, can who never be a true competitor. Thus, the omnipresent medieval God gives way to a God confined in the universe that he has created. "This new collocation of God brought new and extraordinary possibilities for man. Certainly, he lost the central and at the same time ambiguous position that he occupied in the system

---

95 G. Israel, *La macchina vivente. Contro le visioni meccanicistiche dell'uomo*, Torino, Bollati Boringhieri, 2004, pp. 41-42.

of values of the mediaeval cosmos. However, he acquired a new one: the unlimited possibility of not only *knowing*, but also *transforming* nature.”<sup>96</sup>

The mathematisation of nature is certainly one of the most important aspect of this change. Firstly it was applied in the astronomy of Copernicus and, later, in the mechanics of Galileo and Newton. At the same time, this vision of nature found its theoretical equivalent in the mechanistic philosophy of Descartes (1596-1650). In particular, Galileo’s breakthrough lies in having discovered the “mathematical nature”<sup>97</sup>, according to which every event in nature must obey precise laws. This also led him to take up positions in contrast with the Church, or rather, to support theories (that of Copernicus, in particular) that openly contrasted with the teachings of the Holy Scriptures. Thus in 1633 he was condemned for heresy and obliged to deny the theories that he had supported until that time. Only in 1992 Pope John Paul II, following a lengthy examination of the “Galilei case” conducted by a study commission set up by the chair of St. Peter, did admit the injustice of the famous condemnation, emphasising two key aspects:

First of all, as for most of his enemies, Galileo makes no distinction between a scientific approach to natural phenomena and a philosophical reflection on nature, which it generally refers to. This is why he refused the suggestion he had been given to present the Copernican system as a hypothesis, until it was confirmed by irrefutable proof. This was, by the way, a requirement of the experimental method of which he was the brilliant initiator. Moreover, the geocentric representation of the world was commonly accepted in the culture of time as fully consistent with the teaching of the Bible, in which some expressions, taken literally, seemed to constitute statements of geocentrism. The problem posed by theologians of the time was that of the compatibility of heliocentrism and Holy Scriptures. Thus the new science, with its methods and the freedom of research that they demanded, forced theologians to

---

96 *Ibidem*, p.44

97 E. Husserl, *Die Krisis der europäischen Wissenschaften und die transzendente Phänomenologie*, The Hague, Martinus Nijhoff’s Boekhandel en Uitgeversmaatschappij, 1959; English translation: *The Crisis of European Sciences and Transcendental Phenomenology*, Northwestern University Press, Evanston, 1970, p. 52.

question their criteria of interpretation of the Holy Scriptures. Most could not do it.<sup>98</sup>

Nevertheless, although Galilei was ‘rehabilitated’ in the eyes of the Church, his position continues to be problematic. In particular, as Paolo Galluzzi, historian of science, writes, the sacrifice of this scientist and the disbelief of the ecclesiastical authorities of the time “contributed [...] to clarifying the relationships between faith and scientific research, encouraging the affirmation of the awareness of a convergence based on reciprocal autonomy.”<sup>99</sup> Nevertheless, the Church showed a total lack of interest in the issues emerging from scientific progress. Therefore, Galluzzi reveals that

[...] this reassuring paradigm seems in fact to work only on abstract principle’s ground. Faced with the concrete issues put forward by the development of research, the scenario is much more problematic. The Church expresses its disagreement in all cases in which scientific research prefigures results or scenarios that offer ethical implications.<sup>100</sup>

The question that arises, then, is whether in general autonomy of thought means not admitting any possibility of critical judgement; however, continuing in this way it would mean facing the issue about the freedom of research, which is not part of the present discussion.

To return to the content of Galileo’s discoveries, the words of the German philosopher Edmund Husserl are worthy of note because they describe the new features of his scientific method:

In his view of the world from the perspective of geometry, the perspective of what appears to the senses and is mathematizable, Galileo *abstracts* from the subjects as persons leading a personal life; he abstracts from all that is in any way spiritual, from all cultural properties which are attached to things in human praxis. [...] One can truly say

---

98 John Paul II, *Discorso ai partecipanti alla sessione plenaria della Pontificia Accademia delle Scienze*, 31 October 1992. Available online (no official English version available):

[http://w2.vatican.va/content/john-paul-ii/it/speeches/1992/october/documents/hf\\_jp-ii\\_spe\\_19921031\\_accademia-scienze.html](http://w2.vatican.va/content/john-paul-ii/it/speeches/1992/october/documents/hf_jp-ii_spe_19921031_accademia-scienze.html)

99 P. Galluzzi, *Il “caso Galilei”*, in *Il processo a Galileo Galilei e la questione galileiana*, Rome, Edizioni di Storia e Letteratura, 2010, p. 9.

100 *Ibidem*.

that the idea of nature as a really self-enclosed world of bodies first emerges with Galileo. A consequence of this, along with mathematization, which was too quickly taken for granted, is [the idea of] a self-enclosed natural causality in which every occurrence is determined unequivocally and in advance. Clearly the way is thus prepared for dualism, which appears immediately afterward in Descartes. In general we must realize that the conception of the new idea of “nature” as an encapsulated, really and theoretically self-enclosed world of bodies soon brings about a complete transformation of the idea of the world in general. The world splits, so to speak, into two worlds: nature and the psychic world, although the latter, because of the way in which it is related to nature, does not achieve the status of an independent world.<sup>101</sup>

Man’s domination of nature has been made possible by the fact that through his knowledge of reality he can govern its processes and even exploit the nature itself. As Descartes said:

[...] these scientific notions of mine – showed me that we can get knowledge that would be very useful in life, and that in place of the speculative philosophy taught in the schools we might find a practical philosophy through which knowing the power and the actions of fire, water, air, the stars, the heavens and all the other bodies in our environment as clearly as we know the various crafts of our artisans, we could (like artisans) put these bodies to use in all the appropriate ways, and thus make ourselves the masters and (as it were) the *owners* of nature. This is desirable not only for the invention of innumerable devices that would give us trouble-free use of the fruits of the earth and all the goods we find there, but also, and most importantly, for the preservation of *health*, which is certainly the chief good and the basis for all the other goods in this life. For even the mind depends so much on the state of the bodily organs that if there is to be found a means of making men in general wiser and cleverer than they have been so far, I believe we should look for it in medicine.<sup>102</sup>

This passage shows how the Scientific Revolution led to a better way of obtaining knowledge. Now man can unveil nature’s secrets and reproduce its mechanisms for his own purposes. Consequently, it is no more possible to see any distinction between natural objects and artificial objects. “If every natural object and every natural process is based on principles identical to those of the

---

101 Husserl, *The Crisis of European Sciences and Transcendental Phenomenology*, cit., p. 60.

102 R. Descartes, *Discours de la Méthode*, in *Oeuvres de Descartes*, Paris, C. Adam et P. Tannery, 1973; English translation: *Discourse on the Method*, available on line <http://www.earlymoderntexts.com/assets/pdfs/descartes1637.pdf>, p. 24.

machines constructed by man, the scientific method can only be based on the same procedure used by the artisan: dismantling the machine to see how it works.”<sup>103</sup>

This is why, according to Descartes, nature could be compared to a clock.

As previously mentioned, with the scientific revolution Aristotle’s natural teleology definitively gave way to a mechanistic conception of nature, where also the distinction between natural and artificial objects proposed earlier by the Stagirite disappears. Until then nature was considered greatly superior to human manufactures, so the competition between man and nature could be regarded as an impossible ambition. Nonetheless, during the Renaissance a much more optimistic vision of human expertise made a road for itself until Descartes stated that man could even “possess” the legality of the natural world.<sup>104</sup> In this sense, the clock became a metaphor of nature:

For those sectors of European society for whom the clock and its regulatory functions were important aspects of daily experience, this machine came to offer a metaphor of enormous power, comprehensibility, and consequence. The allure of the machine, and especially the mechanical clock, as a uniquely intelligible and proper metaphor for explaining natural process not only broadly follows the contours of daily experience with such devices but also recognizes their potency and legitimacy in ordering human affairs.<sup>105</sup>

The characteristics that make the clock the most suitable metaphor for understanding the nature of the seventeenth century are above all the fact that “the mechanical clock was a complex artefact designed and constructed by people to fulfil strictly human functions.”<sup>106</sup> Secondly, “although it was itself inanimate, the clock imitated the complexity and the purposiveness of

---

<sup>103</sup> Israel, *La macchina vivente. Contro le visioni meccanicistiche dell'uomo*, cit., p. 49.

<sup>104</sup> See S. Shapin, *The Scientific Revolution*, Chicago, The University of Chicago Press, 1998, p. 32.

<sup>105</sup> *Ibidem*, p. 33.

<sup>106</sup> *Ibidem*, p. 34.

<sup>101</sup> *Ibidem*.

intelligent agents. If you did not know there was an intelligent clockmaker who purposefully brought it into being, you might suppose that the clock itself was intelligent and purposive.”<sup>107</sup>. Finally, “the clock was an example of uniformity and regularity,”<sup>108</sup> which was how nature was seen. To use the words of Israel, we can say that, “by dismantling natural machines we can understand the laws that God set as the principles for their functioning. But at that point, we are capable of rebuilding them, at least in principle” and, therefore, “man no longer feels that he is a passive creature, but an active creator. The man Adam is definitively dead and his place has been taken by the man-Prometheus.”<sup>109</sup>

##### 5. *Kant: the return of teleology in the conception of nature*

Romanticism, anticipated by Kant in his work entitled *Critique of Judgement*, reacted to the mechanistic vision of nature. According to Kant, the efficient cause alone cannot be the key to understanding nature and its phenomena. Kant defines the product of nature as ‘the cause and effect of itself,’<sup>110</sup> that is “in such a product of nature every part not only exists *by means of* the other parts, but is thought as existing *for the sake of* the others and the whole, that is as an (organic) instrument. Thus, however, it might be an artificial instrument, and so might be represented only as a purpose that is possible in general; but also its parts are all organs reciprocally *producing* each other.”<sup>111</sup>

A connection of these properties emerges in the phenomenon of life (organism) where all the single moments are related to each other so that the

---

107 *Ibidem*.

108 *Ibidem*, p. 36.

109 Israel, *La macchina vivente. Contro le visioni meccanicistiche dell'uomo*, cit., p. 49.

110 I. Kant, *Kritik der Urteilskraft*, Hamburg-Leipzig, B. Erdmann, 1884; Italian translation: *Critica del Giudizio*, Rome-Bari, Laterza, 2005, p. 423. English translation: *Critique of Judgment*, Oxford University Press, New York 2008, p. 199.

111 F. Salza, *Lettura della Critica del Giudizio di Kant*, Torino, Utet, 2000, p. 124.

<sup>112</sup> Kant, *Critique of Judgment*, cit., p. 202.



past is encompassed in the present so that past and present are looking forward to see the future. There are two ways of seeing the causal link: on the one hand, the cause is seen as efficient, that is according to a cause-effect bond; on the other, the cause can be seen as final where the effect ideally precedes the cause and drives it.

Human activity tends to be regulated according to this second type of cause, however, according to Kant, an analogy between natural organisms, nature's products, and any artefact would be inapt. The metaphor of the watch thus loses its efficacy: in a watch the mechanism does not produce another watch wheel, nor does a watch produce another watch, because "[...] the producing cause of the watch and its form is not contained in the nature of this material, but lies outside the watch in a being that can act according to ideas of a whole which its causality makes possible."<sup>112</sup> That is human power.

Yet, to state that natural organisms have their own formative power and producing cause does not imply the metaphysics of nature. But it could challenge the hypothesis that the mechanism is the only law that governs natural phenomena. It is not by chance that Kant emphasises that:

[...] it is common knowledge that scientists who dissect plants and animals, seeking to investigate their structure and to see into reasons why and the end for which they are provided with such and such parts, why the parts have such and such position and interconnection, and why the internal form is precisely what it is, adopt the above maxim as absolutely necessary. So they say that nothing in such forms of life is in *vain*, and they put the maxim on the same footing of validity as the fundamental principle of all natural science, that *nothing* happens *by chance*.<sup>113</sup>

The fact that nothing is in vain leads reason to an order of thoughts that goes beyond mechanism so the hypothesis of natural ends becomes more feasible. Therefore, even those organisms apparently anti-finalistic to humans,

---

112

113 *Ibidem*, p. 204.

such as the louse or the mosquito, take on a function of exhortation, for example, to clean and rescue nature.<sup>114</sup>

This last passage is by no means to be taken for granted. The fact that a thing shows its internal purpose does not necessarily mean that its existence is a purpose of nature, because this would mean knowing such a purpose, “then the unity of the supersensible principle must be treated, not as valid merely for certain species of natural beings, but as similarly valid for the whole of nature as a system.”<sup>115</sup>

Therefore, the sciences, such as physics, are not concerned with demonstrating whether the purposes of nature were more or less intentional, because the incumbent risk is to combine the principles of knowledge with others that do not belong to the natural sciences, but to the supernatural. On the other hand, when teleology, speaks of nature as if its purpose were intentional, it attributes this intentionality to nature itself, that is to the matter “[...] and consequently is not meant to introduce any special ground of causality, but only to assist the employment of reason by supplementing investigation, so as to make up for the inadequacy of the former even as a method of empirical research that as for its object all particular laws of nature.”<sup>116</sup>

The crucial point is therefore to understand why Kant states that the universal mechanism of nature is insufficient to guide the investigation into the organisms of nature.

The discovery of the empirical laws requires an experimental investigation of nature that must be carried out in the most rigorous manner possible. For example Galileo derived the falling object theory from the observation of numerous similar experiments (artificial reproduction of natural processes in conditions of maximum observability), in order to verify a regular physical behaviour. Nonetheless, Kant states that, “It is [...] quite certain that

---

114 See Salza, *Lettura della Critica del Giudizio di Kant*, cit., p. 128.

115 Kant, *Critique of Judgment*, cit., p. 209.

116 *Ibidem*, p. 210.

we can never get a sufficient knowledge of organized beings and their inner possibility, much less get an explanation of them, by looking merely to mechanical principles of nature.”<sup>117</sup>

Kant begins to reveal two standpoints from which it is possible to investigate nature without one excluding the other. However, the question that must be answered is whether the union between the principle of finalism and that of mechanism is possible, or whether knowledge is condemned to an irreducible dualism.

It is important for reason not to lose sight of the causal nexus to explain the natural products, in fact, as emphasised earlier, only the assumption of a mechanistic standpoint allows a clear and systematic understanding of the organisms’ structures.

However, it is true that the reason asks questions about natural products to which determinism cannot give answers: it is impossible to explain the final causes through a causal relationship and to understand why, for example, a blade of grass exists and has certain precise characteristics.

In the light of this, Kant admits that the principle of mechanical philosophy and that of teleology must necessarily coexist and alternate in the understanding of an organism, without ever being coincident points of view.

The teleological view of nature maintains a continuous interaction between the empirical reality and its aims because “we are utterly unable to ascribe the possibility of such natural ends to any other source than an intelligent Being.”<sup>118</sup> However, if we immediately ascribe the natural ends to hyperphysical intelligence, we would lose ourselves in the transcendent and it “does not further our knowledge of nature one whit.”<sup>119</sup>

From this we can derive an indication of method for the investigation of nature: “I *ought* at all times to *reflect* upon these things *according to the*

---

117 *Ibidem*, p. 227.

118 *Ibidem*,

119 *Ibidem*, p. 238.

*principle* of the simple mechanism of Nature, and, consequently push my investigation with it as far as I can.”<sup>120</sup>

Kant speaks of a necessary subordination of the principle of mechanical philosophy to the teleological in the description of a product of nature because “it is equally necessary maxim of reason not to overlook the principle of ends in the products of nature. For although this principle does not make the way in which such products originate any more comprehensible to us, yet it is a heuristic principle for the investigation of the particular laws of nature”.<sup>121</sup> This does not imply abandoning the phenomenal reality, in fact, the idea that both the finalism and the organic life give “to our experience and our knowledge of nature that *immanent infinity* proper to them; it converts conditioned and isolated experiences into a totality, into the intuition of a *living whole*, but it simultaneously points to the limits of this whole since it comes to know it as a whole of phenomena.”<sup>122</sup>

#### 6. *Darwin and the theory of evolution: a new way of conceiving nature*

With his revolutionary work entitled *The Origin of the Species*, published in 1859, Darwin (1809-1882) introduced the concept of evolution, according to which nature was no longer considered to be static, but in relation to time.<sup>123</sup> Nevertheless, there was no return to the Aristotelian, or at least Romantic, idea of nature, since in this case the evolution did not follow an internal *telos*:

---

120 E. Cassirer, *Kants Leben und Lehre*, Berlin, B. Cassirer, 1918; English translation: *Kant's Life and Thought*, James Haden (trans.), Yale University Press, New Haven and London, 1985, p. 345.

121 Kant, *Critique of Judgment*, cit., p. 239.

122 Cassirer, *Kant's Life and Thought*, cit., p. 355 (author's italics).

123 See R. Bondi and A. La Vergata, *Natura*, Bologna, Il Mulino, 2014, p. 169.

In order to fully appreciate Darwin epochal contribution to the modern emancipation from Platonic-Christian creationism, it is above all necessary to bear in mind, as already mentioned, that he took care not to introduce any personification or divinisation of nature, starting with the question of natural selection itself. In fact, this is not a *force* that pursues the realisation of a conscious design: it only *apparently* performs its *blindly adaptive* function, interacting with the whole stochastic, probabilistic component of mutations and environmental pressures, and without ensuring any progressive advancement towards an optimal result. Therefore, the following adjustments, the tinkering with the material available to the evolution, is very different from the production of man's artefacts: it is not a teleological process meant in any case to fulfil a plan, a sort of harmony already intentionally established by some celestial artisan. In this sense, naturalistic evolutionism, which leaves behind the final causes and takes into account the *teleology of the living world* (the existence of biological programmes produced by the evolutionary history and capable of guiding the organisms automatically towards a goal) is an alternative to every creationism that tries to explain the physical reality (referring to a demiurge or intelligent causal agency that *plans from on high* its strategy with a conscious and intentional purpose).<sup>124</sup>

Darwin was not the first to upset the classical philosophy of nature according to which change has always a purpose (teleology) because Galileo, Copernicus and Newton had already introduced a new logic to the way of considering natural phenomena: the empirical research. Here there is a reference to the scientific analysis of nature, that is an activity that has its purpose in discovering the empirical laws that underlie the natural system, while aware that they cannot explain everything. The empirical laws are nothing more than mechanical laws to which every element of nature is exposed, from rocks to animals: "Thus, for example, an animal and a stone are both subject to the law of falling bodies, and in that sense there is no real difference between them. But when we examine the structure of animals and stones we find that they differ in a striking and important way. Stones are simply aggregates of externally related parts, while the parts of animals seem to be related, not just externally, but through some inner principle of organization".<sup>125</sup> This meant that nature was no

---

124 O. Franceschelli, *Dio e Darwin. Natura e uomo tra evoluzione e creazione*, Rome, Donzelli, 2005, pp. 59-60.

125 J.D. McFarland, *Kant's Concept of Teleology*, Edinburgh, University of Edinburgh Press, 1970, p. 95-96.

longer considered merely a mysterious entity to which man was subjugated, it could be known and could offer its own answers to the queries it raised.

Nonetheless, at the end of the eighteenth century, the argument of the design laid at the centre of the idealist philosophy and was endorsed by the study of organic life:

The progress of physical science, thanks to the Copernican revolution had led man to see the universe from a schizophrenic perspective that persisted until the late nineteenth century. The scientific explanations derived from the natural laws dominated the world of inorganic matter, on the Earth as in the heavens. The supernatural explanations that relied on the mysterious actions of the Creator dominated the origin and the configuration of the living creatures – the most diversified, complex and interesting reality of the world. It was precisely Darwin who resolved this conceptual schizophrenia. Darwin completed the Copernican revolution defining the notion of nature, according to biology, as an ordered system of matter in movement that human reason can understand without relying on supernatural agents.<sup>126</sup>

The study of the living creatures suggested that their perfection could not be anything other than the work of a creative mind and certainly not the result of chance. Kant, simply observing a worm, had shown how mechanisms and teleology cooperated in the understanding of an organism from two different points of view: on the one hand, we can admit that a worm can be considered the product of the mechanisms of matter, starting from elements resulting from the putrefaction of a previous organism. On the other hand, “it is quite conceivable, so far as we are able to know, that one and the same time object *may* be capable of being explained mechanically but, since we cannot understand how this could be possible, must be estimated as the result of a technique of nature.”<sup>127</sup> Nevertheless, as Costa reveals:

The Darwinian principle of natural selection cut straight under this philosophy. If all organic adaptations are due simply to constant variation and the elimination of those variations which are harmful in the struggle for existence that is brought about by

---

126 F.J. Ayala, *L'evoluzione. Lo sguardo della biologia*, Milano, Jaca Book, 2009, p. 34.

127 McFarland, *Kant's Concept of Teleology*, op. cit., p. 95.

excessive reproduction, there is no call for a prior intelligent causal force to plan and preordain them. Hostile critics charged Darwin with materialism and with making chance the cause of the universe.<sup>128</sup>

A force that, in this case, acts in the same way as breeders, farmers and horticulturists work: “Domestication is so compelling an analogy to the natural process of species change that Darwin later seemed to see it as the initial inspiration for his ideas on both transmutations and natural selection.”<sup>129</sup>

According to Darwin, in fact:

[...] since variations are in useless as well as useful directions, and since the latter are sifted out simply by the stress of the conditions of struggle for existence, the design argument applied to living beings is unjustifiable; and its lack of support there deprives it of scientific value as applied to nature in general.<sup>130</sup>

This said, it is necessary to investigate the meaning of Darwin’s theory of evolution and its impact on the study of nature.

Ernst Mayr (1904-2005), one of the most important biological evolutionists of the twentieth century, identified five Darwinian theories of evolution that emerge not only from reading *The Origin of the Species*, updated and revised in all its editions, but also the notes on his explorations and his correspondence. However, “for Darwin himself these five theories were evolution as such, common descent, gradualism, multiplication of species and natural selection.”<sup>131</sup>

The theory of *evolution as such* is considered the foundation of the next four: “This is the theory that the world is neither constant nor perpetually

---

128 J. Dewey, *The Influence of Darwinism on Philosophy*, in *The Influence of Darwin on Philosophy and Other Essays*, New York, Henry Holt and Company, 1910. Available online:

[https://brocku.ca/MeadProject/Dewey/Dewey\\_1910b/Dewey\\_1910\\_toc.html](https://brocku.ca/MeadProject/Dewey/Dewey_1910b/Dewey_1910_toc.html).

129 J.T. Costa, *The Darwinian Revelation: Tracing the Origin and Evolution of an Idea*, in «BioScience», 59, 2009, n. 10. Available online: <http://bioscience.oxfordjournals.org/content/59/10/886.full>, p. 888.

130 Dewey, *L'influenza del darwinismo sulla filosofia*, op. cit., p. 10.

131 E. Mayr, *What Makes Biology Unique? Considerations on the Autonomy of a Scientific Discipline*, Cambridge, Cambridge University Press, 2004, p. 99.

cycling but instead is steadily and in part directionally changing and that organisms are being transformed in time.”<sup>132</sup> The second theory is that of *common descent*:

The case of the three species of the Galapagos [a stop during the naturalistic-geographic expedition of the *Beagle*] provided Darwin with an important new insight. The three species had clearly descended from a single ancestral species on the South American continent. From this conclusion it was only a small step to postulate that all mockingbirds were derived from a common ancestor – indeed, that every group of organism descended from an ancestral species.<sup>133</sup>

Nevertheless, “There was only one area in which the application of the theory of common descent encountered vigorous resistance: the inclusion of humans into the total line of descent.”<sup>134</sup> Moreover, Darwin, for purely empirical reasons, insisted that the theory of *gradualism* according to which “the new species had evolved gradually from pre-existing species by a slow process, at each stage of which they maintained their adaptation.”<sup>135</sup> According to Darwin, the organic diversity could find an answer in the theory of the *multiplication of the species*, which remains a field of investigation with regard to the understanding of genetic events that occur during the speciation. Lastly, the best-known and most innovative Darwinian theory remains, without doubt, that of *natural selection*. It “dealt with the mechanism of evolutionary change and, more particularly, how this mechanism could account for the seeming harmony and adaptation of the organic world. It attempted to provide a natural explanation in place of the supernatural one of natural theology.”<sup>136</sup> It is a process in two phases: the first is the one in which the variation is generated, the second is the one in which the variation undergoes a downright selection, carried out by breeders of cattle, horses, etc. In fact, they choose to breed from the animals that show the most desirable characteristics (the fastest horses, the

---

132 *Ibidem*, p. 100.

133 *Ibidem*.

134 *Ibidem*, p. 102.

135 *Ibidem*, p. 103.

136 *Ibidem*, p. 109.



cows that give the most milk, and so on), while in the case of natural selection, it is the environment that makes these decisions. For example:

The giraffe, by its lofty stature, much elongated neck, forelegs, head and tongue, has its whole frame beautifully adapted for browsing on the higher branches of the trees. It can thus obtain food beyond the reach of the other Ungulata or hoofed animals inhabiting the same country; and this must be a great advantage to it during dearths.<sup>137</sup>

Andrea Parravicini, scholar of philosophy and biology, shows how the Darwinian revolution in the way of conceiving nature and its processes, not only considerably affected biological sciences, but also the philosophical thinking and man's relationship with his environment. In fact, Darwin:

[...] removes from the natural world the supremacy of what was believed to be fixed (like the species) and the presence of intelligent and divine purposes in the evolutionary and development process. At the same time he supports the importance of difference, blind adaptation, becoming, contingency, and the lack of a preordained plan in the evolutionary process. This overturning of values in the philosophical thinking, which fully involves also the notion of the human being and of his thought, produces a profound ethical and political upheaval [...]. Man can freely act in the world and the consequences are now vulnerable, uncertain. The effect of our actions, far from being already written and preordained by some higher Mind or by some preordained final goal, is unpredictable and not decided. Darwin thus introduces, with his perception, a strong element of ethical responsibility of man with respect to his actions and his future, which now has to be decided and understood.<sup>138</sup>

## 7. *Mankind, the master of nature*

The progress of technology and above all the increasing perfection of microscopes (the first electronic microscope dates from 1930) took biology to a

---

137 C. Darwin, *The Origin of the Species*, London, John Murray, 1876 (6<sup>a</sup> ed.). Available online: <http://darwin-online.org.uk/content/frameset?viewtype=text&itemID=F401&pages eq=1>, p. 177.

