"Nature, morality, and ideology"

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The popular understanding is that conception, birth, and death are the most natural facts of human life. We are all created at the moment of conception; we come into being at birth, and are gone forever after we die. We cannot escape these three events that determine our entry into and departure from being. It is entering this world that makes new reproductive technologies a philosophical, anthropological, and religious challenge. Various technologies, from relatively simple artificial insemination to more sophisticated IVF and ICSI, are all part of the effort to enable infertile couples and individuals to have children, to fulfill their desire for children. As altruistic and benevolent as these technologies and options seem, they are nevertheless a subject of vigorous debate and even ideological disputes. Lay people and many scholars understand the desire for children as perhaps the most natural desire of all, which we (supposedly) share with most species of the animal kingdom (Bydlowsky 1998).[1] Even more, ideas of conception, birth, and death are cognitively linked to the notion of nature and natural. Moreover, from this point of view, sexual intercourse is another natural fact (Schneider 1980), leading to pregnancy and shared physical substance, which is again a fact of nature (Schneider 1980; Bestard 2006). On the other hand, conception is not merely the beginning of a new life; it is the beginning of new relations between individuals, new relations that are incorporated into the wider interpersonal networks of family and kinship or relatedness. It seems obvious that, at least in popular discourse, the notion of kinship and family is deeply connected with biology; for medical professionals this is perhaps surprisingly even more obvious. These ideas are simply part of the ethnocentric construction of kinship, as Schneider put it (Schneider 1984), but nevertheless the relation between culturally constructed nature and culture itself

[1] The idea that the desire to have children is natural, particularly for women, is very popular among evolutionary psychologists and sociobiologists, who claim that the mother-child bond is the basis of all social relations and is hence natural.

should be thoroughly analyzed. As Sarah Franklin (2003) has said, nature can no longer be defined as a prerequisite for social behavior; as she has previously noted in her analysis of assisted reproduction, we cannot ignore the fact that biology presents certain natural facts produced by technology (Franklin 1995).

The development of medicine and medical technologies has greatly affected our understanding of nature and natural facts. Nature and its facts became uncertain and fluid, even contradictory and a matter of negotiation. Within interpretations of assisted reproduction, natural facts are not so much opposed to cultural or social norms, but rather to facts and procedures that are perceived as unnatural. Although Bestard (2006: 254) rightfully observed that 'nature has lost this capacity to dictate the social relations of kinship,' it seems that medical discourse (at least in Slovenia) is trying to reinstate nature as the main driving force behind new reproductive technologies. Further development of genetic technologies and research on the human genome conflated nature with cultural and social norms (Pálsson 2007), which can no longer be interpreted separately. Nonetheless, the separation of what is natural and what is cultural/social, although false, still persists in scientific discourse and common public discourse. I intend to show today that the opposition between natural vs. social/cultural has often shifted to an opposition between natural and unnatural. Based on interviews with medical professionals, public discourse, and fieldwork, I intend to show the ideological basis of the natural vs. unnatural opposition, in which unnatural is understood as either artificial or immoral.[2]

Assisted reproduction in Slovenia has a relatively long tradition, although until the year 2000 it was not adequately regulated by legislation. Despite the lack of legislation the first successful in vitro fertilization in Slovenia resulted in birth of twin girls in 1984. Intrauterine insemination with donor semen was also possible until 1994 when it was banned

[2] The interviews were conducted when new legislation concerning treatment of infertility and assisted reproduction was in parliamentary procedure in 2001.

until the new legislation on treatment of infertility and assisted conception including donor procedures was accepted in 2000. During the parliamentary procedure the donor insemination and particularly rights of single women to donor procedures were in the centre of the dispute. The law did not allow single women to have right to donor insemination or any other form of biomedical assistance at conception, and that was the main reason for the attempt to modify the law a few months later. With the amendment of the law single women gained the right to procedures of assisted conception. However, after a couple of months the referendum was called to overturn the new legislative decision. The result of the referendum showed that even 75 % of voters that attended the referendum voted against changes of the law, and thus single women were yet again denied the right to assisted conception. The fieldwork and the interviews were conducted in the time of these events.