138 A. Parravicini, *Dewey e il Ministero del Disturbo: la rivoluzione darwiniana e il suo impatto filosofico*, in «MicroMega», 28 March 2016. Available online: <http://lameladinewton-micromega.blogautore.espresso.repubblica.it/2016/03/28/dewey-e-il-ministero-del-disturbo-la-rivoluzione-darwiniana-e-il-suo-impatto-filosofico/>.

great level of advancement in the study of the cells, embryology and germs. This allowed man to act on this material and to delve into the understanding of the phenomenon of life and its onset. Accordingly the generation of living organisms became the subject of scientific investigation. In fact, until that moment, man had not yet had the instruments for conducting empirical investigations on reproductive processes. But thanks to the new technologies, the biological mysteries started to be unveiled. Certainly, Darwin owned the responsibility of being the initiator of the Copernican revolution in biology and, hence, he challenged the *forma mentis* of his contemporaries. As Collingwood reveals:

Before the rise of nineteenth-century biology, the process of generation in living organisms was conceived as a reproductive process, that is, a process by which the specific form of the parent organism was reproduced in the offspring. Any failure to reproduce it exactly was regarded as an aberration, a failure in the strict sense, a shot in which nature simply missed her mark. [...] But palaeontology, as studied by the geologists of the eighteenth century, made it clear that over a longer stretch of time this evidence no longer held good; for geology very soon presented us with pictures of past ages in which the flora and fauna of the world had been very different from what they are now. The natural way of interpreting this new knowledge was by assuming that the organisms of to-day trace their pedigree not through a line of ancestors all specifically identical with themselves, but through these specifically different forms; so that the specific form itself undergoes change in time as the history of the world proceeds. [...] It was verified by the study, due especially to Darwin, of the breeding of domestic animals, where within comparatively short spaces of time human agency, by selecting certain strains to breed from, can produce forms having at any rate a strong resemblance to independent species and capable like them of breeding true to type. These considerations led to an entirely new conception of the generative process. Whereas nature had hitherto been credited with an effort to reproduce fixed specific forms of life, she was henceforth conceived as attempting, like a human cattle-breeder, to produce always new and improved forms. But for the cattle-breeder an improved form means one better suited to the breeder's interests, which are not identical with the interests of the cattle themselves: thus the purposes of the breeder are imposed on the cattle from without. If nature is improving the forms of life, she works from within; and hence when we say that nature produces an improved form of life, what we mean is a form that is better fitted to survive or simply to live, i.e. a form more adequately embodying the idea of life.<sup>139</sup>

---

139 Collingwood, *The Idea of Nature*, cit., pp. 133-134.

With contemporary biology, in particular genetics and embryology, man was no longer confined to the role of breeder, but “man is intervening in the structure of life, even in that of his own life.”<sup>140</sup> In this sense, then, human intervention can be similar to that within nature itself.

The ethical dilemmas arise precisely at this level because man was no longer the spectator of Darwinian natural selection, but he started to act upon nature. By definition, every human action is artificial and often the starting point for ethical discussions is “an argument about going *against nature*.”<sup>141</sup> The risk, however, is that of falling into a debate dominated, on the one hand, by an anthropocentric point of view according to which nature has no intrinsic moral value and, on the other, by a naturalistic perspective that finds an absolute moral value in nature itself.

However, the new biology teaches us the permeability of the confines between artificial and natural. This polarity would necessarily lead to philosophical and biological confusions. Jürgen Mittelstrass (1936), a contemporary philosopher of science, observes that the only ethics capable of responding to the new questions that biological science presents is “a *rational ethics*, that is, a rightly understood anthropocentrism in ethics, is able to solve them. Nature gives no ethical lessons, neither in the form of physiocentrism nor in the form of evolutionary ethics. Nature only reminds us, when harm is caused – keyword: *environmental problems* – of the unfinished tasks of rational ethics.”<sup>142</sup> Nonetheless, when the problems are not environmental, but they involve the nature of man himself, Mittelstrass recognises that:

scientific facts must be recognised and taken into consideration by ethics, but always considering the (philosophical) fact that one cannot deduce an “ought” from an “is”. Any form of naturalism in ethics prevents the latter from absolving its true task: offering a rational direction for life. We have not yet adequately observed the Delphic

---

140 J. Mittelstrass, *The impact of the new biology on ethics*, in «Journal of Molecular Biology» vol. 319, 2002, p. 901.

141 *Ibidem* (author’s italics).

142 *Ibidem*, pp. 904.

maxim “know thyself” if we simply recognise that which is nature in us. The problem is that of rationally dealing with this nature that is within us and outside us.<sup>143</sup>

Robert Spaemann (1927), a philosopher who also deals with bioethics, considered the moral significance of the difference between ‘natural’ and ‘unnatural’ precisely according to the perspective indicated by Mittelstrass with the Delphic maxim “know thyself”. Spaemann states that the *instinct* is the key concept for understanding the difference between ‘natural’ and ‘unnatural’. If a person is hungry he is keen to satisfy this need, but not necessarily as soon as the impulse appears. In fact, he may not eat until he has completed a surgical operation, or he may simply have had other more impelling occupations:

Instinct itself is, therefore, sufficient for us to do something about its fulfilment *only when we consider it to be so*, that is when we welcome with freedom the vectorial sense that resides in it. This can only be done if we perceive this sense as such, not as a *brutum factum*, as a simple fact, but as something accessible to an interpretation, as something that is already a kind of language. The interpretation of instinct does not happen by itself. It is not at all nature. It is what we call rational. Nature manifests itself as such only through the reason. The beast is hungry, but the natural end of its hunger, its survival, is not revealed and not even the natural end of its sexual instinct, that is the continuation of the species.<sup>144</sup>

Certainly, the self-preservation of mankind is linked to instinct, but there are actions such as eating and drinking that remain free and, as such, lie within a cultural context, where “culture originally meant cultivation of the land, culture meant humanised nature, not eliminated.”<sup>145</sup> Therefore, a rational ethics is reached only when,

---

143 Unfortunately this quote is available only in the Italian version *La nuova biologia e l’etica*, in «Rivista di Filosofia», vol XC, n. 1, 1999, p. 15 (translator’s version).

144 R. Spaemann, *Sind «natürlich» und «unnatürlich» moralisch relevante Begriffe?*, in V. Schubert (ed.), *Was lehrt uns die Natur. Die Natur in den Künsten und Wissenschaften*, St. Ottilien, Eos Verlag, 1989; Italian edition. *Naturale e innaturale sono concetti moralmente rilevanti?*, in U. Perone (ed.), *Cos’è il naturale. Natura, persona, agire morale*, Torino, Rosenberg & Sellier, 2012, p. 64.

145 *Ibidem*.

[...] not, but reason should be for him [man] the measure of the judgement of actions. And for this reason, instead of natural law, one should speak rather of a rational right [...] It could be provocatively said that only in rational action is the concept of the natural fully redeemed. Not however to simply to substitute reason for nature.<sup>146</sup>

At this point the question is raised whether a Newton of the blade of grass really does not exist: “No-one has every managed, and according to Kant no-one will ever manage to reconstruct the reality of a blade of grass, because its parts up to infinity are always organic in nature.”<sup>147</sup> Therefore, can the task of biological science and its branches (genetics, embryology, etc.) be only an infinite approximation of this ‘reconstructive’ project, or is it something more? In fact,

[...] the more recent discussions, with respect to the period of Darwin and Haeckel (a German biologist, a contemporary of Darwin) are characterised by the fact that the Darwinian project is now applied to the entire cosmic process, that is also to the origin of life, and moreover by the fact that now we trying to realise at a conceptual level the genetic reconstruction of life on the one hand, and of subjectivity on the other.<sup>148</sup>

That subjectivity recognises the reason why it has been possible to have full control of certain natural inclinations such as hunger, thirst, sexuality, etc. and in some cases, thanks to technological progress, to reproduce their purpose. On this matter, Spaemann cites the example of the now normal scission, on the one hand, between the attainment of sexual pleasure from its natural function of perpetuation of the species (through the use of contraceptives) and, on the other hand, between the procreative function itself an the natural sexual act (by means of medically assisted fertilisation).<sup>149</sup> Precisely this separation suggests that

[...] the continuation of the human race in the future will be assured by the State, through the production of humans *in vitro*. We must be aware of the fact that this production in vitro is different from procreation, since it is a human action finalised in

---

146 *Ibidem*, p. 66.

147 *Ibidem*, p. 105.

148 *Ibidem*, p. 106.

149 *Ibidem*, p. 65.

reaching a purpose, a ποίησις (*poiesis*), a fabrication, not the natural result of a πράξις (*praxis*), of a relationship, of an inter-human meeting.<sup>150</sup>

Therefore, given the undeniable difference between the procreative methods and the actors involved, it is legitimate to ask whether this also implies a qualitative difference in the result attained, or whether there is no difference from that generated by nature herself.

## 8. *Nature*

We will now conclude this first part by considering one of the most important British scientific journals, which has survived more than two centuries of history and which tells the story of enterprises aimed at modifying and perfecting nature, a journal that not by chance is called *Nature*. It is necessary to go back to the origins of the journal to understand why it has been called in that way.

On November 4<sup>th</sup> 1869, the first issue was published and, amongst others, there were contributions from the English biologist Thomas Henry Huxley and from Charles Darwin. The aim of this journal was not merely to give a voice to the “specialists” or, in other words, to the “men of science” who already boasted their membership of the *Royal Society of London* and, therefore, could publish their discoveries in the journal of *Philosophical Transactions of the Royal Society*. *Nature* aimed to be as much informative as possible and, in this way, to give the opportunity to get an understanding about the scientific discoveries of that time and to present their own. It takes a while since this idea became the journal we now considered one of the most important in the field. In fact, initially, it had been called *The Reader*, a weekly journal about art, literature and science, but it lasted less than a year. It was thanks to the cooperation among the astronomer Norman Lockier, the publisher

---

150 *Ibidem*.

Alexander Macmillan and Huxley that *Nature* saw the light with a title that was chosen to highlight its mission. "What a glorious title, "Nature", a veritable stroke of genius to have hit upon. It is more than a cosmos, more than a universe. It includes the seen and the unseen, the possible as well as the actual, Nature and Nature's God, mind and matter. I am lost in admiration for the effulgent blaze of ideas it calls forth."<sup>151</sup> *Nature* should not have had any boundaries.

The publisher asked Huxley to write the opening article of the first issue of the journal. He decided then to report a fragment on *Nature* from *The metamorphosis of plants* by Goethe.<sup>152</sup>

---

151 From a letter written by Lockyer to the mathematician James Joseph Sylvester. Available online:  
[http://www.nature.com/nature/history/timeline\\_1860s.html](http://www.nature.com/nature/history/timeline_1860s.html).

152 Below is the integral version the essay:

Nature! We are surrounded and embraced by her: powerless to separate ourselves from her, and powerless to penetrate beyond her. Without asking, or warning, she snatches us up into her circling dance, and whirls us on until we are tired, and drop from her arms.

She is ever shaping new forms: what is, has never yet been; what has been comes not again. Everything is new, and yet nought but the old.

We live in her midst and know her not. She is incessantly speaking to us but betrays not her secret. We constantly act upon her, and yet have no power over her.

The one thing she seems to aim at is Individuality; yet she cares nothing for individuals. She is always building up and destroying; but her workshop is inaccessible.

Her life is in her children; but where is the mother? She is the only artist; working-up the most uniform material into utter opposites; arriving without a trace of effort, at perfection, at the most exact precision, though always veiled under a certain softness.

Each of her works has an essence of its own; each of her phenomena a special characterisation: and yet their diversity is in unity.

She performs a play; we know not whether she sees it herself, and yet she acts for us, the lookers-on.

Incessant life, development and movement are in her, but she advances not. She changes for ever and ever, and rests not a moment. Quietude is inconceivable to her, and she has laid her curse upon rest, She is firm. Her steps are measured, her exceptions rare, her laws unchangeable.

She has always thought and always thinks; though not as a man, but as Nature. She broods over an all-comprehending idea, which no searching can find out.

Mankind dwells in her and she in them. With all men she plays a game for love and rejoices the more they win. With many, her moves are so hidden, that the game is over before they know it.

That which is most unnatural is still Nature; the stupidest philistinism has a touch of her genius. Whoso cannot see her everywhere, sees her nowhere rightly.

She loves herself and her innumerable eyes and affections are fixed upon herself. She has divided herself that she may be her own delight. She causes an endless succession of new capacities for enjoyment to spring up, that her insatiable sympathy may be assuaged.

This essay was actually written by the Swiss theologian Georg Christoph Tobler (1757-1812). Nonetheless, the various editions of Goethe's work continue to carry this fragment on nature, due to its wonderful consonance with the thinking of the German philosopher. Goethe's letter addressed to the Chancellor von Müller and dated May 24th 1828 contains an explanation of this text. At the beginning of the letter, referring to Tobler's essay, he writes:

I do not recall whether I wrote it or not; but his considerations coincide with the ideas that came to mind at that time. I could call that stage of my vision of the world a "comparative" driven to show itself and directed towards a superlative not yet reached. There is a tendency towards a sort of pantheism, since it sees as a basis for the phenomena of the universe an inscrutable, unconditioned, humorous, contradictory; and we can consider it a game, not, however, without a bitter seriousness.<sup>153</sup>

In the fifty years following this essay, Goethe wrestled with his discoveries regarding human anatomy and the metamorphosis of plants, and it was this that allowed him to conclude his letter by stating:

[...] If we consider the high achievements by which all the phenomena of Nature have been gradually linked together in the human mind; and then, once more, thoughtfully peruse the above essay, from which we started, we shall, not without a sigh, compare that comparative, as I called it, with the superlative which we have now reached, and rejoice in the progress of fifty years<sup>154</sup>

---

She rejoices in illusion. Whoso destroys it in himself and others, she punishes with the sternest tyranny. Whoso follows her in faith, him she takes as a child to her bosom.

Her children are numberless. To none is she altogether miserly; but she has her favourites, on whom she squanders much, and for whom she makes great sacrifices. Over greatness she spreads her shield.

She tosses her creatures out of nothingness, and she tells them not whence they came, for whither they go. It is their business to run, she knows the road.

Her mechanism has few springs – but they never wear out, are always active and manifold.

The spectacle of Nature is always new, for she is always renewing the spectators. Life is her most exquisite invention; and death is her expert contrivance to get plenty of life.

She wraps man in darkness, and makes him for ever long for light. She creates him dependent upon the earth, dull and heavy; and yet it is always shaking him until he attempts to soar above it.

(J.W. Goethe, *Versuch die Metamorphose der Pflanzen zu erklären*, Gotha, Ettingersche Buchhandlung, 1790; English version of the Aphorism *Nature* is available on line <https://mathcs.clarku.edu/huxley/UnColl/Nature/Goet.html>).

153 *Ibidem*.

154 *Ibidem*.



When Huxley was writing his article for the first issue of *Nature*, that superlative reached by Goethe was already taken for granted and it could be considered the starting point for new discoveries. In fact Huxley recognised that:

When another half-century has passed, curious readers of the previous issues of *Nature* will probably look at *our* best, “not without a smile;” and it, may be, that long after the theories of the philosophers whose achievements are recorded in these pages, are obsolete, the vision of the poet will remain as truthful and efficient symbol of the wonder and the mystery of Nature.<sup>155</sup>

And so it was. Almost two centuries have passed and the progress of science and technology allows each of us to observe the past scientific discoveries as a mother gazes in amazement when her child experiments the force of gravity, dropping anything that comes to hand from the highchair. Nonetheless, while Huxley was certain that scientific progress would never graze man’s concept of nature as a “wonder and a mystery”, now this had become a controversial aspect. On the one hand, science had taken steps forward that even replaced some of the process that until recently had been the exclusive prerogative of nature. This is evident in the field of biotechnologies, in particular where assisted reproduction is at stake. On the other hand, Western society is a spectator of a cultural evolution that sees certain customs, to some extent traditions, questioned, or more simply, no longer considered ‘natural’. The evolution of the idea of family, taken into account in the next chapters, clearly reflects this change due not only to the progress of technology, but also thanks to cultural changes in the conception of parenting (introduction of same-sex adoptions).

---

155 T.H. Huxley, *Goethe: Aforisms on Nature*, in «Nature», 1, 1869, n. 1. Available online: <http://www.nature.com/nature/about/first/aphorisms.html>.

## Chapter 2

### The natural family: a controversial definition

#### *1. The family as a “natural society”*

What is the family today? What role does the concept of *nature* assume in the definition of this institute? These questions are increasingly relevant, since it is precisely the definition of family (natural, social, biological, etc.) that stands at the centre of an intense debate that involves a wide spectrum of figures from the legislator to the common citizen, from the anthropologist to the psychologist. The present controversies have highlighted a sort of conflict among the admirable results of an unstoppable scientific progress, a tradition that increasingly demands a critical examination, and the fact that man has always tried, with every means available to him to meet his own desires. The merely theoretical analyses and the considerations based on groundless presuppositions certainly appear unconvincing when sensitive issues, such as the definition of family and the possibility of becoming a parent are at stake.

All the Constitutions of the EU Member States refer to the family, generally without specifically setting out a definition, but emphasising the

duties of the State with regard to this social formation.<sup>156</sup> Nevertheless there are few exceptions.

In 2013, Croatia called a referendum to protect the traditional family, with the aim of defining marriage as a union between a man and a woman. With this amendment to the constitution, Croatia joined Latvia, Lithuania, Poland, Hungary and Bulgaria, the five European countries that already included an exclusively heterosexual definition of marriage in their constitutions. Italy also presents an unusual definition of the family, with respect to other countries of the European Union. In fact, Article 29 of the constitution states, “The Republic recognises the rights of the family as a natural society founded on marriage. Marriage is based on the moral and legal equality of the spouses within the limits laid down by law to guarantee the unity of the family.” The use of the adjective ‘natural’ is often the subject of debate. This is because nature can assume a limiting or discriminating role in the definition of family, since nowadays there are many new kind of families, and, therefore, in the application of the relative rights. On the one hand, in fact, the *natural* family could be considered exclusively that resulting from bonds and acts of procreation, thus emphasising its natural/biological character. On the other hand, the term ‘natural’ could also mean a society existing prior to the State itself and its laws.

---

<sup>156</sup> For example, we will cite some of the mentions of the term *family* in the Constitutions of the EU Member States. In the preamble to the French constitution of October 27<sup>th</sup> 1946 we read, “The Nation shall provide the individual and the family with the conditions necessary to their development.” In the Spanish constitution, Article 39, paragraph 1, “The public authorities ensure social, economic and legal protection of the family. In the German constitution (*Grundgesetz*) Article 6, paragraph 1 states, “Marriage and the family shall enjoy the special protection of the state.” Article 21, paragraph 1 of the Greek constitution states, “The family, being the cornerstone of the Nation, as well as marriage, motherhood and childhood, shall be under the protection of the State.”

### 1.1. *The natural family and the principles of the Italian constitution*

So, which meaning does the Italian Constitution refer to when speaking of the concept of “natural society”? In order to trace the original meaning of this definition it is necessary to go back to the preparatory works of the Italian Constitution. During the intense work of the Subcommittee and later, during the Constituent Assembly, the definition of family and the introduction of the adjective ‘natural’ were the object of a lively debate.

However the first subcommittee had adopted the definition of the family, as a natural society, almost unanimously. Togliatti (Communist Party, PCI) supported this definition alongside the Christian Democratic Party (DC), which clearly wanted to emphasise the natural character of the family with the following definition: “The family is recognised as a natural human association and is safeguarded for the purpose of increasing the material prosperity and the moral solidity of the nation.”<sup>157</sup> Later in the discussion, La Pira (DC) introduced the issue about the definition of the family within the general framework of the preparatory works:

From the beginning of the works of the Subcommittee, in drawing up the Constitution, we have said that the fundamental concern was to deny the theory of ‘reflexive rights’, which were the foundation of the Fascist State. The Fascist State, in fact, was based on the legal theory that all rights are created and granted by the State, which can withdraw them at any time. In denying this theory, we intend to affirm that the State does nothing more than recognise and safeguard the rights preceding the Constitution of the State, which are the rights of the individuals, the rights of the natural societies or communities.”<sup>158</sup>

---

157 Stenographic transcription of the preparatory works for the Italian Constitution, meeting of 30 October 1946. Available online: <http://www.nascitacostituzione.it/02p1/02t2/029/index.htm>.

158 Stenographic transcription of the preparatory works for the Italian Constitution, meeting of 6 November 1946. Available online: <http://www.nascitacostituzione.it/02p1/02t2/029/index.htm>.

Supporting this general direction, Moro (DC) emphasised the fact that considering the family as a natural society would have the principal aim of protecting it from an undue State's interference, since the State would have been dealing with a reality established prior to the State itself. Therefore, he declared that he intended to vote in favour of the formula, "The family is a natural society [...]" because:

It corresponds to an evident political concern [...] which regards to the battle against the totalitarianism, which has affected above all the family and consequently can undermine the freedom of the individual. By declaring that the family is a natural society, we intend to establish that the family has its own independent sphere of regulation with regard to the State, which, when it intervenes, finds itself before a reality that it can neither diminish nor alter [...].<sup>159</sup>

This means that the State cannot unduly interfere in the development of the social reality of the family, but can only control and regulate this reality, which comes before the State structure itself. This, for example, explains the direction taken by the European Court of Human Rights (ECtHR), which has always taken into account the reality of social relationships. Then, it is necessary to bear in mind that, on the one hand, this definition was affected by what happened during the two World Wars where, on many occasions, the State interfered on matters that did not fall within its competence. On the other hand, it was taken for granted that the family structure was the traditional one, and precisely for this reason, the adjective 'natural' did not refer to the latter aspect, but rather to the former. As Carlo Cardia notes:

It is therefore true that dealing with this reality [the family] complex and not easy to analyse, the particular task of the jurist will be, on the one hand, to discern within the vast problematic that concerns the family, those elements that are inborn and inalienable from the family as an institution. Because, for instance, they derive from biological or natural factors, or because they can be considered the undoubted product of centuries-old civil progress that constitutes the patrimony of all the ideologies. On the other hand, the jurist will identify those element that instead belong to the *possible*

---

159 *Ibidem*.

*family organisation* and therefore to the transitory aspect of it. This is ultimately necessary because of the misunderstanding that has affected so many sectors of legal life and contemporary society where sectorial interests or transient moments of living associated have been confused with as many natural elements. It is then so compelling that the jurist, facing the definition of ‘natural society’ should know how to formulate an interpretative hypothesis through a careful analysis of the fundamental and imperishable elements of the complex family reality.<sup>160</sup>

Instead, according to Cardia the role of the jurist, since he is aware of the changed social context in which the familiar institute finds itself, would be to gather those imperishable aspects of this institution where the adjective ‘natural’ would mean the structure of the family itself (following the traditional scheme of mother, father, children).

This does not mean comparing the family to an ‘animalistic’ reality. A concern that in the present-day debate is certainly present as Boncinelli, a geneticist and Ordine, a journalist, pointed out in their article which recently appeared in the Italian newspaper *Corriere della Sera*.<sup>161</sup> In this sense, it seems not only opportune, but also of extreme actuality the reference to the historical concept of nature that Moro (DC) had noted,

The family is a natural society. What does this expression mean? Excluding that ‘natural’ on this occasion has a zoological or animalistic meaning, or that it refers to

---

160 C. Cardia, *L’art. 29 della Costituzione: la famiglia come società naturale e la dissolubilità del matrimonio*, Padova, CEDAM, 1972, pp. 201-202.

161 See E. Boncinelli and N. Ordine, *Unioni civili, il dibattito sulla famiglia e quell’abuso del termine «naturale»*, in «Corriere della Sera», 12 February 2016. “Then, what kind of nature are you talking about? That is, of the members of which species? It would be extremely interesting to know what are the inclinations of the members of our species before the impetus of cultural evolution – this yes, would be ‘nature’ – but who would know it? The observation of other species teaches us that often it is up to the stronger male to fertilise the females of the herd, and that the runts must be abandoned to their fate. In nature, the newborn are often fragile and suffering. Not to mention the elderly of the group, tired and sick, who are often abandoned to themselves. This is also ‘natural’ It is not clear why a model of ‘natural family’ should not also take into account these (natural) implications.”

Available online:

[http://www.corriere.it/cronache/16\\_February\\_12/unioni-civili-dibattitofamiglia-quell-abuso-termine-naturale-f394d4bea-d1a7-11e5-9819-2c2b53be318b.shtml](http://www.corriere.it/cronache/16_February_12/unioni-civili-dibattitofamiglia-quell-abuso-termine-naturale-f394d4bea-d1a7-11e5-9819-2c2b53be318b.shtml).

a merely *de facto* bond, this formula is not intended to mean that the family is a society created outside any rational and ethical limit. Family has a legal structure and therefore here ‘natural’ means ‘rational’. On the other hand, the intention is not to exclude that the family has its own process of historical formation, nor do we wish to deny that there is an increasingly perfect adaptation of the family to this rationality throughout history: but when we say, “natural society” in this historical moment we suggest that order which, improved through the process of history, constitutes the ideal scheme of family life.<sup>162</sup>

On the contrary, again in the preparatory works for the Constitution, Vittorio Emanuele Orlando emphasised the risk inherent in the term ‘natural’ when it is used as an attribute in the definition of family:

But why – I repeat – natural? Do you mean, because original? Well, in this sense, everything is natural. In a charming French comedy play of some decades ago said, when someone observed, “This is a natural-born child.” The lady answered, “But all children are natural!” (laughter). Is that child natural because he is born thanks to a sexual union? If the intention is to return to the Roman definition of that right, *Jus natural est quod natura omnia animalia docuit* we are making a mistake because amongst animals there is no family: marriage and family are purely and exclusively human institutions. There is nothing animalistic in these forms of social life.<sup>163</sup>

It is, however, true, as Cardia observes, that the definition of family as a natural society cannot avoid a *naturalistic* interpretation where the conjugal union assumes a certain importance, but it cannot limit itself to this:

A first attempt could be to give the term ‘natural’ the meaning of ‘naturalistic’: referring, that is, to those instinctual elements that in human nature govern the formation of the family nucleus. Since this would emphasise the biological factor that has justified the union of the sexes in every historical period and in every type of human association. However, sexual instinct, while essential is not sufficient to fully qualify the family institution: which requires a further and equally necessary condition that can be identified in the *spiritual communion* of the two founders of the community. The conjugal union, therefore, recognised in its *natural* essence can be interpreted as a reciprocal donation – sensitive and spiritual – with two personalities.<sup>164</sup>

---

<sup>162</sup> Stenographic transcription of the preparatory works for the Italian Constitution, meeting of 15 January 1947. Available online: <http://www.nascitacostituzione.it/02p1/02t2/029/index.htm>.

<sup>163</sup> Stenographic transcription of the preparatory works for the Italian Constitution, meeting of 10 March 1947. Available online: <http://www.nascitacostituzione.it/02p1/02t2/029/index.htm>.

<sup>164</sup> Cardia, *L'art. 29 della Costituzione: la famiglia come società naturale e la dissolubilità del matrimonio*, op. cit., p. 228.

And it is only thanks to this idea of ‘natural society’ that we can presume a parental relationship:

The natural society, present in the conjugal relationship, is re-proposed in the dynamic of procreation. With that in mind the parental sexual relationship is a physiological relationship of production and, as such, *a chosen relationship*. According to the child point of view he is the product of that relationship and therefore he could not choose to be part of that. Then the definition of natural society means a plurality of relationships linked by a bond of interdependence, a nucleus in which all take part, although in different ways, in the sexual love and the spiritual affection.<sup>165</sup>

Nonetheless, all the work of Togliatti and Moro in the Subcommittee, aimed at finding a compromise on the definition of family, run the risk of not being supported by the subsequent *Commissione dei 75* (Commission of 75)<sup>166</sup>. In fact, when it was necessary to vote on the cancellation of paragraph 1, “the family as a natural society”, the votes of the DC would not have been enough to avoid it, since the right-wing voted with the left and some members of the independent parties would vote in favour. Therefore, the decision of Togliatti and four other members of the PCI to vote in favour of the definition of the family as a natural society it would have been necessary. And that is what happened.

It is now necessary to take a temporal leap that returns us to our times and to the recent discussion and approval of the Italian law on same-sex unions (Bill 2081, *Regulation of civil unions between persons of the same sex and discipline of cohabitation*). The subject of the bill in question meant that part of the discussion of the Commissions and, later the parliamentary discussion, turned on the question of the family promoted by the State, precisely in the light of the Italian Constitution. The Article 29 of the Constitution and its preparatory

---

<sup>165</sup> *Ibidem*, p. 232.

<sup>166</sup> The *Commissione dei 75* was a group of seventy-five members of parliament, selected from the 556 MPs with the task of drafting the Constitutional Charter and submitting it to the Assembly.



works had been constantly a source of discussion since at the time when the Constitution was written the same sex unions were not an existent issue. In particular, once again, the adjective ‘natural’ was the principle object of discussion.

On the one hand, in fact, the criticality of this bill arose from the interpretation of Article 29 through the *original intent* theory, according to which the natural family should be considered a potentially procreative family and therefore composed by a man and a woman. In this sense, then, natural means the traditional concept of family taken into account by the Constituent Assembly. This emerged clearly also in the intervention of the Senator Bisinella (independent party) in which she emphasised the principal role that the family has played through the centuries and the reason why its definition should remain unchanged:

Above all, the danger for us [she is referring to her political party] is represented by the attempt to subvert the concept of natural family enshrined in the Constitutional Charter, aimed at the procreation and education of children, which not by chance, was foreseen precisely to ensure the continuation of our civil society.<sup>167</sup>

This direction was also taken by Senator Marinello (group NDC-UDC) according to whom Article 29 of the Constitution in defining the family as a “natural society”

Recognises [...] the family as existing prior to the Constitution and its laws, not only the laws of this State, but of any law. Not only a social and cultural foundation, but also a natural and biological institution: it is nature that established how procreation should occur, that is between a man and a woman, nothing more and nothing less. That is why the Constitution recognises it: the family already exists and the fact that this relationship is stable and lasting is one of the reasons that makes our species – assuming that ours is, to all intents and purposes, an animal species – different from the other species.<sup>168</sup>

---

<sup>167</sup> Stenographic transcription of the public session of the Senate of the Italian Republic N. 570, 3 February 2016. Available online: <http://www.senato.it/japp/bgt/showdoc/frame.jsp?tipodoc=Resaula&leg=17&id=964302>.

<sup>168</sup> Stenographic transcription of the public session of the Senate of the Italian Republic N. 571 del 3 February 2016. Available online:

Nonetheless, as the constitutional court judge Criscuolo warned, in the report on the concept of family published by the Constitutional Court:

[...] the definition of “natural society” is not intended to indicate a generic reference to ideas of natural law, but, as clearly emerges from the preparatory works of the constituent assembly, aims to emphasise the fact that the family as an institution precedes the law, that is it exists prior to and independently of legislative interventions. The latter can regulate personal relationships, but without affecting the essential nucleus constituted by the affections and the sentiments that arise and consolidate within the family environment.<sup>169</sup>

On the other hand, the adjective natural, seen in relation to the concept of family could mean the “relation to the human species” and for this reason it should not be considered anymore an “original” reading of the constitutional principles, but an *evolutionary* interpretation. The intervention of the Senator Puppato (PD group) took this approach when she stated:

Shall we re-read Article 29? In fact, I believe that we are making a very serious error. Article 29 says that, “The Republic recognises the rights of the family as a natural society based on marriage”. This means that the Constitution delegates to a social organisation and to a human experience the foundation of the family nucleus and, if it delegates that to the society, it delegates that to the reality [...]. The naturalness and the legitimacy therefore go hand in hand with the reality, which simply makes itself available to define the way in which we have to understand, from a legislative standpoint, this naturalness. The fact that there is obviousness or naturalness is witnessed by human nature itself, since homosexuality has always been represented as a natural element.<sup>170</sup>

---

<http://www.senato.it/japp/bgt/showdoc/frame.jsp?tipodoc=Resaula&leg=17&id=964345>.

169 A. Criscuolo, *Famiglia legittima, figli naturali, adozioni e rapporti di fatto*, Incontro trilaterale della Corte costituzionale italiana con i Tribunali costituzionali della Spagna e del Portogallo (Palazzo della Consulta, 8 October 2010). Available online: [http://www.cortecostituzionale.it/documenti/convegni\\_seminari/relazione\\_cri\\_scuolo.pdf](http://www.cortecostituzionale.it/documenti/convegni_seminari/relazione_cri_scuolo.pdf), p. 1.

170 Stenographic transcription of the public session of the Senate of the Italian Republic N. 576 dell'11 February 2016. Available online: <http://www.senato.it/japp/bgt/showdoc/frame.jsp?tipodoc=Resaula&leg=17&id=964763>.

Nonetheless, when it came to approve the text, what prevailed, in order to reach a common agreement among all the political parties, was the intention to clearly distinguish the civil unions from the marriage. This involved the removal of Article 3, which stated the obligation of faithfulness, and of Article 5 relating to the stepchild adoption, which would allow the adoption of the biological child by the parent's partner. The approval of the measure led the Home Minister of the time, Alfano, to say, "We have prevented a revolution against nature"<sup>171</sup> (referring to the clear distinction between the concept of natural family based on marriage and the civil union between two persons of the same-sex). In the meantime, Senator Cirinnà affirmed that it was "a victory with a hole in the heart"<sup>172</sup> (referring to the lack of approval of the articles regarding stepchild adoption and the equivalence of civil unions between same-sex couples and marriage). Also in this case, a later report by the Constitutional Court about the conception of family, which we will discuss shortly, tried to overcome the paradigm of the traditional family set out in the Article 29 of the Constitution:

Today families have very different features compared to the past: the empirical data confirms the changes and the evolution of society, to which the law adapts through doctrinal and judicial interpretation, acknowledging and elaborating the many declinations of the family phenomenon and its constantly changing connotations (*de facto* couples, homosexual couples, couples of different nationalities and religions, single-parent families and homosexual families). There is not one single type of family and alongside the model for which the law was originally conceived, a plurality of types and family relationships have been added, with a significant contribution of the phenomenon of immigration towards a multicultural society.<sup>173</sup>

---

171 Rai News, *Unioni civili, Alfano: «Abbiamo impedito una rivoluzione contro natura»*, 25 February 2016. Available online: [http://www.rainews.it/dl/rainews/articoli/Unioni-civili/alfano-abbiamo-impedito-rivoluzione-contro-natura-4a71aa1c-0a6c-426d-a74f-c67d1d755634.html?refresh\\_ce](http://www.rainews.it/dl/rainews/articoli/Unioni-civili/alfano-abbiamo-impedito-rivoluzione-contro-natura-4a71aa1c-0a6c-426d-a74f-c67d1d755634.html?refresh_ce).

172 M. Rubino and A. Ananasso, *Unioni civili, si del Senato alla fiducia. Renzi: «Ha vinto l'amore»*, 25 February 2016. Available online: [http://www.repubblica.it/politica/2016/02/25/news/unioni\\_civili\\_fiducia\\_senato\\_su\\_maxiemendamento-134197267/](http://www.repubblica.it/politica/2016/02/25/news/unioni_civili_fiducia_senato_su_maxiemendamento-134197267/).

173 R. De Rosa, *Famiglia, filiazione e rapporti di fatto nella giurisprudenza costituzionale (anni 2010-2015)*, Servizio Studi Corte

We could, then, conclude that the Constitutional Court is referring above all to a notion of naturalness of the family in a historical sense, in line with the definition of “natural society” offered by Moro during the Constituent Assembly, that is “the order that, perfected through the process of history, constitutes the ideal mark of family life.”<sup>174</sup>

## 2. *The natural family and the freedom to procreate*

During the discussion of the Italian law on same sex unions (S. 2081) when it came to the definition of family and the interpretation of Article 29 of the Constitution according to the *original intent* perspective, Senator Marinello evoked the procreative purpose inherent in the conception of natural family and gave the following warning:

I want to remind you that Article 29 of the Constitution states: “The Republic recognises the rights of the family as a natural society founded on marriage.” It therefore recognises the family as a nuclear society existing prior to the Constitution and its laws, not only the laws of this State, but of any law. A social and cultural basis, social formation and first of all natural and biological: it is nature that established how procreation should occur, that is between a man and a woman, nothing more and nothing less.<sup>175</sup>

So, what is the link between the definition of family and the procreation of children? Does the word *natural* mean the potential generative capacity of the couple? Once again, therefore, the adjective natural, which goes along with the definition of family, relieves the interpretative tension between *originalism* and the *evolutionary* theory described above.

costituzionale italiana, July 2015. Available online:

[http://www.cortecostituzionale.it/documenti/convegni\\_seminari/stu\\_285.pdf](http://www.cortecostituzionale.it/documenti/convegni_seminari/stu_285.pdf).

<sup>174</sup> Stenographic transcription of the preparatory works for the Italian Constitution, meeting of 15 January 1947. Available online: <http://www.nascitacostituzione.it/02p1/02t2/029/index.htm>.

<sup>175</sup> Stenographic transcription of the public session of the Senate of the Italian Republic N. 571 del 2 February 2016. Available online: <http://www.senato.it/japp/bgt/showdoc/frame.jsp?tipodoc=Resaula&leg=17&id=964345>.

According to the Italian jurist Roberto Bin, it is possible to identify two different meanings of the word natural: on the one hand, the family thus defined belongs to “the fundamental human needs related to the social nature of man, to his reproduction, his affectivity, his need for discretion.”<sup>176</sup> However, this would mean that “the ‘family’ can assume as many different organisational forms as there are ways for everyone to realise their own personality.”<sup>177</sup> On the other hand, natural could mean “the alternative to ‘normality’”, where “in the ‘normality’ of cases, according to our own experience, when we speak of “family” we think of something that has nothing to do with homosexual couples.” Nevertheless, Bin reveals, “if the notion of ‘family’ has to be grounded on social custom, according to the ‘general opinion’, then the concept of ‘natural’ family loses all its inflexibility. The family does not, in fact, exist prior to the State, because it evolves (as in effect it evolves) with the same rapidity as the social customs and the laws that govern it.”<sup>178</sup>. At this point, we must ask ourselves whether it is possible to attribute a *super partes* meaning to the adjective ‘natural’ which accompanies the definition of family, or whether it is inevitable to embrace one or the other way of thinking.

Particularly interesting for this purpose is the semantic alternative offered by the moral philosopher Francesco Botturi, who tackled the issue from a completely different perspective. He shows that:

While it is true that cultural plurality excludes the universal value of certain behaviours, for example in the family context, it is also true that exists a common inclination to regulate relations between sexually different individuals which shows the *universal constant care of the meaning of sexual relations and generation*.<sup>179</sup>

---

176 R. Bin, *La famiglia, un ossimoro*, in «Studium Iuris», 10, 2000, pp. 1066-1071. Available online: <http://www.robertobin.it/ARTICOLI/famiglia.htm>.

177 *Ibidem*.

178 *Ibidem*.

179 F. Botturi, *Natura e cultura: crisi di un paradigma*, in F. Facchini (ed.), *Natura e cultura nella questione di genere*, Bologna, Edizioni Dehoniane, 2015, p. 31.

Thus, ‘natural’ would indicate precisely this “universal constant care”, a concept that in the strictly legal debate assumes the form of a new right, or rather, freedom, that is the right to generate/procreate that has always existed. Nonetheless, now that this freedom has considerably changed from the past (because of a new cultural and scientific paradigm) there are those who invoke the so-called “right to have a child”, as a fundamental right, according to which not only certain situations not yet regulated by the current legislation would necessarily have to be regulated, but more generally, the State is asked to actively intervene so that every citizen can have his offspring.

### *2.1. Freedom to procreate: nature and individual autonomy*

Above all, it is necessary to identify the two sides of the so-called procreative freedom: on the one hand, there is the couple, or the adult who wants a child, and, on the other, the fundamental rights of the child once he/she is born.

Let’s begin with the analysis from the standpoint of the potential parents in order to understand the ethical and legal roots and, then, whether under the umbrella of this right to freedom we can place the new reproductive techniques.

As long as assisted reproduction and surrogate motherhood were outside the range of known and practicable solutions to infertility, the so-called “right to a child” referred exclusively to a negative right. Its purpose was to make sure that the State did not reiterate the horrors that occurred during the World Wars under the racial laws, according to which certain nations prevented sexual relations and marriage between partners of different ethnicities. According to this perspective, the importance of this negative right rose again when cases of forced sterilisation of Roma women in Slovakia and Czech Republic were brought to the attention of the ECHR between 2004 and 2012.

The judgment *V.C. v. Slovak Republic*<sup>180</sup> is particularly relevant. The applicant was sterilised immediately after giving birth to a boy through the caesarean section. Here, the reasoning of the Strasbourg judges emphasised the importance of the informed consent so that the dignity and the autonomy of the patient is respected, and condemned the paternalistic attitude of the doctors and the hospital staff. Moreover, the Court stated that:

[...] sterilisation is not generally considered as life-saving surgery. [...] As there was no emergency involving imminent risk of irreparable damage to the applicant's life or health, and since the applicant was a mentally competent adult patient, her informed consent was a prerequisite to the procedure, even assuming that it was a "necessity" from a medical point of view.<sup>181</sup>

Finally, worthy of note is the definition of the reproductive apparatus offered by the ECHR, according to which it is "one of the essential bodily functions of human beings, it bears on manifold aspects of the individual's personal integrity including his or her physical and mental well-being, and emotional, spiritual and family life."<sup>182</sup> In this sense, therefore, the essential nature or the patient's procreative function is confirmed.

Leaving aside this case and the others on the same topic<sup>183</sup> that have highlighted the importance of the "right to a child" from a negative standpoint, it can be said that the supposed right to procreate takes shape in a different

---

180 Ruling N. 18968/07. In this case, the applicant was forced to sign the informed consent forms for sterilisation when she was already in labour and after being told that if she had another child either she or the baby would die. As a result of her infertility she was ostracised by the Rome community and her husband, the father of her children left her several times. In 2009 the applicant and her husband divorced. The applicant maintained that her infertility was one of the reasons for their separation. The applicant therefore lodged an application against the Slovak Republic under Article 34 of the Convention for the Protection of Human Rights and Fundamental Freedoms. The applicant alleged a breach of Articles 3, 8, 12, 13 and 14 of the Convention on account of her sterilisation in a public hospital.

181 *Ibidem*, § 110.

182 *Ibidem*, § 106.

183 See *K.H. and Others v Slovak Republic* (n. 32881/04), *N.BC v Slovacchia* (n. 29158/10), *I.G., M.K. and R.H. v Slovak Republic* (n. 15966/04).

framework. It has become one of the so-called *new rights*, thus assuming a positive value, in order to protect those who wish to have a child, but for medical reasons cannot conceive naturally. Consequently, not only we should ask whether it is an authentic right, but also whether the access to assisted reproduction techniques and surrogate motherhood should be considered a right in itself.

The two opponents of the debate on this topic are those who think that the right to procreation should remain within a “naturalistic conception” and those who believe that the individual autonomy should be considered paramount on those sensitive issues.

According to Professor Cyril Hegnauer, we should address specifically the right to procreate and not the right to procreative freedom, as the bioethicist Eugenio Lecaldano does. This right, seen from the standpoint of the adults, would contain in itself both the negative right to not procreate and the positive right to generate and raise a child. This is because:

[...] the idea of basic human rights is inspired by the very nature of human existence. Therefore, if we try to define the substance and the limits of the right to have children, it must be seen in the context that procreation takes place by intercourse. If we do this, we are faced with two simple but essential facts. The first is that the male begets the child with *his* sperm and the female with *her* egg. This is really the only way in which the word ‘procreate’ makes sense. It follows that the basic right to have children embraces exclusively the right to beget children with one’s *own* gametes. [...] The second fact is that procreation by intercourse can occur only by *male and female together*. Neither man nor woman alone can beget a child. Therefore, the basic right to have a child is not a right of the individual, but of the *couple*.<sup>184</sup>

This means that the right to procreate does not contemplate either the heterologous artificial fertilisation or the surrogate motherhood, since in both cases the donor of the gametes and the gestational mother contribute exclusively to the generation of the child, but not to its upbringing and custody.

---

<sup>184</sup> C. Hegnauer, *Human Rights and Artificial Procreation by Donor*, in J. Eekelaar and P. Sarcevic (ed. ), *Parenthood in Modern Society Legal and Social Issues for the Twenty-first Century*, London, Martinus Nijhoff Publishers, 1993, p. 208.



Lecaldano, on the contrary, sees a difference between the ‘right to procreate’ and the ‘right to procreative freedom’ where the latter would comprehend the new assisted reproductive techniques. In fact, he maintains the classic interpretation of the former, highlighting the moral and legal risks connected to the recognition of a generic right to procreate: “The recognition of this right would require a considerable State interference into procreative issues that could only limit one of the negative rights of its citizens.”<sup>185</sup> When speaking of the ‘right to procreative freedom’, Lecaldano recognises that “our species is the only animal species capable of controlling its procreative activity, deciding not only when (and we can now also say how) to procreate and how often to procreate, but also whether to procreate or not.”<sup>186</sup> In this sense, the author tries to overcome an exclusively biological conception of birth, which would create a lack of symmetry both ethical and legal between the natural and artificial procreative freedom. To return to Mill, in fact, Lecaldano reveals that, since the generation of life is an act that relates to the responsibility of man, “the immoral action is not so much that of interfering with a natural process, but precisely that of not controlling it.”<sup>187</sup> Where by ‘control’ we mean “entrusting the same principles of moral responsibility to both natural and artificial procreation, leaving these decisions free from a legal standpoint (except for the necessary argumentations).”<sup>188</sup> Lecaldano also, referring to the parliamentary discussions regarding the Italian Law N. 40/2004 (*Rules on medically assisted procreation*) reveals the risk inherent in such laws of unjustified state interference in the private life of its citizens<sup>189</sup> with the aim of undermining their procreative freedom (deciding how many embryos can be implanted, who has access to such practices, and so on).

---

185 E. Lecaldano, *Bioetica. Le scelte morali*, Rome-Bari, Laterza, 2005, p. 135.

186 *Ibidem*, pp. 135-136.

187 *Ibidem*, p. 148.

188 *Ibidem*, p. 149.

189 E. Lecaldano, *Una legge contro la libertà di procreare*, in «Iride», 3, 2002, p. 462.

To conclude, on the one hand, Hegnauer identifies the right to procreation only in the negative sense, not open to those techniques that make a distinction between biological parents and social parents. This is because the concept of procreation, from the Latin *pro-creo* (create before), is meant to emphasise the generation of a kinship with the implicit duty of care it. On the other hand, Lecaldano, thanks to the introduction of the so-called procreative *freedom*, maintains a negative value of this right (thus rejecting the intervention of the State in such a delicate matter) but at the same time emphasises the opening of this right towards the new techniques of fertilisation: the procreation should be separated from the caring aspect and consequently it would not be anymore a natural phenomenon but a cultural one. In this sense, Lecaldano would transform the way to look at the human reproduction not giving any moral judgement in regards to the new ARTs:

In themselves, these techniques have no characteristic that makes them appreciable or contemptible – if we want we can suggest that they stand within a border line that can be recognized (or at least considered an irreversible fact) as the consequence of the transformation of birth from an exclusively natural phenomenon to a cultural one [...] What counts are the reasons and the motivations that those who commit to a procreative activity (in the first place the women) present for their choices and decisions.<sup>190</sup>

Lecaldano refuses a law where the concept of nature is assimilated to that of tradition and, is therefore inspired by a particular ethical conception.

He emphasises, for example, that the Law N. 40/2004 is the “product of a mixture of contributions from various moral standpoints,”<sup>191</sup> which do not reflect the Catholic ethical conception since, in general, the Church does not consider any type of ART ethically acceptable. Rather, he says, “the present law seems to derive from an eclectic position that comes close to an ethics focused on the child welfare which would be assured by the fact that child is born from a

---

190 Lecaldano, *Bioetica. Le scelte morali*, cit., pp. 185-186.

191 Lecaldano, *Una legge contro la libertà di procreare*, cit., p. 468.

stable heterosexual couple.”<sup>192</sup> At this point, we might ask, first, whether it is possible to exclude any ethical implications coming from sensitive issues, such as the law on ART, in order to avoid a paternalistic conception of the State. Second whether the only option is “the recognition of the right to procreative freedom that relies on the citizens’ moral responsibility to ensure the welfare of their offspring.”<sup>193</sup>

So far, we have spoken about the ethical implication of the ‘right to a child’ or rather the ‘right to procreative freedom’ and its relationship with the natural procreation. However, Mary Warnock, in a study following the *Warnock Report*, saw the need to separate ethical and moral issues and the issues around human rights in the field of reproduction. The reason for this was to avoid any form of confusion between the wish to become parents, although *natural* and *fair*, from the right to become parents. In fact, Warnock emphasised the fact that the wish to generate a child cannot be considered equal to a fundamental need such as nutrition and, where the boundary between *wanting* and *needing* is fuzzy there is a risk that “if we allow wanting and needing to slide into each other, with the consequence that there may seem to exist a right to whatever is deeply wanted, then the dangers of the rhetoric of rights, the borrowed authority, escalate.”<sup>194</sup> Therefore,

while conception cannot be regarded a fundamental right, nor a universal need generating a right, and while there is certainly no positive law conferring on everyone the right to have children, nevertheless the infertile who want to conceive are entitled to expect that they will be given the medical assistance they need, even if they have to pay for it.<sup>195</sup>

According to Warnock, it therefore follows that it is not possible to configure any positive right to procreation, but simply a ‘moral’ right so that no couple is prevented from being able to conceive a child. In fact, she notes that

---

192 *Ibidem*, p. 469.

193 *Ibidem*, p. 461.

194 Warnock, *Making Babies*, cit., p.28.

195 *Ibidem*, p. 54.

where there is a problem of infertility, “I, myself, would prefer to express the relationship between the infertile couple and their doctor in terms of the doctor’s professional duty, which is a duty of compassion to his patients, which makes it obligatory for him to seek as far as he can to alleviate suffering.”<sup>196</sup> In this sense, then, we could conclude that being a parent “is more a privilege than a right, attention must be focused on the purpose for which parents exist and on those who are its subjects (that is, children) to ensure the privilege is not abused.”<sup>197</sup>

## 2.2. *The right to procreative freedom from the child’s perspective*

Above all, becoming parents means taking care of the offspring and for this purpose the first interests to be safeguarded are those of the child. There are legal tools provided for this purposes such as the Convention on the Rights of the Child, ratified by the Assembly of the United Nations in 1959 and revised in 1989, which states in Article 3, paragraph 1, “In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.”

As Lecaldano emphasises, “one of the most common arguments presented in the discussions about assisted reproduction is blaming of procreative egoism who undergoes those treatments. Since those people would be only concerned with their own wishes and interests and would not take into account the rights of the child who will be born.”<sup>198</sup> However, we should ask to ourselves what child’s rights we are referring to when ART is at stake.

---

196 *Ibidem*, p. 109.

197 T. Frame, *Children on Demand. The Ethics of Defying Nature*, Sydney, New South, 2008, p. 35.

198 Lecaldano, *Bioetica. Le scelte morali*, cit., p. 178.

In general, amongst the fundamental rights of the child, the principle of non-discrimination assumes a key role in the Convention mentioned above. In fact, in the introduction we find the following statement: “Bearing in mind that, as indicated in the Declaration of the Rights of the Child, ‘the child, by reason of his physical and mental immaturity, needs special safeguards and care, including appropriate legal protection, before as well as after birth.’” From this, according to Hegnauer, we can assume that the method of conception, in particular the ARTs with the donation of gametes and the surrogate motherhood, must not deprive the child of the rights that he/she would enjoy in the case of natural reproduction or homologous assisted fertilisation (when the biological parents correspond to the social parents).

The author identifies three essential elements that, in his opinion, must be guaranteed to all children for a normal psychophysical development. Above all, he believes that the *genetic* element considerably affects the development of the personality. “I believe that the way we all experience family likenesses in character, appearance, behaviour and intellect, plays an important role in developing and shaping our personal identity.”<sup>199</sup> Nonetheless, if the child were deprived of both biological parents a concrete reference to which certain traits of the personality could be ascribed would be lacking. The second aspect that the Convention identifies as a fundamental right of the child, set out in Article 7, is that of growing up with his/her biological parents (when there are no serious reasons to exclude it):

Here *it is the wish of the childless couple to have their own child* which prevents him from growing up with his genetic parents. Must the basic right of the child give way to this wish? The answer can only be in the affirmative if the childless couple have a basic right to resort to artificial procreation by donor.<sup>200</sup>

---

<sup>199</sup> Hegnauer, *Human Rights and Artificial Procreation by Donor*, cit., p. 209.

<sup>200</sup> *Ibidem*, p. 210.

Finally, as we said, Article 7 of the Convention sets out the right of the child to know his/her biological parents and to be cared for by them, where this is possible. This is also to safeguard the health of the child; in fact, in some circumstances knowing one's biological parents can be decisive in identifying the cause of certain genetic illnesses. In the light of this analysis, Hegnauer, comparing the situation typical of a child born through natural fertilisation (and perhaps we could add homologous artificial fertilisation) with a child born from heterologous fertilisation or surrogacy, reveals that only in the first case would all three of the principles set out above be respected. However, the only alternative to these practices is that children should not be conceived when the social parents do not coincide with the biological parents. Once again, therefore, the controversy previously discussed arises: “[...] the issue is not one of moral conservatism or liberalism, but between the alleged but never established right of the childless adult to have children and the basic rights of the child”<sup>201</sup> and, we should add, “once he/she is born”.

On this matter, the Italian Committee of Bioethics, in a document on ART, highlighted the paradox inherent in the modern family culture, which seems increasingly oriented towards a “child-centrism”. Nonetheless, this attitude, “while on the one hand it may lead to greater attention for the child and his/her material, psychological and affective needs, on the other may assume the characteristics of narcissistic withdrawal [in the form of realisation of the wish of the adult].”<sup>202</sup> In fact, according to this perspective:

On the one hand children must be born only and inasmuch as they are desired, on the other hand, every desired child must be born [...]; consequently, the passage from recognition of the desire for a child to the statement of a genuine “right to a child” seems almost inevitable. From this standpoint, the assisted reproductive techniques and new technological answers to the problem of sterility have contributed, according to some, to making explicit and accentuating this claim to the “right to a child” [...]. This

---

<sup>201</sup> *Ibidem*, p. 211.

<sup>202</sup> Opinion of the Comitato Nazionale per la Bioetica, *La fecondazione assistita*, Rome, Presidenza del Consiglio dei Ministri - Dipartimento per l'informazione e l'editoria, 1995, p. 57.

claim and the recourse to techniques of assisted procreation [...] may implicate the risk of a fragmentation in purely communicative dyads (mother/child, father/child) of the parental experience and the family relationships and a consequent negation of the fundamental relational dimension of the family. The need to recuperate, in the consideration of parenthood and the family, a relational perspective and the need [...] to return to the centre of the entire process of assisted reproduction the child and his rights [...], therefore demand a loyal discussion between the right of the couple to become parents and the rights of the child.<sup>203</sup>

However, we will discuss this later, when we have dealt with the various types of ARTs in more detail.