A statement by the distinguished Slovenian lawyer Alojzij Finžgar that artificial reproduction has to imitate nature has often been quoted: 'Procreatio artificialis imitatur naturam' (cited in Zupančič 1998: 239). Because assisted reproduction should follow nature, it is important that 'unusual and unnatural procedures are not to be permitted' (Zupančič 1998: 239). The special feature of this quote is not so much in the lack of definition of what is unnatural, but particularly in the question of what is or can be unusual when talking about assisted reproduction. The answer can be found in interpretation of scientific and public discourse about assisted reproduction. There is only a thin line between natural and artificial when analyzing assisted reproduction. That is particularly evident when ideas and thoughts of physicians working in the field of new reproductive technologies are analyzed. Sexual intercourse resulting in pregnancy is the natural source of parenthood and kinship relations. Assisted reproduction procedures are thus defined as artificial, although in the eyes of physicians they can be understood as natural as well. Medical professionals often have quite a specialized understanding of natural vs. artificial regarding new reproductive technologies.

They very often understand assisted reproduction as natural although, considering all of the possible technological and medical procedures, one physician has stated that 'assisted reproduction is not so natural any more' (Dr. D). It is thus evident that assisted reproduction is therefore natural, but some procedures are drifting away from nature. Nevertheless, the main idea for medical experts is that assisted reproduction is above all helping nature (and hence natural), and therefore they tend to develop procedures as similar to natural reproduction as possible.[3] The same physician that I already quoted explained this at length:

> "Most people probably understand assisted reproduction as being too artificial, too mechanical, they think that we force everything, but actually, if you see the procedures close up, you see that the procedure is very natural, quite natural, because, for example, you have multiple egg cells, and you perform the same procedure on all of the egg cells, and some of the cells will be fertilized, others won't, with some women all the eggs will be fertilized, with others none will be fertilized, although you perform the same procedure in the same way, optimally. Some cells get fertilized, some don't, some fertilized egg cells will develop into embryos, and some fertilized egg cells won't develop into embryos. Just like in nature, the situation is the same as when everything is natural. Nature is always here and we can do everything optimally, but this is a natural procedure, nature is the one that decides whether fertilization will occur or not. Actually we only help here, with a little help. People perhaps imagine everything altogether as artificial, how we're really dictating the fertilization of the egg cell, dictating implantation and birth. We're only creating certain conditions for nature to do its task or not. Therefore a lot of people have the wrong impression of this procedure. (Dr. D)"

This quote is a rather clear example of the confusion of the notions and the facts of nature in medical discourse and it develops further:

> "I support two things: the first fact is that human reproduction should be as natural as possible, so we should follow the natural path, and the second is the fact, which is very natural – medicine can make a lot of progress, we have a lot of knowledge, there are a lot of couples we can help, but there are, have been, and will always be people without children. That is nature. There are also people that won't have some other things, but that's something we'll have to get used to as soon as possible. (Dr. D)"

Therefore new reproductive technologies are just a medical aid to natural processes. However, this help, minimized by reproductive professionals, cannot always trick nature and

[3] As opposing to cloning, this is rejected by the majority of medical professionals on the basis of unnatural one-sex or same-sex reproduction.

its processes, so some women and men cannot have children, not even with medical assistance. It is quite obvious that minimizing the medical role in the process of assisted reproduction can and does serve as a certain alibi of scientific and technological failure. In her research on the use of ultrasound in the early period of the assisted reproduction,[4] after embryo transfer, when there is no guarantee that pregnancy will occur and even less that pregnancy will lead to birth, Eva Maria Knoll (Knoll 2003) has shown that ultrasound serves as a manipulation of success, freeing reproductive professionals of responsibility for possible failure. Together with the embryo, the responsibility for a successful pregnancy is transferred to the woman. Similarly, the well-known French gynecologist Jacques Testart explained to women right after the embryo left the catheter that they were pregnant (Lucas 1991: 1212) – similar words by Israeli medical professionals have also been cited by Susan Kahn (2004).