### 3. *The family, the families*

It is clear from the previous discussion what Frame emphasises in his book *Children on Demand*, that is the difficulty in offering a definition of family that is universally accepted, because the contemporary society must increasingly deal with family structures. The author says that nowadays, the family:

has become, in fact, something of an ideological battleground, with assertion and counter-assertion about what are the necessary components of a 'real' family. In the absence of formal statements outlining the minimum requirements for a group of people to be designated a family, most Western governments pursue policy agendas that acknowledge and advantage some domestic living arrangements and not others. These policies relate to taxation rebates, childcare subsidies, superannuation payments, property acquisition and probate settlements. Some families, mostly those which include dependant children, receive welfare payments or varied forms of financial assistance. Other domestic groupings are overlooked or ignored as either not justifying support or falling outside official definitions of the family.<sup>204</sup>

In the light of all this, the following questions may arise: is there a *true* definition of family? Is it simply the fruit of social conventions and legal norms? Does biology, or in other words, the reproductive method of the human species play any role in establishing what is, or is not, a family?

---

<sup>203</sup> *Ibidem*, pp. 57-58.

<sup>204</sup> Frame, *Children on Demand...*, cit., pp. 30-31.

### 3.1. *Same-sex unions and heterologous fertilisation:*

#### *Italian judges struggle with the definition of family*

What family and family life mean has been the subject of lively debate in a country like Italy, where the cultural traditions of the family have always carried a decisive weight on these matters. As revealed by the preparatory works of the Article 29 of the Constitution, discussed above, the semantic relationship between the concept of family and that of natural society, tend towards a definition of the former in a traditional sense, therefore founded on marriage. In the years following the Constitutional assembly, the task of the Constitutional Court regarding this matter has been to equalise the legal standing of the figure of the wife and that of the husband. The issue about the relationship between the definition of family life and the parental genetic link has been amply discussed also by the Italian judges of the Constitutional Court; in particular when the focus was on the same sex marriage and the introduction of heterologous fertilisation to the range of ARTs recognised by Italian law.

Two judgements, in particular, are considered legal landmarks in this field: on the one hand, the ruling N. 138/2010 of the Constitutional Court introduced same-sex couples as part of the social forms mentioned in Article 2 of the Constitution and the ruling N. 162/2014 Constitutional Court allowed the practice of heterologous assisted reproduction. With regard to the former, a homosexual couple brought the case before the Civil Court of Venice after a civil servant of that council refused them the publication of their banns of marriage. The Court of Venice confirmed that:

it is not possible, under present laws, to extend the institution of marriage to same sex couples. This would mean pushing the law beyond its boundaries and the judges (other than the judges of the Constitutional Court) are not allowed to do that,



“given an established tradition and thousands of years of understanding of marriage as a union between a man and a woman.”<sup>205</sup>

In particular, the Court noted that:

The opinions contrary to the recognition of the same sex marriage rights on the basis of ethical reasons, linked to tradition or nature, could not be supported. This is why, on the one hand, currently family structures are radically changing and, on the other hand, those opinions could lead to dangerous theories. Theories that in the past, for example, had been used to support serious discrimination, later recognised as illegitimate, such as inequalities between the spouses before the Italian law prior to the reform and the discrimination against women.<sup>206</sup>

On top of that we should add the fact that the family institution, like that of marriage, is open and in permanent transformation, as it has been shown by the evolution of the relative laws. The Court also observed that the concept of family as a ‘natural society’ as stated by Article 29 Constitution is designed to protect the individual’s right to self-determination from state interference.

Nor would it be possible that the “natural society” be seen as the place of procreation, since civil marriage is not institutionally oriented towards this purpose. [...] In fact, procreation is only a possible element of the conjugal relationship and this shows how far the concept of family is from accepting within Article 29 Constitution the notion of the Judaic-Christian tradition.<sup>207</sup>

On this matter, although the Constitutional Court affirms that “the concepts of family and marriage cannot be considered [crystallised] with reference to the period in which the Constitution came into force” nevertheless it notes that “said interpretation [...] cannot go so far as to affect the core of the norm, modifying it in such a way as to include in it phenomena and problems not considered in any way when it was enacted.”<sup>208</sup> In fact, if this were the case, it would mean proceeding to a creative interpretation of the constitutional direction. Therefore, the impossibility of celebrating same-sex marriages “does

---

<sup>205</sup> Ruling Italian Constitutional Court N. 138/2010, § 1 (*in fact and in law*).

<sup>206</sup> *Ibidem*.

<sup>207</sup> *Ibidem*, § 29 (*in fact and in law*).

<sup>208</sup> *Ibidem*, § 9 (*in law*).

not give rise to unreasonable discrimination, since homosexual unions cannot be considered identical to marriage.” However, the Court emphasised that the concept of social groups referred to in Article 2 of the Constitution must necessarily include homosexual unions “since [same-sex couples] have the fundamental right to freely live as a couple, obtaining – in the times, in the manner and within the limits established by law – legal recognition of their status with the related rights and duties.”<sup>209</sup> The recent Law N. 76/2016 made this recognition possible. A law, as previously mentioned, that has led to a great debate on the concept of family and where the word nature, or rather ‘against nature’ has often been used in blogs and the press as a keyword to indicate “what [the family] must be”<sup>210</sup> (as the *traditional* family). It is also necessary to

---

209 *Ibidem*, § 8 (*in law*). See also *Scalk and Kopf v Austria* (app. N. 30141/04, 22 November 2010) the ECHR affirmed that same-sex couples not only fall within the notion of “private life”, but also within that of “family life” guaranteed by Article 8 ECHR: “The Court considers it artificial to argue that, unlike heterosexual couples, a same-sex couple cannot enjoy the “family life” referred to in art. 8. Consequently, the relationship between the applicants, a same-sex couple living in a stable *de facto* relationship, falls within the notion of “family life”, as would be the case for similar relationships between couples of different sexes” (§ 94). In fact, in light of the case in question, the Strasbourg judges have pointed out that “the Court would start from the premise that same-sex couples are capable of engaging in stable relationships such as heterosexual couples. As a result they are in a situation very similar to opposite sex couples as regards the need for legal recognition and protection of their relationship.” (§ 99).

210 See M. Sasso, *L’omosessualità è scandalo contro natura. E gli ultracattolici creano l’osservatorio gender*, in «L’Espresso», 30 May 2016, Available online: [http://espresso.repubblica.it/attualita/2016/05/27/news/osservatorio-gender-combattere-omosessualita-uno-scandalocontro-natura-dell-uomo-1.268232?refresh\\_ce](http://espresso.repubblica.it/attualita/2016/05/27/news/osservatorio-gender-combattere-omosessualita-uno-scandalocontro-natura-dell-uomo-1.268232?refresh_ce); A. Signorelli, *Unioni civili, a proposito di cosa sia o non sia «contro natura»*, in «il Fatto Quotidiano», 22 February 2016, Available online: <http://www.ilfattoquotidiano.it/2016/02/22/unioni-civili-a-proposito-di-cosa-sia-o-non-sia-contro-natura/2485603/>; M. Corbi, *Il nostro no alle adozioni gay: non c’è alternativa alla natura*, in «La Stampa», 31 January 2016, Available online: <http://www.lastampa.it/2016/01/31/italia/cronache/il-nostro-no-alle-adozioni-gay-non-c-alternativa-alla-natura-pbr1NQL6CaMamd0khWZ5iP/pagina.html>; J. Elce, *Unioni omosessuali e l’amore contro natura*, in «Eroica Fenice», 8 March 2016, Available online: <http://www.eroicafenice.com/notizie-attualita/unioni-omosessuali-contro-natura/>; A. Buonaiuto, *Famiglia contro natura*, in «InTerris», 13 January 2016. Available online: <http://www.interris.it/2016/01/13/82932/editoriale/famiglia-contro-natura.html>; F. Salamida, *Negare l’esistenza della famiglia omosessuale, quello sì, è contronatura*, in «The Huffington Post», 23 June 2016, Available online: [http://www.huffingtonpost.it/fabio-salamida/negare-famiglia-omosessuale-contronatura\\_b\\_7628720.html](http://www.huffingtonpost.it/fabio-salamida/negare-famiglia-omosessuale-contronatura_b_7628720.html); T. Scandroglio, *Ecco perché l’omosessualità è contro natura*, in «La nuova bussola quotidiana», 25 May 2016, Available online: <http://lanuovabq.it/it/articoli-ecco-perche-lomosessualita-contro-natura-16284.htm>; F. Buonfiglioli, *Remotti: «Alfano? Non esiste famiglia naturale»*, in «Lettera43», 25 February 2016, Available online: <http://www.lettera43.it/it/articoli/attualita/2016/02/25/remotti-alfano-non->

recall that during the parliamentary discussions on this law, the Constitutional Court, allowing the heterologous assisted reproduction with the ruling N. 162/2014, established that the grounds for parenthood were not necessarily the genetic link. This was a very important element because until that time the only non-genetic parental bond admitted by the Italian law was the children's adoption. Here, the Court noted that, on the one hand "the decision of this couple to become parents and to form a family that includes children constitutes an expression of the fundamental right and general freedom to self-determine, freedom that [...] can be traced to Articles 2, 3 and 31 of the Constitution, since it involves the private and family sphere of life."<sup>211</sup> It is also necessary to highlight the peremptory statement that "the decision to have children or not, also for an absolutely sterile or infertile couple, since it concerns the most intimate and intangible sphere of the human person, cannot be forced."<sup>212</sup> On the other hand, the Court read the deduced right to procreative freedom in the light of the right to health, leading to the conclusion that "the impossibility of forming a family with children, together with the partner, by means of heterologous ART, could negatively affect, even significantly, the health of the couple."<sup>213</sup> With this ruling the Italian judges therefore show an inclination towards the so-called 'right to procreative freedom' as described by Lecaldano, which includes all the artificial reproductive techniques.

However, there are still some concerns related to this attitude. In fact, as Gabriella Gambino, philosopher of law, notes with regard to the well-known Article 29 of the Constitution:

The absolute step back of the State, with regard to the private choices of the couples seeking fertility treatments, in order to safeguard their right to *freedom of procreative self-determination*, has no legal basis. Moreover we should take into account that, while the *generation* of a child that occurs during sexual intercourse can be

---

eùsiste-famiglia-naturale/163623/.

<sup>211</sup> Ruling of the Italian Constitutional Court N. 162/2014, § 6.

<sup>212</sup> *Ibidem*.

<sup>213</sup> *Ibidem*, § 7.

relegated exclusively to the private and family sphere, this is not true for the ART. In fact all those treatments imply a collective dimension that comprises the public responsibility of all the subjects involved.<sup>214</sup>

The Court, then, establishes as the legal basis of the “right to a child” the couple’s right to health, in the sense that the desire to become parents lies within the notion of well-being and health of the subject. Nonetheless, while here becoming parents can be considered a right, the institution of adoption would seem to move in the opposite direction: “The desire of a married couple to start the adoption process does not correspond to a legitimate claim – and therefore a right – as shown by the fact that the court is not obliged to justify its answer if it does not consider a couple suitable for adoption.”<sup>215</sup> Since, it is not possible to find in the legal framework any reference to the so-called ‘right to a child’, invoked with increasing vehemence when heterologous fertilisation is at stake. Gambino notes that while the Italian Constitutional Court, basing its reasoning on the rights of the couple, avoided all references to natural filiation; the reasoning of the Austrian Constitutional Court emphasised the biological procreation as the parameter for evaluating regulations and limits for ART, also with regard to protecting the rights of the child:

From a cultural standpoint, heterologous fertilisation alters the intergenerational relationship, spreading a general indifference towards carnal parenthood and reducing this relationship to a merely social dimension. Yet, the carnal relationship between parents and children is co-essential for the identity of the family roles. In fact, the legislator recently succumbed to this truth, even allowing adoptive children knowledge of their biological origins and to know who their parents are.<sup>216</sup>

For this reason (and also from a jurisprudential point of view), the question that emerges from the debate on the ‘right to a child’ is whether the

---

214 G. Gambino, *Desiderare un figlio: linee per una riflessione biogiuridica sul «diritto al figlio» a partire dalla sentenza della Corte costituzionale sulla fecondazione eterologa*, in «Archivio Giuridico», 234, 2014, n. 3, p. 383.

215 *Ibidem*, p. 388.

216 *Ibidem*, p. 396.

contribution of the genetic parent to the formation of the child can really be traced to an exclusive biological contribution and, consequently, whether the procreation can be defined more a cultural than a natural phenomenon.

### 3.2. *What is the natural family today?*

As previously noted, during the preparatory works for the Italian Constitution the definition of the family was widely discussed and subsequently the constitutional law has had to deal with the topics that were not considered by the Constituent Assembly, such as same-sex unions. Consequently, “a series of interpretative problems have arisen, since the advent of the new ‘families’ has upset the constitutional regulations, demanding a rethink of the notion of family that was taken for granted, inasmuch as it was presupposed,”<sup>217</sup> i.e. the *natural* family discussed at length above. It is still a controversial concept with an unclear meaning. Already in the early thirties, the *Enciclopedia italiana* noted that the meaning of family could not be liquidated using the adjective natural. So, amongst the eighteen pages spent in defining it, the *incipit* emphasises the complexity:

That the origin of the family constitutes a problem was not recognised for a long time. It was admitted that man, because of natural sexual relations, has always lived in marriage. The monogamous marriage of the present was definitely projected into a limitless past, where it finally found its conclusion in the idea of the first couple of progenitors.<sup>218</sup>

---

217 F. Biondi, *Famiglia e matrimonio. Quale modello costituzionale*, in «La Rivista del Gruppo di Pisa», 2013, n. 2. Available online: [https://www.gruppodipisa.it/images/rivista/pdf/Francesca\\_Biondi\\_-\\_Famiglia\\_e\\_matrimonio\\_Quale\\_modello\\_costituzionale.pdf](https://www.gruppodipisa.it/images/rivista/pdf/Francesca_Biondi_-_Famiglia_e_matrimonio_Quale_modello_costituzionale.pdf), p. 4.

218 U.E. Paoli, E. Volterra and E. Albertario, *Voce «famiglia»*, in *Enciclopedia italiana di scienze, lettere ed arti*, Rome, Istituto dell'Enciclopedia Italiana Treccani, 1932. Available online: [http://www.treccani.it/enciclopedia/famiglia\\_%28Enciclopedia-Italiana%29/](http://www.treccani.it/enciclopedia/famiglia_%28Enciclopedia-Italiana%29/).

While the aim, although admitting a normative evolution of this institution reiterates its imperishable fundamental structure:

The advent of the secular notion of the family was asserted with the prevailing of the rationalist philosophical movement that culminated in the French Revolution. A notion that of laicism entertained only the abandonment of the sacramental and religious idea of marriage and related ecclesiastical prerogatives, while maintaining the idea of the social institution of the family with its fundamental lines as had been elaborated by Christianity, and indeed emphasising the animating concept, though transferring to the State the complete discipline. [...] An organically perfect discipline of the family as a civil institution found its place in the Napoleonic code that acquired and built on all the claims of contemporary thought inspired by healthy and right balance and eliminated its biased and passionate exasperations. Moreover, that code precisely dictated to the world the foundations of a typical family organisation, as the primordial nucleus of the organisation of the state. This regulation has undergone successive partial adaptations to the spirit of the new times, but the structure in its main lines has remained almost intact.<sup>219</sup>

These connotations were decidedly more nuanced in the more recent version of the definition of *family* in the *Enciclopedia Treccani*, which still does not deny its universality. In fact, the family is described as:

the fundamental social institution, through which the society develops and perpetuates from both a biological and a cultural perspective. The functions of the family include the satisfaction of sexual and affective instincts, procreation, the raising, education and socialisation of the offspring, the production and use of resources. Nonetheless, despite its universality, the family assumes in the diverse social and cultural contexts an extraordinary number of forms, which makes it difficult to identify a distinctive trait that characterises it in all circumstances.<sup>220</sup>

This is followed by the specification that:

The family is not a fixed entity over time, but rather a system of relationships that must be continually regenerated and re-justified. While it is difficult to identify the tendencies towards change underway, it is nevertheless certain that the family is not destined to disappear. The importance of the family may increase or decrease, some

---

<sup>219</sup> *Ibidem*.

<sup>220</sup> See AA. VV., «*Famiglia*», in *Enciclopedia italiana di scienze, lettere ed arti*. Available online: <http://www.treccani.it/enciclopedia/famiglia/>.

functions may lapse and others may be acquired or created, but overall the family reality remains sovra-functional, in the sense that it constitutes a resource and a limit that cannot be circumscribed to a predefined and limited number of functions. This also because of the explosion of the concept of family, which is assuming non-traditional connotations, according to which the family also constitutes configurations not based on sexual differentiation and on the religious or civil recognition of the union-marriage.<sup>221</sup>

To define the family as ‘over-functional’ could mean ascribing to it an ethical, social and anthropological value that goes far beyond its historical and cultural connotations. Nevertheless, it is always a rather daring operation to give importance to statements of this kind, because, when we take into account the notion of family, it is inevitable to place within a cultural context. Therefore, the question that arises is whether it still makes sense today to speak of the natural family, or whether this notion is now an old-fashioned slogan.<sup>222</sup>

If we consider the anthropological perspective, we can generally agree that, until the mid-twentieth century, the anthropological culture and beliefs of the West saw the position of the Church and that of the States converge with regard to the regulation of the family and marriage:

The unity, the indissoluble nature and the procreation formed the basis, for many different reasons, of the way of thinking of both the Church and the secular States. The need for stability and social order, combined with the need, on the one hand, to boost the birth rate in an economic and productive context that did not yet know the miracles of automation, and on the other, the need to repopulate following epidemics, famines and wars, naturally led the sovereigns and later the parliaments to espouse, for convenience, the theological motives and the legal convictions presented by the Church as the basis for the institution of marriage. In this reconstructive framework, Western culture and anthropology – despite the great fracture of the Protestant reform and the emancipation of the reason of faith proclaimed by the French Revolution – can be read in a unified manner.<sup>223</sup>

---

<sup>221</sup> *Ibidem*.

<sup>222</sup> See C. Saraceno, *Coppie e famiglie. Non è una questione di natura*, Milano, Feltrinelli, 2012. The author notes that “Sociologists anthropologists and ethnologists have scurried around searching for a “kernel” of the family that persists beyond the historical and social variations - a sort of minimal “natural family”, founded on human nature, of which the historical and social evidence would represents simple declension; however, the outcome of these researches has not produced shared and generalizable results.” (p. 17).

<sup>223</sup> A. Zanotti, *L’idea di natura, il diritto canonico e lo specchio infranto della sessualità umana*, in «Quaderni di politica e diritto

Nonetheless, as the anthropologist Francesco Remotti says, it would be improper to speak only now of the new types of family. In fact, his anthropological studies document the widespread practice of polygamous unions and atypical societies, such as the matrilineal societies of Na (in southern China) or the Nayar (in southern India), where brothers and sisters live together (with a rule that prohibits incest) and the procreation occurs through the union with a person outside the family, who assumes the role of a lover.<sup>224</sup>

At this point it is legitimate to ask what kind of relationship occurs between the concepts of nature and culture/tradition in the definition of family. According to Remotti:

Nature and custom mingle to undergo a reciprocal contamination: while on the one hand nature is seen as made up principally of customs (or of culture), on the other hand, the customs give way to a sort of naturalisation. [...] The more customs take the place – so to speak – of human nature, the more they become ‘one’s own business’ and ‘incorporated’ by individuals, the more they are stabilised, thus assuming a semblance of naturalness and even a semi-natural consistency.<sup>225</sup>

Therefore, we could say with the words of Botturi, that according to this perspective, the concept of nature is grounded on “a *process of stabilisation of something that is not natural (constant and universal)* but it is a historical-social product. Thus, the idea of nature is in itself a cultural construction and it possesses a universal value that is only presumed, which, in fact depends on different and particular traditions.”<sup>226</sup> Therefore, Remotti, excluding the possibility of a “substantial *quid*”<sup>227</sup> common to all societies, considers impossible to come to a single definition of family and *natural* family. “The anthropologist can weave the threads that will lead them from case to case: but he will not weave a structure of families, but a network of connections, through

---

ecclesiastico», numero speciale, 2015, p. 11.

<sup>224</sup> See F. Remotti, *Contro natura. Una lettera al Papa*, Rome-Bari, Laterza, 2008, pp. 146-148.

<sup>225</sup> *Ibidem*, p. 19.

<sup>226</sup> Botturi, *Natura e cultura: crisi di un paradigma*, cit., p. 30.

<sup>227</sup> Remotti, *Contro natura...*, cit., p. 103.



which various forms of family come together from many standpoints.”<sup>228</sup> It is precisely this consideration that could provide the “possible strength”<sup>229</sup> to the definition of family, since “given the weave of the fibres; there is no ‘single’ fibre that runs throughout the thread (the nuclear family or the matriarchal family), but rather a multiplicity of fibres, that although they are as long as the thread, break and weave together constantly.”<sup>230</sup>

It is clear that if by ‘nature’ we mean a rigid scheme in the mechanistic sense, then the cultural diversity will be incompatible with it and, above all, it would be wrong to say “*natural family*”. On the contrary “if [...] by nature we mean a *permanent genetic principle* and/or a *fundamental structural tendency*, then his [Francesco Remotti’s] idea is by no means denied by the diversified anthropological phenomenology that, in fact, everywhere and always documents the existence of the search for rules of behaviour.”<sup>231</sup> Nature, in this sense, is seen as a “*bio-cultural process*, that is as *production* and not as a product”<sup>232</sup> and, therefore, prior to the various cultural forms and a common trait of their diversity. For this reason in the words of Botturi, we can state that:

This status of culture rooted in the generative nature, always immanent and always transcending the cultural forms, is the reason why it is possible to *compare* and *evaluate* the cultural forms among them. *Comparing*, because they all have a common reference principle, a differently participated measure, whereby all cultural forms are never completely unrelated to each other; the cultural forms in fact bring with them the features and characteristics of the natural ground from which they derive.<sup>233</sup>

So the word nature could point out an idea of order, rather than anything biological (in the sense of generation), situated at a pre-cultural level and could therefore be the foundation on which the different family structures are anchored.

---

228 *Ibidem*.

229 *Ibidem*, p. 105.

230 *Ibidem*.

231 Botturi, *Natura e cultura: crisi di un paradigma*, cit., p. 31.

232 *Ibidem*, p. 32.

233 *Ibidem*, p. 33.

## Chapter Three

### The meaning of nature when ARTs and same-sex adoptions are at stake

When dealing with new forms of parenting, in particular ARTs and same-sex adoptions, the word *nature* is often used in the various argumentations in order to say what is right and wrong (“natural things” are always right and good, as opposed to the artificial ones). Given the intrinsic importance in the current debate of the word nature and the many perspectives from which it can be tackled, it is possible to find many resources that touch it upon from different

area of expertise such as jurisprudence, medicine, biological science, politics, journalism, and so on. In this study we have emphasised this variety of approaches and perspectives showing the permeability among the different fields, and, at the same time, we have emphasised their dissimilarities. In general, the jurisprudence of the ECtHR shows a certain caution in referring to the concept of nature; in fact the judges in Strasbourg rarely use this word. The National Courts are also very reticent with regard to this term and the Italian Constitutional Court, the few times that it has referred to the concept of nature, has placed the word in inverted commas, almost as if it intended to indicate a certain distance.<sup>234</sup> When the national bioethical committees use the word nature in their opinions, they always opt for an explanation of its meaning, in order to uncover any possible ambiguity; otherwise the word nature is not to be found. The scientific journals, according to their area of expertise (medicine, sociology, psychology, science, etc.), if they decide to use this word, they explain its meaning and at times it can become the focus of their research. Journalists and politicians, on the other hand, make more consistent use of the word nature, ascribing different meanings to it, without ever really looking into its many connotations. So, the word *nature* burrows through the dominant culture, entering through different doors. Those opened by the mass media and by politics are decidedly the widest, because they allow the information to reach a broader audience. And it is the latter information that often assumes the form of downright judgement, and that principally moulds the common opinion on a given subject. The well-known quotation from the film *Citizen Kane* (1941), pronounced by the media magnate “people will think what I tell them to think” is still extremely topical. So, below we will focus on ARTs and same-sex adoptions, taking into account the various perspectives in play and showing the role of nature in defining the new forms of parenting.

---

<sup>234</sup> See for example the rulings N. 161/1985 and N. 221/2015.

### 1. Infertility: nature's error?

The World Health Organization (WHO) defines infertility as the failure to achieve a clinical pregnancy after twelve months or more of regular unprotected sexual intercourse.<sup>235</sup> Secondary infertility is when the couple cannot conceive a child after a successful pregnancy. The term sterility refers to a permanent physical condition that affects the couple or only one of its members, for whom conception is impossible.

In his book *Life in the Making* Alan Guttmacher, an American gynaecologist famous for his studies on human fertility and former president of the American no-profit association Planned Parenthood and of the American Eugenetic Society, described human sterility with words that are still true today:

The unfortunate consequences of sterility in marriage can hardly be over-emphasized. It is one of the most tragic ailments with which the doctor has to deal. The psychic effect is something so devastating that women have been known to lose their reason, and men their self-respect, because it can become a fixed idea that embitters the relationship and destroys the pleasures of existence. The husband reproaches his wife, the wife blames her husband and a marriage that could have been harmonious is shipwrecked against this insurmountable physiological defect. Childless couples shop around from doctor to doctor, hoping against hope that some new trick or nostrum will cure their ill.<sup>236</sup>

It is necessary to wait for the summer of 1978 marked by the birth of Louise Brown – the first *test tube baby* – that sterile couples can finally hope to become parents.

Nonetheless, this does not mean that from that moment onwards couples who want to become parents, but who saw this possibility denied for physiological reason, often obscure reasons, had not so far turned to every sort of medicine or stratagem to overcome the problem. On the one hand,

---

<sup>235</sup> This definition derives from the work of M.J. Whitelaw, *Statistical evaluation of female fertility* published in 1960.

<sup>236</sup> A.F. Guttmacher and Rosa Rosenthal Kohn, *Life in the Making: The Story of Human Procreation*, New York, Garden City Publishing Company, Inc., 1933, p. 191.

Gutmacher documents the customs of the primitive Mexican populations and of certain European regions, which combined rudimental medicine and magic, in fact:

The list of this strange pharmacopoeia against sterility, in addition to herbs, fruits, flowers and plants, precious stones, the organs and products of animals, also includes living animals or those crushed together, such as spiders, wasps, flies and even living fish. It would seem that once the garments of particularly fecund women were considered to exercise a favourable influence.<sup>237</sup>

On the other hand, in more remote times, the Hammurabi code regulated surrogate maternity, clearly according to wholly physiological methods:

(145) If a man take a wife, and she bear him no children, and he intend to take another wife: if he take this second wife, and bring her into the house, this second wife shall not be allowed equality with his wife. (146) If a man take a wife and she give this man a maid-servant as wife and she bear him children, and then this maid assume equality with the wife: because she has borne him children her master shall not sell her for money, but he may keep her as a slave, reckoning her among the maid-servants.<sup>238</sup>

Then, it is sufficient to consider that the first “official” surrogate motherhood in the history is documented in the Holy Bible: Sarai, the wife of Abraham, being infertile, but wanting a child, asked her husband to lie with the slave Agar, so that she could give them a child.<sup>239</sup> In effect, this created

---

<sup>237</sup> *Ibidem*, p. 202.

<sup>238</sup> P. Bonfante, *Le Leggi di Hammurabi, re di Babilonia (a. 2285-2242 a.C.)*, Milano, Società Editrice Libreria, 1903. Available online: [https://archive.org/stream/leleggidihammur00bonfgoog/leleggidihammur00bonfgoog\\_djvu.txt](https://archive.org/stream/leleggidihammur00bonfgoog/leleggidihammur00bonfgoog_djvu.txt), p. 24. <http://www.sacred-texts.com/ane/ham/ham06.htm>

<sup>239</sup> *Holy Bible, New Jerusalem Bible, Genesis 16 1-4.*

“<sup>1</sup>Abram’s wife had borne him no child, but she had an Egyptian slave-girl called Hagar. <sup>2</sup>So Sarai said to Abram, ‘Listen, now! Since Yahweh has kept me from having children, go to my slave-girl. Perhaps I shall get children through her.’ And Abram took Sarai’s advice. <sup>3</sup>Thus, after Abram had lived in the land of Canaan for ten years, Sarai took Hagar her Egyptian slave-girl and gave her to Abram and his wife. <sup>4</sup>He went to Hagar and she conceived. And once she knew she had conceived, her mistress counted for nothing in her eyes.”

problems within the extended family, but we will speak of the possible consequences of surrogacy later on.

What we want to discuss here is above all the catastrophe of the impossibility of having children, where there is a strong yearning and the consequent search for alternative methods to satisfy this desire. All those sentiments and willingness certainly pre-date the medical-scientific progress of the last fifty years in the reproductive field. Nonetheless, initially the sole purpose of medicine was to identify the causes of infertility and seeks to heal the diseased organ, or to restore a deviated physiology (with medical treatments or through magic rituals and witchcraft). Now, however, technical-scientific progress has allowed medicine not only to reach greater success in the treatments, but also to substitute certain phases of the reproductive process. In this sense, therefore, a solution has been found for a ‘malignant’ nature that has rendered some couples sterile. This definition, although it is marked by superstition, was pronounced during the discussion of the Italian law N. 40/2004 on ARTs. In fact, during these discussions the member of parliament Grazia Labate stated, in line with her political party (DS): “We will fight, with our vision, respectful of pluralism and based on scientifically correct foundations, respecting the desire of those [...] to whom nature has been malignant, preventing them from procreation.”<sup>240</sup> This is the same argumentative approach taken also by an article that appeared in *The Sunday Times* some years ago entitled *Scientists Playing God? We should Rejoice?* which announced a new type of pre-implantation diagnosis of embryos, with the aim of identifying and therefore discarding those carrying serious, hereditary, genetic illnesses (with this new type of screening the number of diseases that it was possible to diagnose leapt from 200 to 6,000). The article celebrated this scientific improvement:

---

<sup>240</sup> Stenographic transcription of the Parliamentary Assembly, meeting N. 408 del 19 February 2004. Available online: [http://leg14.camera.it/\\_dati/leg14/lavori/stenografici/framedinam.asp?sedpag=sed408/s000r.htm](http://leg14.camera.it/_dati/leg14/lavori/stenografici/framedinam.asp?sedpag=sed408/s000r.htm), p. 24.

Nature is astonishingly cruel. Science, by contrast, has the power of mercy. One can only be dazzled by the inventiveness and compassion of the scientists involved in this screening breakthrough [...] It will be easier and better in every way to get rid of a tiny collection of cells. This is indeed playing God, as all the usual campaigners were quick to point out last week. But what on earth is wrong with humans playing God?<sup>241</sup>

### *1.1. Can sterility be considered an illness? The relationship between the concept of nature and health*

The arguments discussed before could necessarily lead to infertility being considered not only a bodily disease, but also a spiritual one (just think of the psychological consequences inflicted in particular on the woman and then on the couple). However, the scientific literature is not unanimous in this regard. On the one hand, Carlo Flamigni, gynaecologist who was involved in ART for years, when speaking of the desire for motherhood and the obstacle represented by infertility wrote:

I will say just two things. The first, that it is not possible at the moment to establish to what extent the desire for motherhood and paternity is congenitally part of man (as for example, the survival instinct) and to what extent it is culturally induced, included in one of the primary phases of learning and therefore drawn into adulthood, with all the changes determined by the many variables I mentioned.

The second, that the experience of motherhood and fatherhood is so complex, that the value of the child is so different, so opposed to the meanings of biological and social filiation, that it is not possible to establish whether fertility is a right, a duty, an obligation, a pleasure, a privilege, a gift, a richness, and for whom and at what price. Infertility is rarely a disease of the body (if it is, it is certainly the problem of the disease that prevails over that of lack of

---

<sup>241</sup> M. Marrini, *Scientists Playing God? We should Rejoice*, in «The Sunday Times», 25 June 2006. Available online: <https://www.thetimes.co.uk/article/scientists-playing-god-weshould-rejoice-gn52dcm2xrm>.

children) and can rather be defined as a delicate and painful socio-cultural and psychological problem.<sup>242</sup>

The Italian Constitutional Court in its judgement N. 162/2014 peremptorily defines the wish to become parents as “irrepressible”. “The decision whether to have a child, also for couples who are absolutely sterile or infertile, concerns the most intimate and intangible sphere of the human person and is therefore irrepressible, when it does not infringe other constitutional values.”<sup>243</sup>

On the other hand, the definition of sterility proposed by the WHO and the *International Committee for Monitoring Assisted Reproductive Technologies* (ICMART) given above, recognises sterility as a disease.<sup>244</sup> Hence, as Laura Renzoni Governatori asks:

The framework of guarantees provided by the laws safeguarding health, which all the constitutional charters ratify as a fundamental right of the person, should legitimately include the guarantee of the right to overcome the impossibility of having a child. [...] the proposal to ‘medicalise’ fertilisation refers to a therapeutic treatment, to a genuine hypothesis of ‘cure’ for a condition considered a pathological condition called ‘sterility’. However, is it absolutely true that sterility is to be considered a disease to be cured?<sup>245</sup>

---

242 C. Flamigni, *La fisiopatologia dell'impossibile: il piacere dell'irresponsabilità*, in C. Ventimiglia, *La famiglia moltiplicata. Riproduzione umana e tecnologia tra scienza e cultura*, Milano, Franco Angeli, 1988, p. 256.

243 Ruling of the Italian Constitutional Court N. 162/2014, § 6.

244 See [http://www.bionews.org.uk/page\\_51799.asp](http://www.bionews.org.uk/page_51799.asp): «The glossary was also published in the journals “Fertility and Sterility” and “Human Reproduction”. According to the glossary, infertility is ““a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual relations.” This decision was described as “a significant milestone for this condition”, by the American Society of Reproductive Medicine (ASRM). “We congratulate the WHO for this important result and for having been so clear on the status of the disease of infertility,” declared Doctor William Gibbons, president of ASRM. The doctor then added, “For too long, those suffering from infertility have felt offended or even ignored. Insurance companies do not pay for the related treatments, governments do not allocate sufficient resources to study it and as a result, patients suffer. We hope that this international recognition that infertility is really a disease will allow it to be treated as such.”

245 L. Renzoni Governatori, *Identità femminile, desiderio di maternità e fecondazione artificiale*, in Ventimiglia, *La famiglia moltiplicata*, cit., p. 136.



Here, it is necessary to define what we mean by disease and the socio-cultural interpretation that the concept of sterility and its implications have assumed throughout the history. As previously mentioned, in the past sterility was considered an unfortunate situation that the entire community tried to remedy. Let's, for instance, think about the idea of surrogate motherhood, or the Jewish legal institution of levirate marriage, according to which, if the husband died without leaving offspring, his brother had to marry the widow so that their first male child could be considered the son of the deceased husband.

In the contemporary society, sterility and the methods for overcoming that condition remain above all within the couple's responsibility, as an individual problem, and only later, when the couple figures out a "solution" such as adopting a child or going through ART, the social community does come into play. While in the past, the impediment to procreation was

[...] characterised by the absence of a personal responsibility, the suffering that derived from the impossibility to have a child was dealt with and resolved through a sort of collective assumption of responsibility that resulted in a socially shared solution; in the second case [in contemporary society], the principle of autonomy of the citizen and the network of rights that the constitutional charters construct and guard, constitute the cultural and normative fabric in which personal suffering and pain must find reason and satisfaction.<sup>246</sup>

This approach tends to configure the sterility as a disease and, therefore, to place it within the right to health.

This passage was made possible by the transformation of the concept of health. In fact, throughout the history of medicine, we have moved from the classic Hippocratic definition of health as the absence of disease to the contemporary definition proposed by the WHO, according to which *health* is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity. Hence, medicine, according to the first definition, had the task of re-establishing the natural functions of the

---

<sup>246</sup> M. Mengarelli, *La sterilità: un problema sociale minore?* in R. Bartoletti, *Cultura riproduttiva. Fertilità e sterilità tra comunicazione e prevenzione*, Milano, Franco Angeli, 2011.

compromised organ (and where this was not possible, it was to some extent easier to accept the incapacity of the technique); while now the concept of health assumes a holistic nature, where medicine, together with biotechnology has the common task of finding a remedy that is not exclusively aimed at re-establishing the normal function of the organ. In fact, thanks to medical-technological progress there are now alternative ways of healing a diseased organ, so that the person can at least perceive it as such (for example, prostheses to replace amputated limbs or ART). Almost all the rulings of the Italian Constitutional Court, aimed to change the current Law N. 40/2004 on ART define the protection of women's health "in the widest sense, as psychological-physical health."<sup>247</sup> The importance of the balance between *soma* and *psiche*, body and soul, was already dealt with in depth by the judges of the *Consulta* in the judgment N. 161/1985 on gender reassignment, where a new concept of sexual identity was proposed. In fact, this ruling introduced the legal recognition of transsexual persons and "such identification is no longer exclusively attributed to the external genital organs, as identified at the time of birth or 'naturally' evolved, albeit with the aid of appropriate medical-surgical therapies, but also to psychological and social elements."<sup>248</sup> In this sense, then, the power of the natural reality (in this case physical-organic) is mitigated to favour the psychological and physical balance. Later, however, the Court found it necessary to justify this position, proposing instead the predominance of the natural reality itself, but deciding to place this adjective in inverted commas:

The transsexual person, more than making a properly free choice, obeys to an irrepressible need, to whose satisfaction they are driven and forced by their "natural" way of being. Hence the legislator has taken into account this situation (as described by the medical science) in order to rule accordingly and, when necessary, to ensure the

---

<sup>247</sup> R. De Rosa, *Famiglia, filiazione e rapporti di fatto nella giurisprudenza costituzionale (anni 2010-2015)*, Corte costituzionale, Servizio Studi. Available online: [http://www.cortecostituzionale.it/documenti/convegni\\_seminari/stu\\_285.pdf](http://www.cortecostituzionale.it/documenti/convegni_seminari/stu_285.pdf), p. 49.

<sup>248</sup> Ruling of the Italian Constitutional Court N. 161/1985.

examinations of the single case or to allow – always in line with the medical suggestions – a surgical intervention, followed by the consequent gender rectification in the public records.<sup>249</sup>

Only in the more recent judgment N. 221/2015 the Italian highest Court established that the natural physical reality does not necessarily need to be changed in order to modify the public records: this is because the concepts of psychological and physical health do not necessarily require a correspondence between anatomic gender and the one registered in the public records.<sup>250</sup>

It is precisely at this level that bioethics plays a key role:

Bioethics has progressively tended to become an information system and a body of knowledge that mediates between the actors in the field and clarifies both the internal regulatory practices of the medical systems and the possibilities of different legislative procedures. Bioethics therefore appears as a system that would tend to bring coherence among the other systems involved. But the problem of coherence/inconsistency remains much more open, and largely unresolvable "from the outside", if we refer to interpersonal relationships and identity processes.<sup>251</sup>

It is therefore necessary to find a criterion, that is as much comprehensive as possible, to make ethical judgments about certain processes. As contemporary medicine has adopted a holistic approach at the same time the ethics applied to it should take into account all the reasons behind a specific choice without embracing radical positions.

In fact, “[...] if the natural biological processes marked the teleological or finalistic meaning of mankind, then it would be necessary to deny ethnicity to the entire operative field of these disciplines; no medical intervention is natural. The question that immediately arises is precisely: this is technically possible, but is it also ethically legitimate?”<sup>252</sup> Here the opposition between artificial

---

<sup>249</sup> *Ibidem*.

<sup>250</sup> See Ruling of the Italian Constitutional Court N. 221/2015.

<sup>251</sup> A. Scivoletto, *La scienza della procreazione e la sociologia*, in Ventimiglia, *La famiglia moltiplicata*, cit., p. 71.

<sup>252</sup> L. Lorenzetti, *La trasmissione della vita umana da un'etica della natura a un'etica della persona*, in Ventimiglia, *La famiglia moltiplicata*, cit., p. 193.

(*contrary to nature*) and natural collapses. In fact, it belongs to the human nature to intervene on nature itself and, in general, we can say that not all that which is artificial is ethically contrary to nature (it is sufficient to consider the medical prostheses mentioned previously). Therefore, as Lorenzetti observes, “artificial and natural are not adequately contrary. There are artificial procedures that are ‘natural’, that is that conform to the nature of man, to the dignity of the human person and, on the contrary, many natural things – not artificial – are contrary to the nature of mankind.”<sup>253</sup> In this sense then:

[...] it is a question of the correct relationship between man and nature and, in particular, man-natural biological processes. If, as we have said, natural processes are not to be sacralised or absolutised, nor are they to be arbitrarily ignored; nor must we achieve a sacralisation of the cultural reality with uncritical acceptance of new technological possibilities. Passing from one absolutisation to another does not solve the problem of the nature-science relationship<sup>254</sup>.

This means that the use often made of the word natural in the sense of ethical, is not only a somewhat naïve statement, but it is also intrinsically incorrect. Nevertheless, this does not lead to “an uncritical acceptance of new technological possibilities” or “a sacralisation of the cultural reality”. In fact, it cannot be denied that the natural order has a meaning since, for example, the work of medicine is to re-establish it, although through using processes that are, in themselves, artificial.

## 2. *What is the place of nature in ART?*

In the scientific world, the 25<sup>th</sup> of July 1978 is considered a very important day because Louise Brown, the first ‘test tube baby’ was born in Oldham (England), thanks to an artificial reproductive technique developed by

---

<sup>253</sup> *Ibidem*, pp. 193-194.

<sup>254</sup> *Ibidem*, p. 199.

both the British medical researcher Robert Edwards and the British gynaecologist Patrick Steptoe.

In the days following the birth, newspapers all over the world applauded, though not without reserves, the science that had allowed a couple who otherwise could not have children to become parents and, therefore given hope to many others in the same condition. The front page of *Corriere della Sera* dated July 27<sup>th</sup> 1978 carried the headline *A great step forward for science*. The article that followed, written by Buzzati Traverso, criticised the doubts raised by this event, attributing them to widespread religiousness:

Unfortunately, many educated people of this twentieth century are still victims of the irrational "sacredness" of taboos of very ancient origins. The priests or sorcerers who influence the sexual behaviour of their fellow men do so because they are aware of the power that they can exercise: for this reason the biological studies on the mechanisms of reproduction in our species are still backward compared to other fields of physiology.<sup>255</sup>

The next day it would be Giuliano Zincone who took up the thread of the question, beginning a discussion on the relationship between nature and ART. Zincone initially espoused an argumentation that has emerged repeatedly in this study: the morality of an action cannot be defined by whether it is contrary to nature, because there are many acts that, although they subvert the course of nature are praiseworthy, like the work of medicine. This said, "the central problem lies in establishing to what extent and how far man should be considered a 'natural animal.'"<sup>256</sup> The journalist put the capacity to choose or, in other words, the freedom, as the threshold that allows man to be a natural animal in a different way to all the others. If the task of the ant is to build an anthill, man must build a city, or rather, many cities and all of different kinds;

---

<sup>255</sup> A. Buzzati Traverso, *Un grande passo avanti della scienza*, in «Corriere della Sera», 27 July 1978.

<sup>256</sup> G. Zincone, *Padre, come può essere un male regalare la vita a Louise?*, in «Corriere della Sera», 28 July 1978.

this is because man is free and therefore always working to realise his desire for happiness:

The ant's product will always and only be an anthill. Man can produce cities - extremely different from each other, and devote himself to a variety of occupations. He cannot only change nature; he can also try to change the action of nature on the human body. He can try to live longer, which is extraordinarily unnatural. According to Nature, man would be a particularly fragile animal. [...] Man is that natural animal who gives birth to twenty children and sees eighteen die. He is that natural animal exterminated by malaria, smallpox, plague, leprosy, pneumonia.<sup>257</sup>

Yet now man has found cures for many of these diseases and need no longer die of them. So, Zincone asks: "Where do the boundaries of Nature lie: with the catapult or with the shotgun? With the chariot or with the aeroplane? With quinine or with a kidney transplant?"<sup>258</sup> He answers "the only limit that appears obviously insurmountable to each of us is the one where mankind begins to harm himself." Nevertheless, it is legitimate to ask what "harm himself" means or, in other terms "to take action against mankind". Is it exclusively a question of physical harm, such as murder or torture? Or does it involve decisions of an ethical nature, such as the cloning of individuals? According to Zincone the answer to these questions has nothing to do with the man-nature relationship, but it is rather a "political" issue, or one of 'power':

But all this, from pollution to the possible genetic crime, is not a problem that can be faced with theoretical discussions on the relationship between man and nature. It is a political problem, precisely because the human species is not condemned to construct anthills forever. [...] What matters, in our opinion, is not the more or less mysterious or diabolical substance of an invention, but the will of those holding the power to decide their use.<sup>259</sup>

However, it is legitimate to ask whether freedom can be grounded on "power" and, at this point, if the limit of 'do no harm to oneself' is a limit

---

<sup>257</sup> *Ibidem.*

<sup>258</sup> *Ibidem.*

<sup>259</sup> *Ibidem.*

imposed from the outside or from within the human being. On the contrary, in *Moderati*, a book written by Quagliariello, Roccella and Sacconi, we read that politics cannot avoid dealing with ethical issues, especially in an era where “moral principles” are continually challenged by scientific progress and by prevailing way of thinking:

Societies have long been invested by a sort of anomalous wave, that is growing every day, fed by a number of fonts and sources, ranging from technology and scientific discoveries to the debatable definition of new rights issued by scientific circles of European and international institutions and, last but not least, by the Italian jurisprudence with its creative tendencies. It is the bearer of considerable anthropological confusion, with obvious political repercussions, offering multiple symptoms of separation from the natural dimension: the definition of male or female as a personal choice, the repeated attempts to re-define marriage and the family, procreation regardless of the exclusive elements of an affective relationship, the possibility of manipulating and exploiting human material [...] The preservation of the order of nature in human matters cannot be a battle left to the Church, with a part of the Catholic world that remains a spectator, but has a profoundly secular political value, also because it invests the constituent elements of the nation and the deep feelings of his people.<sup>260</sup>

In this sense then, “defending nature” means taking up the defence of those traditional moral principles that are an integral part of a people but, this means taking care not to fall into the combination natural/right and artificial/wrong.

If for a moment we turn our glance to the report published by the Warnock Committee, just a few years after the birth of Louise Brown, which amongst other things took into consideration and organised the opinions expressed by the general public, we can see three reasons for uncertainty characteristic of ART, one of which takes into account the concept of nature, only to hastily liquidate it.

The first reason begins with the observation that “in an over-populated world it is wrong to take active steps to create more human beings who will

---

260 G. Quagliariello, E. Roccella and M. Sacconi, *Moderati. Per un nuovo umanesimo politico*, Venezia, Marsilio, 2014, digital edition.

consume the finite resources.”<sup>261</sup> Nonetheless, the Committee believes that it is more opportune to concentrate on arguments relating to individuals and not to operate broad generalisations, particularly since, “the number of children born as a result of techniques to assist in the treatment of infertility will always be insignificant in comparison with the naturally increasing world population.”<sup>262</sup>

A second group of opinions believed that “it is wrong to interfere with nature, or with what is perceived as the will of God.”<sup>263</sup> Nevertheless, due to the semantic ambiguity of words such as ‘natural’ and ‘unnatural’, the Committee decided to commit to the rule according to which “the actions taken with the intention of overcoming infertility can, as a rule, be regarded as acceptable substitutes for natural fertilisation.”<sup>264</sup> Finally, it was agreed that becoming parents could not be considered a need, but only a wish and for this reason should not be a financial burden for the State. This said, however, the Committee concluded that “medicine is no longer exclusively concerned with the preservation of life, but with remedying the malfunctions of the human body. On this analysis, an inability to have children is a malfunction and should be considered in exactly the same way as any other.”<sup>265</sup> Why then do assisted reproductive interventions cause more scandal than an appendectomy or an organ transplant?

On the one hand, the words of professor Sebastiano Maffettone lead us to suppose that human intervention ‘denaturalizes’ a natural process: “Even an appendectomy is not strictly natural, but this does not mean that we easily renounce it, if we need it.”<sup>266</sup> On the other hand, however, it is not possible to ignore the statements of Doctor Steptoe following the birth of Louise Brown:

---

261 Warnock, *A Question of Life*, cit. p. 9.

262 *Ibidem*.

263 *Ibidem*.

264 *Ibidem*.

265 *Ibidem*, pp. 9-10.

266 S. Maffettone, *Bimbi in provetta, ma con giudizio*, in «Corriere della Sera», 7 November 1985.



Step toe is adamant in his belief that his work does not go against the natural creation of life and conception, but combines with it in a careful imitative process. “I think it is necessary to remember that it is a life that is already there, a living oocyte and a living spermatozoa. And the fact that these are united outside the body is no different from the process that occurs in natural circumstances [...] It must be remembered that nature itself makes so many errors that of every hundred oocytes exposed to natural fertilisation, only thirty-one will give life to a normal child. I personally believe that there are so many things that can go wrong, it is impossible to say when a fertilised oocyte can become a viable set of cells and when this will not happen.”<sup>267</sup>

We could consequently ask why giving nature a helping hand should be unacceptable, since nature has repeatedly shown itself to be fallible.

On this question we should agree with the emphasis of Adriano Pessina, professor of moral philosophy:

The meaning of artificial reproduction, as opposed to natural, needs to be clarified. In some cases it seems that the objection to this technique can be traced back to its artificiality. The problem is complex due to the equivocal use of the word nature: if by nature we mean the biological element, then every type of fertilisation, because it uses biological material, is natural. But if by nature we mean what is specific, that which is proper to a certain act or behaviour, then it is not sufficient for the biological element to be respected. A rape, for example, is not an artificial act, but it remains, for those who use the word nature in the second sense, an unnatural act (that is, not conforming to the specificity of the interpersonal human sexual relationship).<sup>268</sup>

For the purpose of furthering these latter considerations we will now explore more in depth the various types of ARTs and their relative issues, always keeping the word nature as our *leitmotiv*.

### *2.1. The concept of nature in homologous and heterologous ARTs*

---

<sup>267</sup> AA. VV., «Test-Tube Babies»: *Not Against Natural Laws*, in «Daily News», 5 May 1981.

<sup>268</sup> A. Pessina, *Bioetica. L'uomo sperimentale*, Milano, Bruno Mondadori, 1999, p. 118.

Dear Robert Edwards,

The development of human in vitro fertilisation has made it possible to treat infertility, a medical condition that afflicts a large proportion of humanity. Your pioneering work therefore represents a monumental achievement that truly can be said to confer the greatest benefit to mankind. The result of your work has touched us all, giving millions of infertile couples a precious gift, a child.<sup>269</sup>

With these words professor Christer Höög concluded the presentation speech for the 2010 Nobel Prize in Physiology and Medicine. It is undeniable that having elaborated a scientific technique that allows the formation of an embryo outside the woman womb is a revolution from which thousands of women have benefitted and for a purpose that can only be considered positive: the birth of a child. Nonetheless, the numerous controversies surrounding ART and its interventions show that there is no unanimous opinion on the matter.

Also across the ocean the birth of Louise Brown was welcomed as a great success, even though it raised some perplexities. Recently an article in the *New York Times* emphasised that:

It took time for in vitro fertilization to gain acceptance. Fears that it could harm mothers and children lingered. Early success rates were low, and there were moral objections from some religious groups that viewed the creation of human life in a laboratory as a violation of the sacred order. But over all, the techniques have proved safe, and success rates have climbed to rival those of natural conception. Some religious objections remain, however. The Roman Catholic Church, for instance, continues to condemn in vitro fertilization.<sup>270</sup>

Those perplexities, like others, despite the fact that almost forty years have passed, have not lost their relevance. In the following pages we are going to examine these and other complications concerning ART from more an ethical

---

<sup>269</sup> C. Höög, *Presentation Speech for the 2010 Nobel Prize in Physiology or Medicine*.

Available online:

[http://www.nobelprize.org/nobel\\_prizes/medicine/laureates/2010/presentation-speech.html](http://www.nobelprize.org/nobel_prizes/medicine/laureates/2010/presentation-speech.html).

<sup>270</sup> D. Grady, *Lesley Brown, Mother of World's First «Test-Tube Baby»*, *Dies at 64*, in «New York Times», 23 June 2012. Available online: <http://www.nytimes.com/2012/06/24/health/lesley-brown-mother-of-first-test-tube-baby-dies-at-64.html>.

perspective. Furthermore, it is necessary to highlight that the analysis will not take into account the right to access to ARTs for singles and same-sex couples, because this would involve delving into topics that could lead the present discourse in other directions. For this reason, we will suppose that those who undergo these techniques are heterosexual couples married or in a stable relationship.

## *2.2. The relationship between ART and nature according to the national committees of bioethics*

In order to understand the following analysis, it is necessary to explain the various types of ARTs. In general, ARTs are biomedical techniques of filiation capable of reproducing the procreative moment (the union of the spermatozoa and the oocytes) without sexual intercourse. It is possible to distinguish between two types of fertilisation: *homologous*, when the gametes used are those of the future parents; and *heterologous*, when part of the genetic material comes from at least one donor outside the couple. In both cases, the fertilisation techniques are similar and can be divided into three levels, according to how invasive they are. The first-level techniques are known as intrauterine insemination (IUI): the spermatozoa previously selected are introduced into the uterus on the day of maximum fertility of the woman, with the aim of increasing the number of male gametes in the area of fertilisation. Amongst those of second level, the most common are *in vitro fertilisation* and the transfer of the embryo (FIVET). The oocytes and the spermatozoa previously harvested are placed on a specific culture medium in order to encourage fertilisation and, once the embryos have formed, they are transferred to the uterus of the woman. Then, there is the intracytoplasmic injection of the spermatozoa (ICSI), which is the preferred treatment for male infertility.

Finally, it is possible to carry out transvaginal transfer or laparoscopic transfer of the male and female gametes (GIFT), zygotes (ZIFT) or embryos

(TET). With regard to these third-level techniques, the most frequently used are MESA and TESE, which consist in the surgical collection of spermatozoa and are reserved for severe cases of male infertility.<sup>271</sup>

Since these techniques were introduced, various national committees of bioethics have produced documents giving a critical contribution to the topic, *in primis*, to the legislators. Amongst these we will examine some of the documents that refer directly to the concept of nature.<sup>272</sup>

In 1995, the Italian Committee of Bioethics (*Comitato Nazionale per la Bioetica*, CNB) published a report that aimed to examine the ARTs, from both a medical and ethical standpoint. The document shows considerable uncertainty regarding the exclusive positivity of these new reproductive techniques. Francesco D'Agostino, at that time the president of the CNB, referring in general to the different ARTs identified two problems: the first deriving from the fact that they are not curative therapies, because they do not cure the infertility, but rather bypass the obstacle in a similar way when an amputated limb is replaced by a prosthesis. As he points out:

Undoubtedly, the simpler cases [the ART practices mentioned in this document] have a therapeutic nature in the *widest sense*; above all when the work of the

---

271 For an in-depth analysis of the various MAP techniques see in particular: M. D'Amico e B. Liberali, *Procreazione medicalmente assistita e interruzione volontaria della gravidanza. Problematiche applicative e prospettive future*, Napoli, Edizioni Scientifiche Italiane; M. de Tilla, L. Militerni and U. Veronesi, *Fecondazione eterologa*, Torino, Utet, 2015; S. Penasa, *La legge della scienza. Nuovi paradigmi di disciplina dell'attività medico-scientifica. Uno studio comparato in materia di procreazione medicalmente assistita*, Napoli, Editoriale Scientifica, 2015; J. Van Blerkom and L. Gregory, *Essential IVF: basic research and clinical applications*, Boston-London, Kluwer Academic, 2004.