As already stated, the procedures are presented as an aid to nature, but nature does not always seem to obey. Despite efforts to help, sometimes nature just does not want to do what medicine is trying to impose (it seems necessary to note at this point that in the discourse of medical professionals nature is personified and it appears almost as a subject). Physicians, at least some of them, are well aware of this and one of them has commented that assisted reproduction means that a 'person is subjected to technology without the guarantee of success' (Dr. C). To follow natural conception procedures and to enhance the success rate of the procedures, the gynecological clinic in Ljubljana has developed an interesting 'natural cycle' procedure, as they call it. In the natural cycle procedure, they follow the menstrual cycle of the woman and harvest the egg cell when it is ready, without the prior use of hormonal treatment. In a certain way they are therefore harvesting 'natural eggs.' This is a relatively successful attempt to follow natural procedures as closely as possible and to

[4] In the case of IVF and embryo transfer.

diminish the artificial, technological notion of assisted reproduction. The main benefit of this procedure is precisely the fact that hormonal therapy is no longer needed for women:

> "I have to mention another thing: namely, at our clinic we very successfully perform the natural cycle. The natural cycle method was originated by Professor . . . . we have been using this natural cycle method for quite some years; it is very popular among women and it is clinically successful as well. We follow the natural cell of the woman, and at the proper moment we remove it from the ovary and we perform the IVF procedure on that natural cell. The procedure is very successful in the case of female infertility, whereas with low semen quality the chance of success with one cell is smaller. (Dr. D)"

It is peculiar to see something called a 'natural cycle' (actually a menstrual cycle) to have an originator, even a male originator, and that the women whose ovaries produced the egg is excluded as a subject from the procedure. On the other hand, the natural cycle is an important attempt to make procedures that are psychologically and physiologically very stressful for the woman as easy as possible. However, understanding a procedure that in its first phase is really easier on the woman because hormonal therapy is no longer needed as natural, or just a slight deviation from nature, is highly questionable and ideological:

> "I'd say it's, physiologically it's different, the intervention into nature, in the natural cycle, in the natural procedure it's insignificant, almost nothing, and it's really, instead of ovulation, the follicle doesn't break itself, you puncture it, fertilize the cell outside the body, and return it to the uterus. (Dr. B)"

It is interesting that the main obstacle to the use of this method is supposed to be financial. It would be logical and, in particular, easier for women to try a couple of natural cycles before hormonal treatments, but the fact that at the time of writing insurance pays for only four (and now five) attempts at IVF prevents many women from trying the natural cycle. One of the main reasons that women with fertility problems do not use the natural cycle is the problem of numbers. Namely, the natural cycle generally produces only one egg cell and therefore only one potential fertilized egg for the cycle, and implanting only one embryo into

the uterus significantly reduces the success rate.[5] However, it is not really clear why only a one-embryo policy is used in the natural cycle because in a couple of months several egg cells can be harvested and fertilized. However, the practice is that in the natural cycle only one embryo is implanted. There are two possible reasons for this. The first is probably the goal of following the natural path as closely as possible – namely, by not freezing embryos. The second, which is far more logical, is the desire to avoid multiple pregnancies, which more often result in miscarriages. The small number of egg cells and embryos therefore very often prevent women from trying the natural cycle because only five attempts are paid for by insurance. The often false fear of failure is another reason to try the hormonal cycle and have several embryos transferred in the procedure. Namely, women and couples that come to seek help at fertility clinics often do not have a lot of time left, and the logic of high numbers appears very attractive to them. It is thus interesting that in the eyes of physicians legal, financial, and bureaucratic obstacles actually render the method less attractive and force couples to choose 'less natural procedures.'

The similarity of the method called the 'natural cycle' and the actual natural procedure is a source of excitement and satisfaction among physicians, although of course the statements seem at least peculiar: 'The natural cycle is good, particularly because the procedure is very similar to the natural procedure' (Dr. E).[6] However, the natural cycle is only part of the in vitro fertilization procedure, so the procedure is only partially 'natural,' although, as we have seen, in the eyes of medical professionals IVF itself is very natural because no matter what and how they perform the procedure it is up to nature whether the egg will finally be fertilized or not. Nonetheless, the IVF procedure, intracytoplasmic sperm injection, and other techniques used in assisted-reproduction processes are all technological inventions, they are

[5] However, the clinic stated that the success rate is really better with natural-cycle eggs, which is (implicitly) attributed to the fact that hormonal treatment can produce egg cells of inferior quality that are less likely to lead to successful fertilization.