272 For the selection of the documents, the author proceeded as follows: above all the area was limited to the European Member States. For each Member State we visited the website of the relative national bioethical committee, or similar organisation dealing with ethical aspects of MAP practices. We then examined the documents only if they were available in Italian, English, French and/or Spanish (note that generally there is an English version of most of the documents). Moreover it has been checked the presence of the word 'and whether it has been used with a particular meaning.

physician is limited to facilitating the union between the gametes of the couple, bypassing the obstacle that does not allow them to conceive naturally and thus making it possible for the maternal organism to normally carry out the ‘task’ of the pregnancy. This is a theory that is not substantially different from other medical interventions that, by overcoming an obstacle, allow the normal performance of a given function (for example, in cases of some prosthesis). However, this analogy does not allow us, amongst other things, to compare even the more simple assisted procreation techniques to an *everyday* medical treatment. [...] It would therefore seem that, as soon as we distance ourselves from the most simple cases, even in the slightly more complex situations, the assisted procreation practices are radically different from any therapeutic practice *in the strictest sense*: not only do they not have any specifically *curative* nature (since they do not restore the body its *natural fecundity*), but above all they operate through a *technological manipulation* of the subjects involved in the generation, which cannot be compared to any other biomedical practice.<sup>273</sup>

We can certainly agree with D’Agostino that the ARTs do not restore the natural fertility of the couple, however, the question that must be asked concerns the reason why these interventions can be defined “a technological manipulation”, thus raising many more doubts about their morality. In fact, to return to the example given above, it would be naïve to think that the kernel of the question is not an “act contrary to nature”, because in effect amputating a limb and fitting prosthesis are operations that certainly subvert the course of nature, but are not blameworthy for this reason.

The second critical point highlighted by D’Agostino concerns the so-called ‘depersonalisation’ of the generation:

Instead of the effect of a direct and immediate meeting between two persons, this becomes the effect of a sophisticated technological procedure, scientifically admirable, since it is existentially *impersonal* and for this reason alone ethically problematic. [...] The *depersonalisation* of the procedure impoverishes the meaning itself of the generation [...] it significantly alters that *personal* value of the generational roles, to which the construction of the profound identity of man is entrusted.<sup>274</sup>

In particular then, when the heterologous fertilisation is at stake, this aspect is considerably amplified:

---

273 F. D’Agostino, *Etica della fecondazione assistita*, in AA. VV., *La fecondazione assistita. Documenti del Comitato Nazionale per la Bioetica*, Rome, Presidenza del Consiglio dei Ministri-Dipartimento per l’informazione e l’editoria, 1995, p. 133.

274 *Ibidem*.

The insertion within the dynamics of the couple of the figure of the *donor* can only exasperate the depersonalisation of the procedure, previously mentioned. Depersonalisation that becomes evident in the irresolvable paradox inherent in heterologous procreation procedures. Why does a couple ask for heterologous fertilisation rather than choosing to adopt a minor? Evidently, because, at least one of the two members of the couple considers an essential and indispensable value the genetic bond with the child who will be born. Yet, with just as much evidence, we should consider that for the other member of the couple, this value is non-existent and renounceable, to the point of allowing him to consent to be substituted by a gamete donor.<sup>275</sup>

The Warnock Committee expressed its opinion on precisely this point, highlighting the necessity to establish whether the introduction of a third party within the dynamics of the couple (the donor of gametes) can be a real threat to the stability of the relationship:

It is argued that the wife may feel that the child was hers rather than her husband's and that her husband had in some sense failed her. Similarly, the husband may experience a sense of inadequacy and of exclusion because he has not participated in the creation of the child. In consequence the wife may be emotionally closer than the husband to the child, and this may threaten the couple's relationship. There are, however, existing parallels, for example, that of a step-parent, where relationships in which one parent is not genetically related to the child can work extremely well. We do not accept that the donor is *necessarily* a threat to the stability of the relationship.<sup>276</sup>

In the CNB document previously mentioned, Lecaldano dissociates himself from the position of D'Agostino, pointing out that the aforementioned difficulties need not prevail over the positive result of ART, that is the birth of a child. In particular, homologous fertilisation would not present any contraindications from an ethical standpoint since the biological parents are also the social parents. On the contrary the doubts about the asymmetry between the biological and social parents in the heterologous fertilisation would be more

---

<sup>275</sup> *Ibidem*, p. 134.

<sup>276</sup> Warnock, *A Question of Life*, cit., p. 21.

comprehensible, but not crucial because, once again, “the result attained is beneficial for all and does not harm any of the interests involved.”<sup>277</sup>

What deserves further scientific analysis, also according to Lecaldano, is the impact of ARTs on the child.

On this question he suggests:

[...] an adjustment and revision of the traditional and naturalistic notion of maternity and paternity on a biological basis. [...] It is in no way proven that the good or the interest of the unborn child, its need to be cared for, looked after, educated etc., are firmly ensured by the so-called biologically natural birth and, instead, endangered by artificial processes.<sup>278</sup>

Nevertheless, it remains legitimate to ask whether the asymmetry between the biological and the social parents can have consequences in the development of the child.

Here, once again, we have come across the concept of nature when we have compared the different forms of reproduction and, therefore of parenting. However both the word nature and the adjective natural have never shown up. In fact, the ‘normal’ way in which children are conceived, and the traditional family (mother, father and children) were almost taken for granted. In this regard, the Swiss Bioethics Commission in a document concerning ARTs highlighted the vagueness and ambiguity to which the adjective ‘natural’ is subject in this particular field.

In 1996 the Swiss Federal Council had issued the following definition of parenthood: “Nature intends every child to have a father and a mother. These figures have specific importance for the development of the child and are generally considered the legal parents. These fundamental principles of human nature must be represented when medically assisted procreation techniques are

---

<sup>277</sup> E. Lecaldano, *Implicazioni etiche nel campo della fecondazione assistita*, in AA. VV., *La fecondazione assistita, Documenti del Comitato Nazionale per la Bioetica*, cit., p. 185.

<sup>278</sup> *Ibidem*, p. 188.

used.”<sup>279</sup> The Swiss bioethical commission found itself divided precisely on the point relating to the normativity of nature: on the one hand, a minority of members of the Commission agreed with the statement of the Federal Council invoking the normativity of nature (in an ontological sense).<sup>280</sup> According to this reading:

The "natural law" cannot be traced to a set of physical laws, but constitutes the rational expression of human purposes attentive to deep aspirations. It is in this natural sense that a child has a father and a mother: the dynamism of reproduction is associated with the inclination of a man towards a woman, and vice versa, which promotes the stability of the couple and the care of the children welcomed and raised. To defend this type of normativity, in line with two thousand years of tradition, it is necessary to be respectful of people and, at the same time, to situate individual freedom within the normative framework of human nature.<sup>281</sup>

On the other hand, the majority of the members of the Commission pointed out the fallacy inherent in attributing a normative value to nature, arguing that to derive moral values from nature would mean considering in a negative way any human intervention on nature.

Nonetheless, as we have repeatedly said, the question cannot be resolved by establishing whether it is legitimate to carry out an action against nature in the sense of interfering with its dynamics and, where necessary, altering its course; on the contrary, it would be necessary to understand whether the word nature indicates in itself an objective aspect of the reality that can deliver a message to mankind. It is sufficient to think of the discovery made by the Scottish biologist Sir Alexander Fleming in the now distant 1928, when he

---

279 Conseil Fédéral, *Message relatif à l'initiative populaire «pour la protection de l'être humain contre les techniques de reproduction artificielle (Initiative pour une procréation respectant la dignité humaine, PPD)» et à la loi fédérale sur la procréation médicalement assistée (LPMA) du 26 juin 1996*, 96.058, FF 1996 III 197. Available online: [www.admin.ch/opc/fr/federal-gazette/1996/index\\_29.html](http://www.admin.ch/opc/fr/federal-gazette/1996/index_29.html), pp. 243-244.

280 Cfr. Introduction, chapter 1

281 Swiss National Advisory Commission on Biomedical Ethics, *Medically Assisted Reproduction. Ethical Considerations and Recommendations for the Future*, Opinion n. 22/2013. Available online: [http://www.nek-cne.ch/fileadmin/nek-cne-dateien/Themen/Stellungnahmen/en/NEK\\_Fortpflanzungsmedizin\\_En.pdf](http://www.nek-cne.ch/fileadmin/nek-cne-dateien/Themen/Stellungnahmen/en/NEK_Fortpflanzungsmedizin_En.pdf), pp. 46-47.



observed that a mould (*Penicillium*), developed accidentally on a staphylococcus culture plate, had created a bacteria-free circle around itself. After further experiments, he found that the mould culture prevented the growth of staphylococci even when it was diluted. He named the active substance penicillin. However, for this active ingredient to be used by mankind and, above all for it to be available in sufficient quantities, it was necessary to find which mould was the most suitable for the purpose. Thus, rotten vegetables and fruit became important objects of study, until a mould was found, above all that on a melon, that made it possible to increase the production of penicillin tenfold.

This example shows the ambiguity of the reference to nature in scientific discoveries. On the one hand, some discoveries aim to overcome nature but, on the other hand, science must look to nature itself and its laws in order to be successful. The current debate on vaccines and the relative polemic falls within the same line of argument, except that vaccinations are given preventively to healthy persons.<sup>282</sup> By the eighteenth century, when smallpox epidemics reaped the lives of a large number of the population, an inoculation process known as ‘variolation’ was carried out, although its rudimentary nature raised a considerable debate on its legality, more moral than scientific. This debate culminated in the sermon delivered by the Reverend Edmund Massey, preached one Sunday in 1722 at the church of St. Andrew’s Holborn in London and entitled *Sermon against the Dangerous and Sinful Practice of Inoculation* according to which the latent temptation of this practice was “to make his *Patient* let go his Integrity, throw off his Dependence upon Almighty God, and renounce that Allegiance which is justly due to him, as Creator and Governor of the World.”<sup>283</sup> According to this point of view, in fact, the

---

282 For an in-depth analysis see the document produced by Accademia dei Lincei entitled *I vaccini*, 2017. Available online: [http://www.lincoi.it/files/documenti/I\\_vaccini\\_def12May2017.pdf](http://www.lincoi.it/files/documenti/I_vaccini_def12May2017.pdf).

283 E. Massey, *A Sermon against the Dangerous and Sinful Practice of Inoculation*, St. Andrew’s Holborn, 8 July 1722. Available online: <http://tei.it.ox.ac.uk/tcp/Texts-HTML/free/N02/N02782.html>, p. 9.

inoculation would subvert the natural course of nature itself (in this case the will of God) and would not be considered a natural remedy in favour of nature itself.

To return to ART, we could conclude that the purpose of medicine is nothing other than beneficial and that medicine itself (and paradigmatically ARTs) in order to ‘overcome’ the obstacles posed by nature does nothing more than study its mechanisms to try to reproduce and improve them.

In 1984 the French *Comité Consultatif National d'Éthique* in a study on the ethical problems raised by ART had already emphasised that the quarrel between natural and artificial was not the most efficacious starting point for dealing with problems relating to ART and emphasised the need to clarify the term ‘artificial’ in this field.

Furthermore, an Ethics Committee whose task it is to study the conditions of scientific development, should not start its work in a spirit of *a priori* mistrust of anything artificial, as though it opposed the laws of nature. Its very mission implies dealing with artifice, even if its members individually may have other personal preferences or convictions. Artificiality is introduced into reproduction, which is a complex process by dissociation. This act, which so far was decided and accomplished together by a man and a woman, conducted to its term by the association of the embryo and that woman, can now be a decision which is taken separately and at a different time. The decision can be made, and deferred to a later time. Genetic parents may have no obligation to the unborn child. A mother may limit her responsibility to gestation. Children can be born with a single parent, or they may be born long after the death of their father. Genetic parenthood, gestational parenthood, educational and emotional parenthood, may go their separate ways. These virtual situations are far removed from simply controlling fertility which has existed for a long time and was mostly confined to birth control. They awaken in human beings the temptation to totally control procreation by creating birth when and where it would not have happened.<sup>284</sup>

It thus emerges that man’s approach to nature aimed at imitating and improving its functions is not without critical aspects. In effect, when it is a matter of legislating on such sensitive and continually evolving issues, the law should also draw a clear boundary in order to limit those drifts considered

---

284 Comité Consultatif National d'Éthique, *Avis sur le problèmes éthiques nés des techniques de reproduction artificielle*, Rapport n. 3, 23 October 1984. Available online: <http://www.ccne-ethique.fr/sites/default/files/publications/avis003.pdf>.

English version:  
<http://www.ccne-ethique.fr/sites/default/files/publications/avis003en.pdf>

contrary to public ethics and, at the same time, give space to scientific advances. The questions that arise are therefore more generally where it is possible to find the 'foundation' of this limit so that it can be universally recognised and, more particularly, whether subverting the course of nature is equivalent to exceeding its laws. The intervention of the Italian MP Cima (Green parties group), during the preparatory work for the Law N. 40/2004 on ART, clearly indicates the need to find an answer to these questions so that mankind is not at the mercy of scientific progress:

Awareness of the limits, the ethics of responsibility and the complex challenges that science faces today, tend to overcome an order of thought rooted in the Cartesian philosophy of knowledge: separation between body and mind, between rational and irrational, between subject and object, between nature and culture, separation based on the external and 'neutral' role of the observer. [...] Today more than ever, with the experiments in the field of genetics, we realise that observing already means modifying. Also, to answer the question asked by R.G. Edwards, who made possible the first 'test tube baby', "While it's there, why not look at what's inside the embryo?" perhaps we could say that it is very clear that observing is already modifying and that using genetic probes to read defects and predispositions in cells carries in itself the risk of a quality control eugenics that could lead to the rejection of any embryo that does not respond to the desired model. Not everything that *can be done* must necessarily *be done*. [...] The new reproductive technologies transform the natural process of conception and pregnancy into something artificial, separating the reproductive event from the union of the parents in the sexual act. They create the conditions in which procreative functions are artificially separated so that a number of different people can contribute at different times. In this way, we have a deflagration of the parental figures, since they do not correspond to a cultural elaboration and the social reality modelled on the natural process of reproduction is profoundly transformed, moreover, the ethical doubts legitimately raised are momentous.<sup>285</sup>

### *2.3. Surrogate motherhood and the importance of the genetic bond*

As widely discussed above, the human drama that infertility brings with it and its consequences were not unknown in ancient times and therefore it

---

<sup>285</sup> Report of the XII Italian permanent commission for social affairs, presented to parliament on 26 March 2002 Bill N. 47, *Norme in materia di procreazione medicalmente assistita*. Available online: [http://legxiv.camera.it/\\_dati/leg14/lavori/stampati/sk0500/relazion/00470a3.htm](http://legxiv.camera.it/_dati/leg14/lavori/stampati/sk0500/relazion/00470a3.htm).

would be naïve to think that attempts to remedy this condition have only been made with the advent of science and technological progress. In fact:

You could say that the surrogate mother of all surrogate mothers was Hagar, servant to Sarai in the Old Testament. Sarai, later known as Sarah, had fertility woes. So she pleaded with her husband — Abram, before he became Abraham — to lie with Hagar and do what needed to be done. [...] Her plan worked splendidly. Hagar conceived a son. Call him Ishmael. [...] If you are up on your Bible, you know that things did not then go swimmingly between the two women. Jealousies and peevishness erupted. Fast forward a few thousand years and we see that such kinks in human nature have not been entirely ironed out, a stubborn reality even if the technology of baby-making is vastly different from what it was in Sarai and Hagar's day.<sup>286</sup>

Although surrogacy is an increasingly common ART, it remains one of the most controversial from an ethical standpoint. Before dealing with this issue, it is opportune to briefly describe what it involves and who benefits from this treatment.

Surrogacy is a form of ART that becomes essential when due to a particular clinical situation, it is impossible for the woman to get pregnant and to give birth. In fact, this practice foresees the presence of a second woman who undertakes this task and, after the birth, hands over the child to the intentional parents. There are two types of surrogate maternity: the traditional form, where the surrogate mother is also genetically linked to the child, since she is fertilised with the gametes of the intentional father. The second type is known as gestational surrogacy, where there is no genetic link between the gestational mother and the child, since he/she was conceived through homologous FIVET (using the gametes of both the intentional parents) or heterologous FIVET (using

---

<sup>286</sup> C. Haberman, *Baby M and the Question of Surrogate Motherhood*, in New York Times, 23 March 2014. Available online: [http://www.nytimes.com/2014/03/24/us/baby-m-and-the-question-of-surrogate-motherhood.html?\\_r=0](http://www.nytimes.com/2014/03/24/us/baby-m-and-the-question-of-surrogate-motherhood.html?_r=0).

the gametes of one of the intentional parents and those of a donor outside the contracting couple).

From a legal standpoint, there are two forms of surrogacy: commercial, that is when a monetary reward is offered and ‘altruistic’, which foresees only the payment of expenses incurred by the gestational mother. In the majority of EU countries, the former is strictly prohibited and the parental contracts regarding the gestation and the offspring are considered null and void. For this reason, the transcription of the birth certificate also involves considerable problems.

Part of the critical literature describes the practice of surrogacy, in particular commercial surrogacy, as ‘trading in new-born children’.<sup>287</sup> Nonetheless, it is precisely the genetic link between the child and at least one of the two contracting parents that annuls this hypothesis, because “one cannot buy what one already owns.”<sup>288</sup> In fact, the “genetic connection to the infant, via the prospective social father’s sperm (and in some cases, the ovum of the prospective social mother) constitutes the infant as ‘their’ [the commissioners’] baby.”<sup>289</sup> This would mean that the genetic link is sufficient to give the parent parental rights over the child.<sup>290</sup> However, this assumption is not without concerns. In fact, on the one hand, it would make the bond between the gestational mother and the social parents even more complex in the case of heterologous procedures. In particular, as the author quoted above emphasises, we do not ‘possess’ our children, as if they were just any inanimate piece of property.

---

<sup>287</sup> See J.K.M. Hanna, *Revisiting Child-Based Objections to Commercial Surrogacy*, in «Bioethics», 24, 2010, n. 7.

<sup>288</sup> C. Overall, *Reproductive “Surrogacy” and Parental Licensing*, in «Bioethics», 29, 2015, n. 5, p. 355.

<sup>289</sup> *Ibidem*.

<sup>290</sup> *Ibidem*.

A recent study by the European parliament on the regulation of surrogacy in the Member States showed that amongst the major ethical problems relating to this practice, the fact that the “The gestational mother’s bond with the child is a physical one and cannot be ignored.”<sup>291</sup> In fact, while homologous fertilisation and, more markedly, heterologous techniques have altered the relationship between sexuality and procreation and introduced the distinction between biological and social parents, exclusively emphasising the genetic contribution, surrogacy includes a further (necessarily temporary) physical bond between the child and the parental figure. The aspect that the critical literature and the surrogacy agencies emphasise on this point is that “parenthood should be established on the basis of intentions, rather than biology or genetics.”<sup>292</sup> Once again, the arguments presented by those who are contrary to this kind of ART and all attempts to legislate it, are mainly based on the question of nature. It is true in fact that the contracting parents very often ask to the clinics the following question: “What happens if the surrogate mother refuses to relinquish the child?”<sup>293</sup> It is not possible to examine any legal answer to that, but we will point out the reasons behind it.

Nowadays, the most common form of surrogate maternity is gestational, because the absence of a genetic link between the child and the mother leads the latter to consider that child not her own. It is also generally recognised that the more this practice is regulated, the greater is

---

291 European Parliament’s Committee on Legal Affairs, *A Comparative Study on the Regime of Surrogacy in EU Member States*, European Parliament, European Union, 2013. Available online: [http://www.europarl.europa.eu/RegData/etudes/.../2013/.../IPOL-JURI\\_ET\(2013\)474403\\_EN](http://www.europarl.europa.eu/RegData/etudes/.../2013/.../IPOL-JURI_ET(2013)474403_EN) p. 23.

292 *Ibidem*.

293 See S.L. Roach Anleu, *Reinforcing Gender Norms: Commercial and Altruistic Surrogacy*, in «Acta Sociologica», 33, 1990, n. 1, p. 63.

the chance that the surrogate mother will experience her role as a professional service. Therefore, it should mean that signing a prenatal contract (subjected to an informed consent and financial compensation/expenses refund) would ease the bond between the surrogate mother and the child on a gestational level. However, already in 1984, the *Comité Consultatif National d'Éthique* emphasised the importance of this relationship, even though it was not possible to prove it scientifically.<sup>294</sup> As the sociologist Sharyn Roach Anleu underlines:

In a sense surrogacy is an extension of the kinds of nurturing related activities women have always performed, such as child-rearing, which have not always been recognized as compensable work, but treated as resulting from natural female emotions and instincts. Paid surrogacy breaks the myth of the maternal instinct; not only can women have babies and give them away, but they can also enter into a contract that actually rewards them for having a babies.<sup>295</sup>

On the one hand it would be possible to discuss the problem of informed consent, the terms of which cannot be fully known beforehand by neither the doctor nor the patient. In fact every pregnancy is different both on a medical and psychological level. Nonetheless surrogacy has been widely practiced since ancient times:

[...] it is only recently that studies have been undertaken to monitor its effects on surrogates, whether altruistic or commercial, and other interested parties. It is clearly a heart-wrenching experience for the surrogate, with many women declaring that they did not know how difficult it would be to 'give away' the children they had carried inside their bodies for nine months. They were, after all, 'their children'. Without the protection and nourishment provided by their wombs, the children would not exist. The child owes its existence to the surrogate.<sup>296</sup>

---

294 See Comité Consultatif National d'Éthique, *Avis sur le problèmes éthiques nés des techniques de reproduction artificielle*, cit.

Available online : <http://www.ccne-ethique.fr/sites/default/files/publications/avis003en.pdf>

295 Roach Anleu, *Reinforcing Gender Norms: Commercial and Altruistic Surrogacy...*, p. 72.

296 T. Frame, *Children on Demand. The Ethics of Defying Nature*, Sidney, New South, 2008, p. 152.

Moreover, “the issue of informed consent is also problematic due to the fact that long-term health outcomes, complexities that might arise in the relationship between the contracting parties or the social implications cannot be known in advance.”<sup>297</sup>

Returning to the question we began with, Susan Golombok, director of the Centre for Family Research in Cambridge, identifies four problems inherent in the families who went through the experience of the surrogate motherhood. Firstly, “intended parents must live through the 9 months of pregnancy with the uncertainty of whether or not the surrogate mother will relinquish the child. Furthermore, as the intended mother is not, herself, pregnant, prenatal bonding with the child may be absent or diminished.”<sup>298</sup> Secondly, “the intended parents must establish a mutually acceptable relationship with the surrogate mother during the pregnancy and ensure that this relationship does not break down.”<sup>299</sup> Thirdly, this kind of ART is the most controversial, therefore “intended parents may experience disapproval from family, friends and their wider social world.”<sup>300</sup> This would contribute to making their role as parents fragile, together with the fact that “greater difficulties could arise when the surrogate mother is also the biological mother of the child, because the intentional mother, who is neither the genetic nor the gestational mother, could feel more insecure in her maternal role.”<sup>301</sup> Finally, another factor that can raise some concerns is the relationship between the surrogate mother and the child once it is born:

It has been suggested that contact with the family as the surrogate mother may benefit the child by providing the child with a greater understanding of his or her origins. However, the on going involvement of the surrogate mother with the family

---

297 European Parliament’s Committee on Legal Affairs, *A Comparative Study on the Regime of Surrogacy in EU Member States*, cit., p. 25.

298 S. Golombok, *Modern Families. Parents and Children in New Family Forms*, Cambridge, Cambridge University Press, 2015, p. 122.

299 *Ibidem*.

300 *Ibidem*.

301 *Ibidem*, p. 123.



may have an undermining effect on the parenting of the intended couple. The most crucial question of all is how the children will feel about having been relinquished by the surrogate mother, especially in cases in which she is their genetic mother, and in cases in which she has received a large sum of money in return.<sup>302</sup>

The picture of surrogate motherhood portrayed by Golombok also sees in the genetic link between the surrogate mother and the child the origin of a closer relationship for both of them. Contrary to what was said at that time, in the *Warnock Report*, where we read that this type of ART could “be potentially damaging the child, whose bonds with carrying mother, regardless of genetic connections, are held to be strong, and whose welfare must be considered to be of paramount importance.”<sup>303</sup> The allusion to nature in the sense of a biological-genetic bond, aims to emphasise the gestational relationship between the mother who carries the child and the foetus and the possible consequences of their separation. This is a problematical element that should be added to those already highlighted by other forms of ARTs.

On this point, Golombok shows the positive results of an empirical research based on questionnaires aimed to understand the impact of the various types of ART (specifically gestational surrogacy and heterologous FIVET) in children aged up to nine years old<sup>304</sup>. In fact according to this study there are no significant differences amongst children born thanks to those techniques. This makes possible to conclude that “the gestational link is not essential for the positive family functioning”<sup>305</sup> admitting, however, the need to establish the impact of these techniques during the adolescence of the children. Moreover, it would be interesting to carry out an empirical analysis that compares the above sample with families whose children were adopted at birth and families who conceived their children traditionally.

---

302 *Ibidem*.

303 Warnock, *A Question of Life*, cit., p. 45.

304 For an in-depth analysis of the topic, see amongst others:

Golombok, *Modern Families. Parents and Children in New Family Forms*, cit., pp. 124-136.

305 *Ibidem*, p. 137.

### *3. The concept of nature in the definition of the status of the human embryo*

When *in vitro* fertilisation is at stake, one of the most controversial arguments is that relating to the *status* and the destiny of the embryos created in the laboratory and not transferred to the uterus of the woman. There are three reasons this happens: firstly, when the embryo presents visible defects such as absence of development, or when the pre-implant diagnosis shows the presence of a serious, untreatable genetic defect and, in both cases the embryo is discarded. The third scenario sees the cryo-conservation of the extra embryos, so that they can be transferred at a later date, if the first attempt with FIVET is not successful, or if the parents want to have other children in the future.

Well aware of the complexity of this topic and the vast number of issues related to it, here we are going to examine only the *status* of the embryos in accordance to the ARTs. Of course the *leit motiv* of the analysis will be the reference to the word nature. In particular, then we will show, as an example, the impact that a certain notion of nature has had on the British parliamentary discussions when the legislation on scientific research on human embryos was at stake.

#### *3.1. The relationship between the definition of the statute of the human embryo and nature, according to the bioethical committees*

The CNB and the Warnock Committee dealt in depth with the subject matter starting from the analysis of the ARTs. The *incipit* of the CNB document of 1996 relating to the identity and the status of the human embryo illustrates the problem as follows.

What is usually called the question of the "ontological status of the human embryo" has arisen essentially from the fact that certain biomedical practices (particularly in the field of assisted procreation and certain experimental research projects), even when they are intended to be lawful, can end up damaging and terminating the human embryos. Precisely this circumstance has led [people] to wonder if these practices are morally legal. Being a moral question, it makes sense in the context of the principles and moral norms accepted or discussed today. Among these figures, as a universally shared ethical principle (even if variously founded and specified), there is a duty not to harm human individuals and, even more so, not to suppress them. Now, the problem of the lawfulness of the aforementioned practices concerns (at least principally) the correctness of applying this principle, precisely, to the case of embryos. In essence, the demand for lawfulness (prescriptive plan) gives rise to a cognitive (or descriptive) type, as a preliminary point: "Is the human embryo a human individual?"<sup>306</sup>

The direct answer to this last question is very controversial and difficult. It has been tackled from many different perspectives because its complexity derives also from the fact that the most philosophical and ethical aspect cannot be separated from the biological and medical considerations. First of all, we want to suggest the analysis offered by the CNB for its efficacy and the practical aim that has animated its drafting, i.e. being a useful instrument at the legislative level.

In the first place, to understand if the embryo is to be considered a person, it is necessary to outline, albeit briefly, what person means. According to the CNB, two distinct philosophical conceptions can explain that word: the traditional one finds its greatest expression in the definition of Severino Boezio (480-526) who describes the person as *rationalis naturae individua substantia*<sup>307</sup>. He says 'substance' to oppose everything that is otherwise accidental (i.e.: changeable), in the sense that it indicates the permanence of its essence in time and space despite changes being necessary. For example, a dog remains such

---

306 Comitato Nazionale per la Bioetica, *Identità e statuto umano dell'embrione*, Presidenza del Consiglio dei Ministri - Dipartimento per l'informazione e l'editoria. Available online: <http://presidenza.governo.it/bioetica/pdf/25.pdf>, p. 7.

307 S. Boezio, *De duabus naturis et una persona Christi (Contra Eutichen et Nestorium)*, III, 1-3. In this case, Boezio uses the term *substantia* in the sense of substance that is existence in itself (*substare*) in a determinate and more elevated way than the simple objects.

from birth to death although in this timeframe mutations occur within him. However, although a dog, a rose and a person can be defined as a substance in the same way, the distinctive feature of the latter - writes Boethius – it is individual being and its rational nature. ‘Individual’ indicates both the internal unity of something and its uniqueness that is its difference not only from what is dissimilar in substance, but also from what is similar (unrepeatability). Thus, the peculiarity of the individual substance that is the person consists in its nature, in the sense of essence, that is:

[..] of a concrete individual endowed with a certain ontological nature, which manifests itself in a series of capacities, activities and functions (which can undoubtedly be considered as embodying its rationality), but that nature cannot consist just in them. Therefore a certain concrete individual can possess the rational nature (and be with that same person) even without manifesting all, always and in the maximum degree those characteristics.<sup>308</sup>

The second philosophical conception of a person can be defined as ‘functional’ in the sense that what defines a person is a set of very precise qualities, such as a certain capacity for action, the use of reason, language, etc. It is precisely from this definition that the question of whether or not there should be a difference in the treatment of an embryo, a foetus and a newborn child is more problematic. The moral philosopher Peter Singer, who has long been involved in these issues, espouses this second vision of a person according to which rationality, autonomy and self-awareness are necessary features of a human person and their degree of development means that an embryo certainly cannot be considered a person, but also a new born child cannot be the same as an adult person and therefore, “Killing them therefore, cannot be equated with killing normal human beings, or any other self-conscious beings.”<sup>309</sup> The

---

308 Comitato Nazionale per la Bioetica, *Identità e statuto umano dell’embrione*, cit., p. 9.

309 P. Singer, *Taking Life: Humans*, in *Practical Ethics*, Cambridge, Cambridge University Press, 1993. Available online: <http://www.utilitarian.net/singer/by/1993----.htm>, pp. 175-176.

consequence drawn by the CNB, referring to a functional notion of the person, states that:

Since a machine can exercise the functions to which the person is *reduced* in varying quantities and in different degrees, it follows that one can be more or less a person, that one can become or cease to be a person, and that while it is possible that some human beings are not persons, they can be instead (albeit to a small extent) various animals.<sup>310</sup>

In the past, the characteristics of the person were based exclusively on morphological-functional descriptions, nonetheless the progress of genetics and, in particular, the discovery of DNA has made it possible to consider the latter as “a depositary of those characteristics that accompany every living person from the first to the last moment of their story.”<sup>311</sup> Specifically:

Every embryo derived from the fusion of human gametes possesses from its zygotic structure a DNA that contains specifically human sequences. These are biological data that are not controversial so the embryo has a human nature from the conception, also because the DNA is the bearer of a development programme that (if the embryo is implanted in the maternal uterus) will lead to the formation of a complete human individual, or unusually, more than one human individual (in other words, development is endogenous and could not lead to different outcomes).<sup>312</sup>

Precisely for this reason, one of the most controversial ethical problems is that of establishing whether and how far it is legitimate to use human embryos for scientific purposes. There are two positions: the first indicates the presence of personal life from the moment of fertilisation since the product of this event carries in itself the human imprinting (in this case the DNA). For this reason, experimentation on embryos would generally be prevented at any stage of development. On the contrary, the scientific community generally agrees in establishing the individual character of the embryo following the appearance of

---

310 Comitato Nazionale per la Bioetica, *Identità e statuto umano dell'embrione*, cit., p. 9.

311 *Ibidem*, p. 11.

312 *Ibidem*.

the “primitive streak” (around the fourteenth day after fertilisation), that is, when the embryo loses its duplicative capacity and the formation of the nervous system begins.

The Warnock Committee, after describing the formation of the embryo and stating that the answer to the question about whether the embryo could be considered a person is both complex and subject to many criticisms, decided to answer to the “more practical” question: “*How should the human embryo be treated?*”<sup>313</sup> On the one hand, the main argument against the use of human embryos for research is based on the fact that since these are potential human beings, it is necessary to grant them the same *status* as a child or an adult. In this case, therefore, when the *in vitro* fertilisation is at stake, every embryo produced should be transferred to the uterus of the woman, in order to offer them the possibility of development. On the other hand, those who defend the research on human embryos emphasise the fact that the embryos are just a group of cells, which, since they have not been implanted into the uterus, cannot develop further. In the light of this, the Warnock Committee, while recognising that human embryos cannot be considered like a child or an adult (and therefore they are not entitled to be protected by the right to life) states that it is in any case necessary to grant them some legal protection.<sup>314</sup>

### 3.2. *The role of nature in the definition of the statute of the human embryo in the British legislation*

Between 1989 and 1990 the British parliament discussed the *Human Fertilisation and Embryology Act 1990* (HFEA).<sup>315</sup> In her work, the

---

313 Warnock, *A Question of Life*, cit., p. 60 (italics in the original).

314 *Ibidem*, pp. 58-69.

315 Once the *Human Fertilisation and Embryology Act 1990* was passed, the *Human Fertilisation and Embryology Authority* was set up, a *unicum* in Europe, with the duty of establishing the guidelines for research on human embryos and approving and monitoring fertility clinics in the UK. The Authority also offers information to those interested in fertility treatments and to those who have donated gametes or embryos for the

anthropologist Sarah Franklin describes the debate that aimed to establish the moment up to which the human embryo could be considered a bundle of cells and not yet a human person. The choice to take into account that Act of the parliament depends on the fact that, during its discussions, the reference to nature was central in establishing when the embryo was to be considered an individual, and therefore when to limit experimentation on it.

As Franklin writes, during the discussions “‘natural facts’ such as the primitive streak were seen to provide the neutral, impartial and objective facts of the matter upon which legislation should properly be based.”<sup>316</sup> In particular, the primitive streak indicates “a marker, a natural dividing point, which would serve as a basis for a legislative distinction between permissible and impermissible research. A ‘boundary’ found in ‘nature’ and duly classified by biological science.”<sup>317</sup>

It is precisely this definition that is challenged by ARTs and by the British parliament itself. In this case, since nature is ‘assisted’ by man it becomes:

[...] *a mediated authority*, a partial foundation, and then in need of further ‘assistance’ by the law to confirm its certainty. Nature is thus doubly mediated: it is interpreted by its assistants, the scientists and clinicians whose expert advice was the basis for parliamentary decision-making, and it is then rendered arbitrary by the law once its ‘design’ has been revealed. Thus the law makes residual what it claims as its foundation: it renders uncertain the very premise of its certainty.<sup>318</sup>

---

purposes and the activities regulated by the *Human Fertilisation and Embryology Act*. Over the years, this act was amended and culminated in the *Human Fertilisation and Embryology Act 2008*, which is currently in force. However, the sections 3 (3a) relating to the fact that the human embryo cannot be kept alive or used for research purposes after the appearance of the primitive streak remains unchanged. Therefore, the analysis reported has not lost its cogency.

316 S. Franklin, *Making Representations. The Parliamentary Debate on the Human Fertilisation and Embryology Act*, in J. Edwards, S. Franklin, E. Hirsch, F. Price and M. Strathern, *Technologies of Procreation. Kinship in the Age of Assisted Conception*, London, Routledge, 1999, p. 135.

317 *Ibidem*.

318 *Ibidem*, pp. 135-136.

That is nature itself. Consequently, Franklin emphasises this twofold process: “the displacement of ‘natural facts’ by social decision-making (the period of fourteen days), and the displacement of social facts by biology. In some cases, the authority of nature has been completely lost, as in elucidation of ‘the meaning of mother’”<sup>319</sup> since the number of parental figures has increased (biological mother, social mother, gestational mother).

Hence the ‘natural facts’, such as the primitive streaks, once they have become legal boundaries, are considered like conventions. In other words, we could say that nature falsely assumes a normative value. In fact, biotechnological progress has now opened up the possibility of prolonging the permanence of a human embryo in the laboratory and therefore the law of fourteen days has once again become a moot point. As remerged from a recent article in *Nature*:

Revisiting the 14-day rule might tempt people to try to rationalize or attack the philosophical coherence of the limit as an ethical tenet grounded in biological facts. This misconstrues the restriction. The 14-day rule was never intended to be a bright line denoting the onset of moral status in human embryos. Rather, it is a public-policy tool designed to carve out a space for scientific inquiry and simultaneously show respect for the diverse views on human-embryo research.<sup>320</sup>

This said, then:

Some might conclude from such developments that policymakers redefine boundaries expeditiously when the limits become inconvenient for science. If restrictions such as the 14-day rule are viewed as moral truths, such cynicism would be warranted. But when they are understood to be tools designed to strike a balance between enabling research and maintaining public trust, it becomes clear that, as circumstances and attitudes evolve, limits can be legitimately recalibrated. Any decision to revise the 14-day rule must depend, however, on how well any proposed changes can uphold the

---

319 *Ibidem*.

320 I. Hyun, A. Wilkerson and J. Johnson, *Embryology Policy: Revisit the 14-day Rule*, in «*Nature*», 4 May 2016. Available online: <http://www.nature.com/news/embryology-policy-revisit-the-14-day-rule-1.19838>.



rule's two chief goals: supporting research and accommodating diverse moral concerns.<sup>321</sup>

It is therefore possible to conclude that in the definition of the statute of the human embryo, when the concept of nature intervenes, it becomes a convention/limit set by man himself, inspired (but no more than that) by a biological phenomenon (like the fourteen-day rule) and therefore attributes greater incisiveness to this convention. In fact, precisely because the rule draws only inspiration from the biological nature it can be reviewed and adjusted whenever man feels it is necessary.

#### *4. Adoption by same-sex couples: nature and parenthood*

The analysis conducted so far shows how the structure of parenthood has radically changed, not only thanks to the intervention of reproductive technology, but also due to legislations aimed at modifying the conditions for establishing the potential parents' suitability for adoption. Once again, the concept of nature will be the *leitmotiv* of the following analysis aimed at understanding the link between nature and parenting, an issue that often emerges in debates concerning cases where parenting goes beyond the traditional model of the heterosexual couple. Here, the access to adoption procedures for same-sex couples will be considered exclusively according to the "nature-perspective" and will only tangentially take into account the psychological impact of those forms of parenting on the child's development.

##### *4.1. The criterion of 'imitatio naturae': special adoptions and same-sex adoptions*

The institution of adoption can be considered complex and variegated for the long tradition that precedes it and the various national legislation

---

<sup>321</sup> *Ibidem*.

systems that regulate it. The permanent trait of its evolution is its qualification as “a means to create family bonds through the fundamental relationship of filiation between persons who are not linked by a corresponding biological bond.”<sup>322</sup> It is sufficient to think that the Code of Hammurabi (approximately 2000 BC) carries traces of this institution, seen here as the passage of a person from one family to another<sup>323</sup> for the purpose of ensuring lineage. In ancient Rome, the practice of adoption had a mainly political aim: in fact, when a patrician aspired to a plebeian position he had to be adopted in order to acquire the new social status. This meant the loss of the rights and duties towards the family of origin, whose name was maintained in the form of adjective (for example, *Caesar Octavianus*). The influence of Christianity would later introduce changes to the practice of adoption as a gesture of charity, at a time when the sale and exposure of the infants was still a common practice. With Justinian those practises became unlawful. He also introduced the capital punishment towards those fathers who exposed their children and two types of adoption, *plena* and *minus plena*. As Monica Crotti describes:

Justinian’s legislation, under which women also had the right to adopt, providing they had lost their children and not by physical defect, was based on the principle *adoption imitator naturam*, that is, adoption must imitate nature. It therefore established that there must be at least eighteen years difference in age between the adopter and the adoptee: the adopter could already have other children, and it was forbidden to adopt the children of a concubine. [...] Justinian also distinguished between an *adoption plena*, which gave the adopter parental rights and eliminated all hereditary rights of the adoptee with regard to the family of origin, and *adoption minus plena*, under which these rights remained intact. The original ties of kinship and hereditary rights were added to those due under the adoptive relationship.<sup>324</sup>

---

322 M. Crotti, *Adottare e lasciarsi adottare*, Milano, Vita e Pensiero, 2006, p. 20.

323 For a more detailed analysis of the development of the institution of adoption over the centuries, see in particular: G. Sgueo, *L’istituto dell’adozione nella storia. Dal diritto Romano agli ordinamenti moderni*. Available online: <http://www.diritto.it/docs/23487-l-istituto-delladozione-nella-storia-dal-diritto-Romano-agli-ordinamenti-moderni>; Crotti, *Adottare e lasciarsi adottare*, cit.

324 *Ibidem*, p. 30.

In the Middle Ages, the practice of adoption waned, because it interfered with the feudal hereditary rights, but it remained a necessity because of the growing number of abandoned children, whose needs were only met by the religious movements. In this context, the regulation of the institution of adoption took backward steps, being deprived of any juridical structure and reduced to a mere agreement between the parties. It would be under Napoleon Bonaparte that this practice returned to being part of the provisions of the civil code on which the civil codes of the European countries were based. In fact:

[...] the personal intervention of Napoleon Bonaparte reintroduced adoption to deal with the numerous war orphans: the decree of December 7th 1805 establishes that the children of soldiers and officials who died in Austerlitz are considered his adoptive children, also, the orphans of all wars were “adopted by France herself”, recognising in the homeland the maternal figure. The Napoleonic Code considerably influenced the formulation of the first Italian Civil Code, in 1865, which, with regard to adoption, transferred into Italian legislation the criteria of French legislation. The adopter must be at least fifty years old; the adoptee must be over eighteen years old and remains part of the family of origin by right [...]. The institution is still conceived to meet the wishes of the adopter, expressing a ‘fictitious’ or ‘artificial’ bond that did not in effect alter the status of the person, inasmuch as the bonds with the natural family still existed.<sup>325</sup>

In Italy, the legal institution of affiliation was only introduced in 1942 and it foresaw that:

[...] the person to whom a public assistance institution has entrusted a minor for three years or who has raised the minor for three years without the child being officially entrusted to them, can apply for fostering, that is for the minor to be attributed a position similar to that of a biological child, assuming at the same time, the powers and the duties of parental authority relating to the minor.<sup>326</sup>

The legal institution of adoption, as it is meant in Italy today, was only recognised in 1967 when the law N. 431/1967 (known as the special adoption law for children aged up to eight) was introduced. Thanks to this law “the *ratio* of adoption, which consists in giving a family to the minor who does not have

---

325 *Ibidem*, pp. 32-33.

326 D. Pastina, «Affiliazione», in *Enciclopedia italiana*, Appendice II, 1948. Available online: [http://www.treccani.it/enciclopedia/affiliazione\\_%28Enciclopedia-Italiana%29/](http://www.treccani.it/enciclopedia/affiliazione_%28Enciclopedia-Italiana%29/).

one, rather than providing an heir or protecting a heritage, was expressed in the [Italian] legislation.”<sup>327</sup> This law was followed by Law N. 184/1993, which updated the legislation on adoption, eliminated the age limit for adoptable minors, lowered from five to three the number of years of marriage required by law in order to become adoptive parents, foresaw the adoption of foreign minors and recognized legal status to foster care. These measures, like the amendments to Law N. 149/2001, primarily focused on the rights of abandoned children and

[...] the criteria followed by the law were expressly intended to mould the adoptive family in the image and likeness of the “natural” family, therefore reproducing within it the distance in years “normally” existing between children and the biological parents. Underlying this option is the idea that the model of the biological family, in its standard connotations, represents the best guarantee for realising the interests of the minor, with regard to affective and educational potential.<sup>328</sup>

Thus, the legislator adopted regulations on adoption designed to recreate a family situation similar to a natural one, applying the so-called procreative model: “In effect, the legislator evaluates the interest of the minor according to the difference in gender of the adopters, implicitly considering heterosexuality a personal quality necessary for the purposes of adoption.”<sup>329</sup>

In fact, the Italian laws on adoption (like the majority of the western countries) are based on this principle, which can be set aside only in exceptional cases, to safeguard the best interests of the minor.<sup>330</sup> Amongst these exceptions

---

<sup>327</sup> Crotti, *Adottare e lasciarsi adottare*, cit., p. 35.

<sup>328</sup> M.R. Marella, *L'adozione dei minori oltre il canone dell'imitatio naturae: l'impatto dei nuovi modelli di genitorialità sulla disciplina vigente*, in «Cardozo El. L. Bull.», 6, 2000, n. 2. Available online: <http://www.jus.unim.it/cardozo/review/Persons/Marella1.html>.

<sup>329</sup> D. Ferrari, *Status giuridico e orientamento sessuale*, Rende (CS), Primiceri, 2015, p. 107.

<sup>330</sup> The international panorama is variegated, in fact, same-sex adoptions are considered legal in twenty-nine countries: Andorra, Argentina, Australia [only some states], Austria, Belgium, Brazil, Canada, Columbia, Denmark [including Greenland and the Faroe Islands], Eire, Finland [not yet in force], France, Holland, Iceland, Israel, Luxembourg, Malta, Mexico [only in some regions], New Zealand, Norway, Portugal, Spain, South Africa, Sweden, United Kingdom [including the Commonwealth and those under British law: Bermuda, Gibraltar, Gurensy, Isle of Man, Jersey, Pitcarin Islands], Uruguay and the USA) and four countries in which only stepchild adoption is permitted (Estonia, Germany, Italy [where it must be evaluated case by case] and Switzerland [not

there could be the difference in age between the adoptive parents and the child and the relationship between the potential adoptive parents. Indeed, it is necessary to repeat that “in the majority of the civil codes the principle of Roman law *adoption naturam imitator* (adoption imitates nature) has set a legislative barrier that prevents adoption when the adoptee is not old enough to be considered the natural child of the adopter”<sup>331</sup>. Generally, this is translated into a minimum difference of 18 years and a maximum between 40 and 50.

The parameter according to which adoption imitates nature has also led the Italian legislator to exclude the access to singles and same-sex couples to the procedures aimed to verify their suitability as adoptive parents.

Nonetheless:

[...] in relation to the requisite of the matrimonial bond for couples who intend to apply for adoption and the age limits to be respected between the adopters and the adoptee, following the intervention of the Constitutional Court, some of the more rigid conditions of the law have been eliminated, by reason of the pre-eminent and effective interest of the minor.<sup>332</sup>

On the one hand, in fact,

same sex adoption represents a situation as far as possible from a law, such as the one in force, based on the principle of *imitation naturae*, where the reference to ‘nature’ is to be seen in the sense [...] of a total adhesion to the model of conventional family (legitimate family, based on marriage, the expression of the heterosexual and patriarchal paradigm) with the aim of preserving it.<sup>333</sup>

However, it should be recognised that:

---

yet in force].

331 W.J. Wadlington, *Minimum Age Difference As a Requisite for Adoption*, in «Duke Law Journal», 1966, p. 394.

332 B. Liberali, *L’adozione dei single e delle coppie omosessuali*, in *La famiglia davanti ai suoi giudici*, Atti del Convegno annuale dell’Associazione «Gruppo di Pisa» (Catania, 7-8 June 2013). Available online: <http://www.gruppodipisa.it/wp-content/uploads/2013/05/LIBERALI.pdf>, p. 27.

333 Marella, *L’adozione dei minori oltre il canone dell’imitatio naturae: l’impatto dei nuovi modelli di genitorialità sulla disciplina vigente*, cit.

[...] to consider generally and abstractly the sexual orientation only in relation to the homosexual couple, or stating that the homosexual orientation makes couples unfit to adopt, would compromise the assessment of prospective parents' suitability which must take into account the circumstances of the specific case, in order to safeguard the protection and the best interests of the child.<sup>334</sup>

This approach cannot, then, avoid a historical-sociological consideration that sees the traditional family model increasingly flanked by new types of family and methods of procreation. As Daniele Ferrari stresses:

The progressive neutralization of the sexual orientation with respect to the definition of parental roles has been determined by the obsolescence of the monopoly of the procreative model and therefore of the traditional binomial maternity-paternity. In fact, the need to protect the child's interest in maintaining established family ties has led jurisprudence to guarantee the condition under examination, considering the homosexuality of the parent irrelevant or protecting their subjective choice to become a parent regardless, in the case of couples, the gender identity or diversity between parental figures.<sup>335</sup>

In particular, it is necessary to take into account all the adoptions that take place abroad and their need to be regulated *ex post* in a country where the legislation does not foresee same sex adoptions as in Italy. In this case, in fact, "Article 44 of the Law N. 184/1983, derogating from the conditions of adoptability of the minor generally foreseen, identifies alternative requisites to the conjugal status, mitigating the criterion *imitation naturae*, which is required for the adoptive relationship."<sup>336</sup> Amongst these conditions the sexual orientation is not specified, for this reason "homosexual persons can adopt minors in particular cases, not recognising any title of belonging to an institutionalised social group, but only the suitability of the subject to realise the interest of the adoptee."<sup>337</sup>

---

334 Liberali, *L'adozione dei single e delle coppie omosessuali*, cit., pp. 22-23.

335 Ferrari, *Status giuridico e orientamento sessuale*, cit., p. 117.

336 *Ibidem*, p. 119.

337 *Ibidem*, pp. 119-120.

It is precisely the protection of the best interests of the minor that informs the regulations on adoption. In particular, when it comes to assess the parental suitability, the sexual orientation should be relevant only if it is detrimental to the filial relationship.

These considerations are not intended to confute the naturalness of the traditional parental bond, or to reduce its importance concluding that the paradigm of *imitatio naturae* on which the legal institution of adoption is based, should be considered out-of-date. Nonetheless, the first parameter for establishing parental suitability is the best interests of the child, which can never be set aside. Therefore, each time, it is necessary to examine case by case in order to assess the application of the aforementioned parameters. As Antonio D'Aloia emphasises:

The bond between filiation and 'heterosexuality' is truly and objectively 'natural', and I do not know whether we can completely overlook its natural presuppositions, to become just an artificial technique. The methods and procedures of non-natural filiation, adoption and medically assisted procreation, do not refute this assumption, but simply partially set it aside; while it is far from proven that the 'legal' removal of the double parental figure (from the sexual standpoint) is irrelevant with regard to the need for a harmonic development of the personality of the minor in all its aspects. [...] Obviously, we are not questioning the sensitivity of the educational and affective capability that homosexual individuals or couples can show and have to an extent not unlike that of a heterosexual subject or couple. The problem is more generalised and concerns the suitability of a parental scheme of this type (also in light of the social and cultural context) in relation to the process of formation of the personality of the minor, and the perplexities and uncertainties remain strong and not completely resolved, as emerges from the analysis of (indeed not without contrasts) psychopedagogical scientific literature.<sup>338</sup>

---

338 A. D'Aloia, *Omosessualità e Costituzione. La tormentata ipotesi del matrimonio tra persone dello stesso sesso davanti alla Corte costituzionale*, in R. Bin et al., *La «società naturale» e i suoi «nemici». Sul paradigma eterosessuale del matrimonio*, Torino, Giappichelli, 2010, p. 107.

## 5. *Who am I and where do I come from? Seeking one's biological origins*

Each person comes to a point in his life when the questions “who am I?” and “where do I come from?” become, for various reasons, important. The answers to these questions, apart from not always being evident, can touch upon various degrees of depth according to the reasons that lie behind them and the circumstances in which we came into the world. Here we intend to examine a first level of answer that involves the natural origins of each of us: the gestational process and the birth. These circumstances may not have been happy, as in the case of an undesired child or one whose biological parents were unable to care for him, or on the contrary favourable, but complicated by the technological intervention, as in the cases of ART. Precisely this latter hypothesis:

[...] interrogates the conscience of everyone, even those who do not access and will not access these techniques, since it challenges our anthropological identity and our interpersonal relationships at the same time. The category of the ‘child’, which concerns every human being (each of us may or may not become a father and mother, but cannot cease to be the child of someone, cannot express their identity by declining their ‘origins’), takes on a new connotation: what does it mean to be a child of man in the technological era?<sup>339</sup>

We could also ask what it means to be an adopted son or daughter.

Without wishing to confuse ART and adoption, one undeniable element is common to both practices: the fact that the biological parents and the social parents are not the same persons. This asymmetry may lead to difficulties in constructing a personal identity, which, as Frame states, is constituted by the interaction of many factors and, above all, is in constant development. In particular, he describes this process as follows:

---

<sup>339</sup> Pessina, *Bioetica. L'uomo sperimentale*, cit., p. 113.



I'm the only person able to answer the fundamental question that is asked by every human being at some point in their existence: 'Who am I?' Although family and friends may claim some insight from the outer persona of the man or woman they believe they know, I am the only person fully acquainted with my inner being and I alone can give an answer that is both adequate and truthful. But it is not a complete or final answer, because my sense of identity is drawn from an ever-expanding array of sources [...]. First, I perceive that I am unique and unparalleled in human history: that there is no-one else like me anywhere in the world. Second, I recognise that parts of me are common to all human beings: certain human characteristics are universal and, in that, I am like everyone else. Third, I am aware that I resemble my biological parents and from them gain a unique genetic inheritance. Fourth, I'm conscious that I am also formed and influenced by every person I encounter in life and that I am also marked by the universal experiences that influence every human life.<sup>340</sup>

Of the four factors listed by Frame that contribute to the formation of the personal identity, the last two are the ones we will consider in the following examination. To the question "whose child are you?" everyone will undoubtedly answer by indicating the persons who took care of him/her from childhood and who, in the majority of cases, are the biological parents. There are cases, however, in which the carers were relatives, friends, or persons who got a parental order in the case of death, abandonment or incapacity from birth or at a later date. These situations have been formalised as adoptions, fostering and so on. Then, there are cases in which the biological parents do not correspond to the social parents (the people who effectively cared for the child) because the reproductive technique involved made use of the gametes donated by a person outside the contracting couple.