[6] Not surprisingly, the natural cycle is patented. It might seem odd that the menstrual cycle is also actually patented here. Perhaps royalties shall have to be paid by menstruating women to the rightful owner of the patent.

carried out using highly sophisticated instruments and we can justifiably assume that only after fertilized eggs are implanted into the uterus can the procedure really be left to 'nature.' Therefore, the natural cycle of the woman is nevertheless a part of the procedure, but there is a phase of unnatural, artificial procedures and conditions, a time when the embryo develops outside the female body, and the responsibility for its development is not, or at least should not be, the responsibility of the woman. However, the responsibility is not entirely transferred to the woman even after implantation. The pregnant woman and the embryo are medical issues (Ragoné & Willis 2000) and they are subjected to medical attention and control throughout the pregnancy, and the conception procedure is completely irrelevant (Knoll 2003).

On the other hand, artificial reproduction procedures raise ambivalent questions and feelings, and even fear among professionals themselves: 'If the physicians start creating life, they become gods and that's not good, it's not acceptable' (Dr. E) so perhaps it is better 'to be conservative and to hold back progress (. . .) if there are doubts it will be better to stay behind and not to demonstrate we're capable of that' (Dr. E). The reason for that is the awareness of the physicians of the unnaturalness of the procedures, awareness of the fact that those are experiments on living people, in which the results are always uncertain:

> "Along with removing natural barriers, the objective danger of procedures resulting in something bad is growing (. . .) we transfer parents' genetic material into the child and I think that the descendant could have the same fertility problem as the parent, if nothing else. (Dr. B)"

I think we must consider here that the idea of assisting nature comes from a false assumption. Infertility or low fertility is actually nature's fault; we are dealing with nature's defect because nature is not fulfilling our expectations and its duties. Assisted reproduction therefore circumvents nature and actuates what nature does not make possible for individuals (Strathern 1999b). Assisted reproduction is basically assistance to individuals or couples that,

despite nature's limitation, want to have children. Assisted reproduction is therefore not to help or to assist nature, but assistance that enables fulfillment of the desire to have children (Strathern 1999b), which, as we saw earlier, can be understood as the most natural desire of all. It would be then more appropriate to talk about procedures against nature and not assistance to nature. At the same time, reproductive professionals do not understand technological reproduction as unnatural but as an improvement of natural unpredictability (Schmidt & Moore 1998) and such an understanding further strengthens the thesis that assisted reproduction procedures represent a certain way of tricking nature.

Therefore, the question of natural vs. artificial is easily answered for medical professionals by a rather unconvincing thesis: that assisted reproduction is just a small step around natural obstacles and is essentially almost as natural as nature itself. To support this, physicians seem to break the procedures to the small steps and then pick up bits and pieces of procedures to be able to define these in terms of nature; hence they are searching for fragments of naturalness in order to gather evidence to support the thesis that the procedures are almost as good as natural, and therefore they are almost natural – and, if they are almost natural, we can omit 'almost' and define them as natural. However, because the relation between natural and artificial seems more like an exercise in confusion, I believe that the opposition between natural and immoral can be more productive, and particularly so because it is based on the understanding of the family.

As already presented in the quotation from Alojzij Finžgar, the artificial should imitate nature, and unnatural and unusual procedures are unacceptable. It is clear even from this interpretation that we are dealing not only with the relation between nature and technology, but more with the relation between nature and morality – unnatural and unusual are associated with the notion of immoral, and as such they are very often the source of almost apocalyptic fears in public, political, and scientific discourse: we can hear warnings about the decay of

human societies if basic laws of nature are broken, if moral and ethical principles are violated; warnings that the healthy family will be destroyed if assisted reproduction is used to help single women or even homosexuals have children; because, as certain a physician wrote in a newspaper article – 'humanity always, even in the caves, lived in couples, and this means that marriage is a natural institution.' Morality and nature are thus very closely connected and are placed above any doubts. The violation of their principles will lead to a disaster. The result of such ideas is the axiomatic definition that what is natural is moral, and what is unnatural is immoral.