Franklin, from an anthropological standpoint, highlights the way in which precisely the scientific progress in the biotechnological field is one of the factors that has challenged the traditional notion of parenthood, defined as a blood relationship: "The fact of having been brought into being by technology also determines the nature of the embryo as kinship entity. The new kinship is one that can be controlled from within: it is not only assisted nature, it is nature

---

<sup>340</sup> Frame, *Children on Demand. The Ethics of Defying Nature*, cit., pp. 53-54.

redesigned. It is a nature that *requires* intervention, as well as legal clarification, in order to express itself.<sup>341</sup>

In fact, thanks to the ART, it is the embryo itself that carries a parental bond, which could be called a blood kinship, but does not necessarily correspond to the factual one. Taking into consideration the work of Sarah Franklin regarding the role of the word nature in the definition of the statute of the human embryo, widely discussed in the British parliament during the nineties and mentioned above, the anthropologist Janet Carsten emphasises that:

[...] the kinship discussed by members of the British parliament differed sharply from anything anthropologists would readily recognize as kinship. In particular, the focus on the embryo itself as an individualized, 'pre-relational' entity, divorced from its social context (revealed especially in the scarcity of references to its mother), suggests that embryos came to constitute a new type of kinship entity. [...] here the embryo embodied a kind of 'kinship yet-to-be', made possible by science and technology rather than nature.<sup>342</sup>

This would be a kinship based on the certainty of the technological progress that leaves open the question of how the growing space occupied by the biomedical sciences in human reproduction will also affect the parental relationships involved.<sup>343</sup>

Undoubtedly, the difference between the biological and the social parent will always pose a question regarding one's origins that lies, more or less consciously, in the possibility of tracing one's biological roots. In fact, it is not necessary to be expert biologists or geneticists to glimpse physical and character similarities between parents and children, which often translate into the reason of a certain feature or behaviour. However, children adopted or conceived thanks to the heterologous fertilisation are not able to carry out this process

---

341 Franklin, *Making Representations. The Parliamentary Debate on the Human Fertilisation and Embriology Act*, cit., p. 160,

342 J. Carsten, *After Kinship*, Cambridge, Cambridge University Press, 2004, pp. 171-172.

343 *Ibidem*, p. 173.

within the family nucleus: the only possibility they have is to leave their home and go in search of their biological parents.

The experience of E. Kay Trimberger, professor of gender studies and adoptive mother, who has supported her son's search for his biological parents highlights the importance that the natural filial bond can have in the development of the personality:

When I adopted in 1981, I believed — like many social scientists and adoption professionals at that time — that nurture was everything, each infant a blank slate awaiting parental inscription. Even when Jamal was a young child, I recognized that this idea was too simple, that my son had many attributes different from those of anyone else in my family. Still, I was surprised by these reunion revelations. The adoption theory that I'd absorbed over the years never mentioned genetic heritage. Jamal's difficulty finding his way as a young adult, I was told, might stem from a number of psychological factors. First was the loss of a birth mother with whom he had bonded in utero — a “primal wound” that supposedly made it difficult for him to bond with an adoptive mother. [...] More compelling was the idea that he had been affected by the foetal environment of a stressed teenage birth mother, who probably drank and smoked. This, possibly combined with a weak sense of self deriving from a loss of ethnicity and family history, especially prevalent in the transracially adopted, might help to explain why he chose a life outside the mainstream, one that for many years involved heavy marijuana and alcohol use.<sup>344</sup>

These evidences led Trimberger towards a scientific research aimed to look into the relationship between genetics and adoption, after which she was forced to admit that:

[...] Perhaps I hoped to find that nature is everything, and that I could let go of my parental guilt for his problems. As a social scientist with little biological education, I began by looking at science journalism, then turned to the original research. I found that genetics alone could explain neither Jamal's positive behaviour nor his addiction; genes provide only probabilistic propensities, not predetermined programming. They provide probabilities for behaviour and risk factors for disease but do not indicate whether any individual will sustain a behaviour or succumb to a particular mental or physical disorder, or how severe the disease might be.<sup>345</sup>

---

344 E.K. Trimberger, *Adoption and Genetics: Implication for Adoptive Parents*, in «The Huffington Post», 1 April 2014. Available online: [http://www.huffingtonpost.com/e-kaytrimberger/adoption-and-genetics-imp\\_b\\_4682667.html](http://www.huffingtonpost.com/e-kaytrimberger/adoption-and-genetics-imp_b_4682667.html).

345 *Ibidem*.

Then, taking into consideration the legal standpoint, the norms of the various States regarding the access to the birth information by adopted persons are not homogeneous and the situation is further complicated when one or both the biological parents refused to be named at the time of birth. In fact, the right to know one's origins is not always considered paramount, when it clashes with the right to privacy of the biological parents.

As Silvia Favelli writes, the diversity of European laws:

[...] can be traced back to the theory according to which the European legal landscape is divided into two models of reference, characterized one by the 'idea of obligation' (German model) and the other by the 'idea of voluntariness' (French model). The first considers that the attribution of motherhood is a legal effect that automatically and inevitably springs from the fact of the birth (and the birth mother's wishes do not matter), while the second provides that the *status* of mother can never be established against the will of the woman.<sup>346</sup>

It remains that the laws on anonymous birth (which aim above all to protect the health of the woman and the child's right to life) and the relative impossibility of knowing information regarding the biological parents exist only in France, Italy and Luxembourg. In France and Italy the respective rulings *Odièvre v. France*<sup>347</sup> and *Godelli v. Italy*<sup>348</sup> were examined by the ECHR. In the

---

346 S. Favalli, *Parto anonimo e diritto a conoscere le proprie origini: un dialogo decennale fra CEDU e Corte costituzionale italiana*, in «Forum Costituzionale», 9 December 2013, Available online: [http://www.forumcostituzionale.it/wordpress/images/stories/pdf/documenti\\_forum/paper/0446\\_favalli.pdf](http://www.forumcostituzionale.it/wordpress/images/stories/pdf/documenti_forum/paper/0446_favalli.pdf), p. 2.

347 *Odièvre v. France*, ruling N. 42326/98. In this case, the applicant, abandoned at birth by her mother who had asked not to be named, appealed to the Court because she was unable to have full knowledge of her origins under the French legal system. However, the court judged the aims of this system, which were to safeguard the right to privacy of the mother and the right of the adoptee to know their origins, to be balanced, since France has appointed an institution that, on request of the adoptee, seeks out the anonymous mother and only if this last consensus reveals the identity to the child.

348 *Godelli v. Italy*, ruling N. 33783/09. In this case the appellant was abandoned at birth by the mother, who opted for anonymity. The appellant claimed an infringement of Article 8 ECHR, since it was impossible for her to trace her biological origins. The Strasbourg judges confirmed this infringement since Italian law considerably favours the right of the mother to anonymity, compared with the right of the child to know their origins. In line

remaining countries, as in the United States, the right to know one's biological identity is guaranteed from the time of coming of age and there are organisations and institutions prepared to deal with these questions.

Now moving the focus from the adoption to heterologous ART, it must first be noted that in this case an anonymous birth is not a possibility offered by any legal system. For example, in Italy Article 9.2 of the law N. 40/2004 clearly states that "the mother of the child born through artificial reproductive techniques cannot decide not to be named." Perhaps does it come from the idea that nature is more cogent than the birth mother's will? Apparently, there can be no second thoughts when this 'will' to become parents is the result of a conscious reflection before the conception itself. So, not only should nature take its course, but also the law should adapt to it by establishing the impossibility of separating biological and social parenting. However, it is quite impossible to apply this law because when it comes to register the birth at the register office the civil servant does not need any information about the way through which the child has been conceived, nor the mother has to inform the hospital on that at the time of the delivery.

Generally, however, the question of seeking the origins of children born through heterologous ART emerges in relation to the laws that protect the anonymity of the gamete donor. As Domenico Rosani states:

[...] the personal conditions of the child born through heterologous ART and of the adopted child, regardless of the case of anonymous birth, show considerable differences, so that easy parallelisms due to the - at least partial - absence of a genetic

---

with this ruling, the Constitutional Court (ruling N. 278/2013 declared the constitutional illegitimacy of Article 28, paragraph 7, of the law N. 184/1983, in the part in which does not provide the possibility for the judge to question, at the request of the child, the mother who asked to remain anonymous at the time of birth, for the purpose of a possible revocation of this secret. Pending the entry into force of a new law on the matter, the Court of Cassation, Section I civ., with sentence N. 22838/16 established the right of the adoptee whose biological mother claimed anonymity at the birth, to be able to access information concerning her origin once she was deceased.

relationship that both cases present must be avoided. The adoptee has often lived a part of his life with biological parents and was separated from them following procedures that are frequently litigious. These circumstances, which do not exist in the case of heterologous ART: the social mother gave birth to the child, and both her and her partner desired that child. On the contrary the gametes donor deliberately granted his gametes, aware that any child born would be the child of others.<sup>349</sup>

This is also why it is generally given more relevance to the search for the biological parents of adopted children, and not to the search for the identity of the donor of gametes. It should also be said that, until recently, the parents who had had children through ART procedures, generally did not tell them.<sup>350</sup> In one of her anthropological studies, Golombok, emphasises that:

when asked about their reason for secrecy, parents of children born through egg, sperm and embryo donation have said they were worried that their children would be upset, shocked and confused by the knowledge that they were not genetically related to one parent (or both parents). [...] The parents were also concerned about jeopardizing the positive relationship that existed between the non-genetic parent(s) and the child, fearing that their child would no longer love the non-genetic parent(s) if they were to find out.<sup>351</sup>

So the secrecy is aimed, not so much at protecting their family from the judgment of society, but rather at maintaining the balance on which the family is grounded avoiding the risk that the truth carries with it of implications difficult to bear.

The legal rules concerning the search for one's biological origins, when this involves the release of information regarding the gamete donor, varies from country to country and clearly none of them obliges parents to reveal the secret regarding the way the offspring was conceived. For example, the United States does not have any *ad hoc* legislation at federal or state level governing this matter. Indeed, it is up to the clinics regulating the release of data concerning

---

349 D. Rosani, *Il diritto a conoscere le proprie origini nella fecondazione eterologa: il caso italiano e l'esperienza estera*, in «BioLaw Journal. Rivista di BioDiritto», 2016, n. 1, pp. 221-222.

350 See Golombok, *Modern Families. Parents and Children in New Family Forms*, cit., pp. 98-102.

351 *Ibidem*, p. 99.

gamete donors. The Donor Sibling Registry<sup>352</sup> (which has more than 53,000 members) was created for this reason. It is a web page belonging to a non-profit organization founded by Wendy Kramer and her son Ryan born through heterologous ART, where both gametes donors and those born through those techniques can subscribe to find their donor (and *vice versa*) and any ‘siblings’ with whom they share part of their genetic heritage. Sweden was the first country to ban the right to anonymous donation of gametes, in 1985, followed by Austria, Switzerland, the United Kingdom, Norway, the Netherlands, New Zealand and the states of Western Australia and Victoria.<sup>353</sup> However, unlike adoption, in most legal systems, the recognition of the right to know one’s origins, seems less cogent than the protection of the donor’s anonymity. Marina and Carlo Casini indicate the following reasons for this choice:

It is clear that the donor’s anonymity facilitates the donation of gametes by people (the so-called ‘donors’) who normally – even when assured that they will not incur into legal battles – would prefer to avoid any chance of being traced by the child as biological parents. On the other hand, the right to know one’s biological parents significantly reduces the supply of gametes for heterologous ART and exposes donors to the possible dreaded inconvenience of being one day sought after for what in reality is beyond any legal provision, they are the biological father or biological mother. On the other hand, it is true that ‘donating’ gametes is not like donate an organ, tissue or a cell, but rather offering the possibility of conceiving a human being, a child.<sup>354</sup>

One could add that all children also have the same rights. However, apart from the legal aspect, which, in this case, is certainly not the most relevant aspect of the issue, it should be said that ARTs and the regulation of adoption must necessarily meet the fundamental needs of each child. Needs that also relate to one of the most “natural” aspects of the human being: one’s origins.

---

352 Available online: <https://donorsiblingregistry.com>.

353 See, G. Cohen, T. Coan, M. Ottey and C. Boyd, *Sperm Donor Anonymity and Compensation: An Experiment with American Sperm Donors*, in “Journal of Law and Bioscience”, 3, 2016, N. 2.

354 M. Casini and C. Casini, *Il dibattito sulla PMA eterologa all’indomani della sentenza costituzionale n. 162 del 2014. In particolare: il diritto a conoscere le proprie origini e l’«adozione per la nascita»*, in «BioLaw Journal. Rivista di BioDiritto», 2014, n. 2, p. 146.

<sup>122</sup> *Ibidem*.

Therefore, we could conclude, once again with the words of Marina and Carlo Casini that:

[...] if it is true that the biological dimension does not exhaust the whole of man, it is equally true that corporeity is its fundamental value: through our body we can return to those who have preceded us and from whom we descend; the body reminds us that we are just one link in a long chain, the new chapter of a new story that has its roots in the past.<sup>355</sup>

## Conclusions

The question of question for mankind – the problem which underlies all others, and is more deeply interesting than any other – is the ascertainment of the place which Man occupies in nature and of his relations to the universe things. Whence our race has come; what are the limits of our power over nature, and of nature's power over us; to what goal we are tending; are the problems which present themselves anew and with undiminished interest to every man born into the world.<sup>356</sup>

---

355 *Ibidem*.

356 T.H. Huxley, *Il posto dell'uomo nella natura*, Milano, Feltrinelli, 1961, p. 46.



This study has shown how the words of Huxley, published in the now distant 1863, are timeless and can still be considered very topical. Nonetheless, the technological progress together with the following new cultural paradigms have demanded a more thorough investigation of the words nature/natural used and, at times abused, when the new forms of parenting are at stake.

This study has highlighted the polysemy of the word 'nature' and pointed out three levels of understanding of this concept: the first can be defined as 'common sense', a second level has illustrated the historical and philosophical evolution of that word. The last level has examined the practice and the reasons why the word nature and the adjective natural have found space in the analysis of new forms of parenthood. Generally speaking, the word nature has always been used to indicate everything that is not the work of human genius and hence the natural/artificial semantic opposition. It would then, be only with the Judaic-Christian tradition that those adjectives assumed an ethical connotation (natural things are perceived as worthy and right while artificial products are seen as disreputable and wrong). Clearly, this is a very naïve position, because reality shows that human intervention in nature is sometimes not only beneficial, but even essential (like the positive role of medicine) and moreover, there are natural facts that cannot be considered positive (for example, earthquakes, tsunamis, etc.) either for man, or for nature herself. This, like many other contradictions, has highlighted the need to examine the meaning of the term nature and its relationship with man: can man modify nature and its course without limits? Does nature mean a reality completely apart from mankind? Otherwise can the word nature be just a product of our culture? The second level of analysis has unveiled the evolution of the concept of nature over the centuries, showing its diversity and versatility. Among the

---

Thomas Henry Huxley, *Evidence as to Man's Place in Nature* (New York: Appleton, 1863, page 71. *Evolution and the Victorians: Science, Culture and Politics in Darwin's Britain*, Johnathan Conlin, Bloomsbury.

most relevant aspects, it is necessary to emphasise how the concept of nature is now so far from the one described by the Greek tradition, to the point that it can be considered a *non sequitur*. At that time, nature had had a dynamic character, as if it was a living animal, such that the principle and the cause of movement were internal to it.<sup>357</sup> Judaism and later Christianity have brought radical changes in the conception of nature and its relationship with man. In particular, the absolute departure from the Greek tradition has consisted in the idea of creation from nothing thanks to a transcendent God and, consequently, a clear separation between nature and divinity (God is above all present in history and not in nature itself) where man occupies an intermediate position (an anthropocentric vision of the cosmos).

Man, in fact, rather than a spectator of nature, became an actor, bringing nature into the domain of ethics. It should not be forgotten that until that moment, the law of nature was the necessity while the advent of science has allowed man to know the laws of nature and, to some extent, to ‘possess them’. In this way, nature has become part of ‘human domination’ losing all its vitality in order to be considered a simple mechanism, like a clock. Kant would have answered to this reduction by inviting the men of his time to observe the natural processes and showing how a simple mechanism could not be enough to explain all their complexity. With Darwin and the concept of evolution there has been only the illusion of bringing nature back to its original vitality, because it has been no longer considered statically, but in relation to time.<sup>358</sup>

Nonetheless, we are far from the Aristotelian, or at least romantic, idea of nature, since the evolution in this case would not follow any internal *telos*, but it is governed by chance. Studies on the evolution of the species have, in fact, shown how over time nature has been ‘able’ to correct and improve itself, but in a totally unpredictable way. It is only with contemporary biology, in

---

<sup>357</sup> See, Aristotele, *Physics*, II, 1.

<sup>358</sup> See R. Bondi and A. La Vergata, *Natura*, Bologna, Il Mulino, 2014, p. 169.

particular genetics and embryology that this power has been no longer the privilege of nature alone; so much so that human intervention in natural processes has become similar to that of nature itself. In this way, the distance between man and nature has shrunk considerably and Huxley's question, mentioned above, is ever more relevant: "What are the limits of our power over nature, what are the limits of nature's power over us?"

To answer these questions means entering into the third level of understanding of the word nature in order to figure out the role it has played in the definition of the family and the new forms of parenting. In fact, while the word nature has been previously tackled from a mainly theoretical viewpoint, afterwards its practical declination has been shown. For this reason, we can say that the levels of comprehension we are dealing with are reciprocally permeable.

With regard to the definition of family, we have considered the notion of the *natural family* according to the various perspectives through which it could be examined (jurisprudential, bioethical, etc.) in order to offer the reader the tools for understanding the meaning that the adjective natural could assume in this area. We have seen that in general it refers to the tradition (in the sense of traditional family) or it has suggested the idea of a society existing prior to the State. However, the fact that this implicates a sort of 'universality' or 'timelessness' of the family institution has been constantly challenged by the present reality and the various cultures that see them flooded by new family structures. Therefore it has been assumed that if the word nature means a mechanically rigid scheme, then the cultural diversity is incompatible with it and, above all, it would be wrong to say the definition "*natural family*". On the contrary, nature can mean, "*a permanent genetic principle and/or a fundamental structuring tendency*"<sup>359</sup>, "*a bio-cultural process, which means a production and*

---

359 F. Botturi, *Natura e cultura: crisi di un paradigma*, in F. Facchini (ed.), *Natura e cultura nella questione di genere*, Bologna, Edizioni Dehoniane, 2015, p. 31.

not a product”<sup>360</sup> and, therefore, antecedent to the different cultural forms and common ground in their diversity. So much so that this common attribute would make it possible to compare the different family structures with each other. Hence the word nature would indicate a concept of order more than anything biological (in the sense of generation) and therefore pre-cultural.

Then, dealing with the concept of nature when ART is at stake, we have noted that at the level of ‘common understanding’ in which all kinds of ARTs are involved, there has been an inclination to ethically connote the adjective ‘natural’ and ‘artificial’ in the sense of natural/right and artificial/wrong. In this sense, then, ‘defending nature’ would mean taking the side of those traditional moral principles that are an integral part of a people. Consequently nature would not only mean the biological element, but what is specific to the human behaviour<sup>361</sup>, for instance that a child is the fruit of a sexual union between a man and a woman.

To be more specific, for example with regard to heterologous fertilisation, it has been highlighted that the natural element is the parental genetic bond, a factor that is considerably amplified when we took into account surrogate motherhood. Besides in regards to the debate on the statute of the human embryos – a topic directly related to ART – has raised a very interesting issue: nature is ‘used’ as a starting point to state a normative parameter, in this case the appearance of the primitive streak, to then assume a purely conventional connotation.<sup>362</sup>

Moreover it is noteworthy that the parameter informing the Italian legal framework on adoption is the so-called *imitation naturae* (the imitation of nature). In fact, its aim is to evoke a family situation similar to a natural one (in the traditional sense). Italian courts, called upon to rule on the new types of

---

<sup>360</sup> *Ibidem*, p. 32.

<sup>361</sup> See A. Pessina, *Bioetica. L'uomo sperimentale*, Milano, Bruno Mondadori, 1999, p. 118.

<sup>362</sup> See, in particular, the documents related to the United Kingdom’s legislation.

family, have over the years, discussed this parameter coming to the conclusion that, in particular when parental suitability is at stake, sexual inclination should be relevant only if it affects the parental relationship. This is not intended to contradict the naturalness of the traditional bonds, or to reduce their importance, assuming that the paradigm of *imitation naturae* should be considered ‘out dated’ with regard to the best interests of the minor. In fact, it is always necessary to examine case by case in order to assess the fair balance between those parameters and, more importantly, ask to ourselves whether, in general, the law can ignore its natural ground (in this case, the relationship between parenting and heterosexuality).<sup>363</sup>

Thus, it emerges that man’s interventions into natural processes, aimed to improve its functionality, gives cause for concerns: when it comes to legislating on such sensitive and constantly evolving subjects, the law should set limits and boundaries and, at the same time, allow scientific development and take into account cultural changes. The questions that arise are, more generally, whether and where it is possible to pinpoint the ‘foundation’ of those limits so that they can be universally recognised and, more particularly, whether subverting the course of nature is equivalent to overcoming its laws.

## Appendix

### *National Bioethics Committees’ official documents*

#### *Austria*

---

363 See, D’Aloia, *Omosessualità e Costituzione. La tormentata ipotesi del matrimonio tra persone dello stesso sesso davanti alla Corte Costituzionale*, in R. Bin et al., *La “società naturale” e i suoi “nemici”. Sul paradigma eterosessuale del matrimonio*, Torino, Giappichelli, 2010, p. 107.

Austrian Bioethics Commission, *Ethical Aspects of the Development and Use of Assistive Technologies*, 13-07-2009, available on line <http://archiv.bka.gv.at/DocView.axd?CobId=39411>.

#### *Denmark*

Danish Council of Ethics, *The beginning of human life and the moral status of the embryo*, 2004, available on line [http://ethicist.kmu.edu.tw/pimages/p-27/engelsk\\_embryo.pdf](http://ethicist.kmu.edu.tw/pimages/p-27/engelsk_embryo.pdf).

#### *Germany*

German Council of Ethics, *Preimplantation genetic diagnosis*, 08-03-2011, disponibile on line <http://www.ethikrat.org/files/opinion-preimplantation-genetic-diagnosis.pdf>.

#### *Greece* (all available on line <http://www.bioethics.gr>)

Hellenic National Bioethics Commission, *Comments on the drafts bill concerning medically assisted human reproduction*, 11-10-2002.

Hellenic National Bioethics Commission, *Recommendation. Contemporary issues of "choice" in reproduction*, 7 luglio 2014. Hellenic National Bioethics Commission, *Recommendation. Regarding age limits in medically assisted reproduction*, 14-02-2017.

#### *Italy* (all available on line <http://bioetica.governo.it/it>)

CNB, *La fecondazione assistita*, Roma, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 1995.

CNB, *Identità e statuto dell'embrione umano*, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 1996.

CNB, *L'adozione per la nascita (APN) degli embrioni crioconservati e residuali derivanti da procreazione medicalmente assistita (PMA)*, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 2005.

CNB, *Destino degli embrioni derivanti da Pma e non più impiantabili*, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 2007.

CNB, *Conoscere le proprie origini biologiche nella procreazione medicalmente assistita eterologa*, Roma, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 2011.

CNB, *Considerazioni bioetiche sullo scambio involontario di embrioni*, Presidenza del Consiglio dei Ministri-Dipartimento per l'informazione e l'editoria, 2014.

CNB, *Il Comitato Nazionale per la Bioetica: 1990-2005. Quindici anni di impegno*, Atti del Convegno di Studio (Roma, 30/11 – 3/12/2005), available on line <http://presidenza.governo.it/bioetica/eventi/BIOETICA15anni.pdf>.

France (all available on line <http://www.ccne-ethique.fr>)

Comité Consultatif National d'Ethique, *Avis sur le problèmes éthiques nés des techniques de reproduction artificielle*, rapport n. 3, 23-10-1984.

Comité Consultatif National d'Ethique, *Avis sur le transfert d'embryons après décès du conjoint (ou du concubin)*, rapport n. 40, 17-12-1993.

Comité Consultatif National d'Ethique, *Avis sur l'évolution des pratiques d'assistance médicale à la procréation*. Rapport n. 42, 30-03-1994.

Comité Consultatif National d'Ethique, *Access to originis, anonymity and confidentiality of filiation*, opinion n. 90, 24-11-2005.

Comité Consultatif National d'Ethique, *Problemes ethiques soulves par la gestation pour autrui (GPA)*, avis n. 110, 01-04-2010.

Comité Consultatif National d'Éthique, *La demande d'assistance médicale à la procréation après le décès de l'homme faisant partie du couple*, avis n. 113, 10-02-2011.

*Lussemburgo* (all available on line <http://www.cne.public.lu>)

Commission Nationale d'Éthique, *Les problèmes éthiques et juridiques soulevés par la reconnaissance d'un droit de l'enfant à connaître ses parents biologiques*, Avis n. 1, 2000.

Commission Nationale d'Éthique, *La procréation médicalement assistée*, Avis n. 1, 2001.

Commission Nationale d'Éthique, *Aspects éthiques de la médicalisation de la conception humaine*, Avis n. 23, 2011.

*Portugal* (all available on line <http://www.cneqv.pt/?locale=en>)

National Council of Ethics for the Life Sciences, *Medically assisted procreation*, opinion n. 44, 2004.

National Council of Ethics for the Life Sciences, *Medically assisted procreation and surrogate pregnancy*, opinion n. 63, 2012.

*Spain*

Comité de Bioética de España, *Informe del Comité de Bioética de España sobre los aspectos éticos y jurídicos de la maternidad subrogada*, 16-05-2017, disponible on line [http://assets.comitedebioetica.es/files/documentacion/es/informe\\_comite\\_bioetica\\_aspectos\\_eticos\\_juridicos\\_maternidad\\_subrogada.002.pdf](http://assets.comitedebioetica.es/files/documentacion/es/informe_comite_bioetica_aspectos_eticos_juridicos_maternidad_subrogada.002.pdf).

*Sweden*

The Swedish National Council on Medical Ethics, *Assisted reproduction – ethical aspects*, 2013, available on line <http://www.smer.se/wp-content/uploads/2013/03/Slutversion-sammanfattning-eng-Assisted-reproduction.pdf>.



*Switzerland*

Federal Council (1996), *Message relatif à l'initiative populaire «pour la protection de l'être humain contre les techniques de reproduction artificielle (Initiative pour une procréation respectant la dignité humaine, PPD)» et à la loi fédérale sur la procréation médicalement assistée (LPMA) du 26 juin 1996*, 96.058, FF 1996 III 197, available on line [www.admin.ch/opc/fr/federal-gazette/1996/index\\_29.html](http://www.admin.ch/opc/fr/federal-gazette/1996/index_29.html).

Swiss National Advisory Commission on Biomedical Ethics, *Medically assisted reproduction. Ethical considerations and recommendations for the future*, Opinion no. 22/2013, available online [http://www.nek-cne.ch/fileadmin/nek-cne-dateien/Themen/Stellungnahmen/en/NEK\\_Fortpflanzungsmedizin\\_En.pdf](http://www.nek-cne.ch/fileadmin/nek-cne-dateien/Themen/Stellungnahmen/en/NEK_Fortpflanzungsmedizin_En.pdf).