However, if we are able to define the relationship between natural and artificial as a relationship between non-technological and technological, technology cannot be the answer when the opposition of natural vs. unnatural and unusual is understood in terms of morality. It is therefore necessary to address this question from two different viewpoints. The first deals with the question of what is legally permissible for scientists to analyze and study. Slovenian legislation, for example, does not allow experiments on human embryos unless the written permission of the couple that the embryos belong to is given. Creating embryos for the purpose of experimentation is strictly forbidden (therefore only leftovers from couples are at scientists' disposal). However it is not clear what can be done with aborted embryos because they are not mentioned in the act. The question is whether it is possible to use them for research and whether written permission of the woman is necessary or not. The problem is that the act only regulates treatment of infertility and assisted conception, and obviously abortion has no place in this act, but nevertheless we can presume that those embryos and fetuses are not to be used for research. Cloning of any kind is strictly forbidden as well. Nevertheless there is an open window for scientific research, although with relatively strict and sometimes ambivalent restrictions, but moral and ethical dilemmas concerning research on embryos, although somehow disputable, seem to be solved.

On the other hand, the relation between natural and immoral becomes far more disputable and a matter of discussion when the question of the family is involved. Here I must note that assisted reproduction in Slovenia is only allowed for heterosexual couples, married or not. Donation of cells is allowed, but only one cell can be donated to the couple; hence double donation (donation of sperm and egg) is not permissible. The donation of an embryo is not allowed even with permission of the couple who give the cells. Single women, let alone homosexuals (single or in a couple) are not entitled to assisted reproduction procedures. The key argument against single parenthood and one-parent families or homosexual parenthood and families is the assumption that only the nuclear family is natural, because it is founded on the relation between a man and a woman and the relation between a woman and a child, which is a natural relation (Cannel 1990). This assumption is founded on the fact that parents create social relations and ties on a biological basis (Strathern 1999a). However, it is obvious that the mother-child relation cannot be logically linked only to the nuclear family. The mother-child bond is present in single-mother families as well. However, those who argue that a single-parent family is not natural have a different and peculiar reasoning. Namely, for them it is the social bond between the mother and father that is the distinctive feature of the family, and fatherhood is precisely what is missing in single mothers' families as well as in lesbian families. In the eyes of the opponents to single-parent and homosexual families, it is the relation between the mother and father that is the prerequisite for the next important family relation – the relation between the father and child – and those two relations are apparently understood as natural and they are the basis of the family as well.

Therefore, there are three natural bonds within the family and all three have to exist to have a nice little family that everybody will be happy to see: the mother-father bond, the father-child bond, and the mother-child bond. This last bond is natural by definition, but is often left aside in ideological discourse. After the mother-child bond is defined as natural,

some kind of peculiar reasoning develops the thesis that the mother-father and father-child bonds are natural as well. It is possible to interpret this in a way to demonstrate that the bond between a woman and a man that is clearly recognized as social is also understood as natural, whereas in the case of single or lesbian motherhood the relation between the mother and the child, which is natural even for socio-biologists and evolutionary psychologists, can no longer be perceived as natural. The family is thus very often morally acceptable only when it is a nuclear one, a natural one, and thus should be protected in the name of the nation, religion, and morality (Rener 1995). All other types of family (single-parent families, families of homosexual partners, etc.) are thus defined as unnatural. However, the paradox of motherhood as unnatural seems to persist and it presents a problem for opponents to single and lesbian motherhood. They have found a disputable solution for the paradox when new reproduction technologies are in question. Namely, any other solution than allowing assisted reproduction only to heterosexual couples would be unusual and in contrast to the legal sense of the citizens of Slovenia. Terms such as 'legal sense' and 'unusual' are of course very dangerous in any legal matter and legislation, but they nevertheless persist in legal discourse. Those terms are founded on a peculiar and limited morality, allowing arbitrary interpretations. One example of this interpretation was incorporated into Act on Marriage and Family Relations Act:

> ". . . parents act for the benefit of children if they meet their material, emotional, and psychosocial needs, acting in a way that is acceptable and approved of by society . . . (ZZZDR/ACAAMFR, §5a)"

The paragraph seems quite innocent but, by establishing that society renders behavior acceptable or approvable, the act actually refers to arbitrary morality. One can conclude that society approves of and accepts natural and moral behavior, and that it does not approve of and accept immoral and hence unnatural behavior – for example, single-parent families, or

single or two-parent lesbian or gay families, and perhaps even two-parent heterosexual families with an unconventional lifestyle. Thus the question of a natural family is really a moral one, mainly based on the assumption that the only acceptable family form is the nuclear family because that is the most common type. However, restricting the family to one type on a moral basis is irrational and morally contestable. As John Harris (2002) once wrote, referring to scientific research on embryos but quite applicable here as well: it would be irrational not to allow something that is not morally contestable. The fact is that nature serves as an ideological alibi to restrain the possibilities of choosing a lifestyle, of choosing the children and family life one wishes to. It is morality that underlies this particular ideological understanding of nature, and morality is arbitrary and culturally specific.

The notion of nature and natural can thus be used ideologically in several ways, and one might say that certain social facts, which are popularly presented as unnatural, are really facts seen through the eyes of narrow morality, ideologically shaped through a peculiar (mis)understanding of nature. Facts and deeds that are very often ideologically understood as immoral are masked as unnatural, which gives those propagating such ideas an alibi for their views. In this particular sense, I think that the concept of nature is obsolete and should be abandoned as an analytical tool, or at least used only in a very precise and narrow sense. Of course, we cannot banish the use of the words ‘nature’ and ‘natural,’ but we should always be very cautious when using them so as not to use them as an ideological tool, but instead interpreted in the framework of the particular theme involved. Instead of using the words ‘nature’ and ‘natural,’ I propose being more precise and using narrower definitions and descriptions that can be theoretically justified. For example, one might take kinship relations, which are in many ways understood in terms of nature, but (as assisted reproduction has shown) we should use them in a precise manner. Of course, we do not use expressions such as ‘natural mother’ and ‘natural father’ (although I have heard the latter used), but we should

exercise caution even for definitions such as ‘social motherhood’ and ‘social fatherhood’ because new reproductive technologies have shown that there are a full seven possible relations between a women and a child (Åkesson 2001), and a purely social relation is only one of them, although it is the only one that matters. A genetic relation, which is one of the possible relations between a mother and child (and a father and child as well), is another good example. Genetic kinship relations seem to be natural par excellence, but when observed closely we can see that genetic kinship (real genetic kinship, not an imagined one) is always mediated through highly sophisticated technology. Natural facts can of course be mediated and defined through technology, but in this particular case genetic relation is only an imagined relation if technological intervention is not present. Hence genetic kinship is pure imagination if not interpreted by scientific knowledge and technology, and is therefore actually a super-cultural concept masked as natural.

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Abstract

New reproductive technologies and biotechnology are challenging many common facts about nature. Various forms of assisted conception can change the understanding of a family, parenthood, personhood, and personal identity. Based on interviews with physicians and other professionals at a fertility clinic, the particular understanding of 'natural technologies' is discussed. The idea of 'natural technology,' or technology that imitates nature was a powerful argument when the family and parenthood were debated some years ago in Slovenia, when new legislation on assisted reproduction was adopted. This paper shows that nature and culture can no longer be defined in separate discourses. Cultural and natural facts are increasingly becoming fluid, and even a matter of negotiation. Therefore, it is perhaps necessary to abandon those concepts as separate entities and observe them as a single concept seen from different viewpoints.

Resum

Les noves tecnologies de reproducció i la biotecnologia desafien molts llocs comuns sobre la natura. Formes diverses de concepció assistida poden canviar la comprensió de la família, la paternitat i la maternitat, la persona i la identitat personal. En base a entrevistes amb metges i altres professionals d'una clínica de fertilitat, aquest article analitza la comprensió particular de les "tecnologies naturals". La idea d'una "tecnologia natural", o una tecnologia que imita la natura, constituia un valor ideològic important en les discussions sobre família, paternitat i

maternitat a Eslovènia ara fa uns anys, quan es va promulgar la nova legislació sobre reproducció assistida. Aquest article mostra que natura i cultura ja no poden ser definides de manera separada. Els fets culturals i naturals són cada cop més fluids i constitueixen fins i tot objecte de negociació. En conseqüència, potser caldria abandonar aquests conceptes en tant que entitats separades i considerar-los com a un únic concepte susceptible de ser observat des de punts de vista diferents.