FUTURE GENERATIONS: AN EVOLUTIONARY APPROACH

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ABSTRACT

FUTURE GENERATIONS: AN EVOLUTIONATY APPROACH

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Why do we care for future generations? This work argues that the reason we care for future generations lies in our psychogenetic nature. When we think of future generations, we feel that we have to do something for them. If we all have a common feeling profile, it is plausible to assume that this common feeling profile includes “caring for future generations”, because all of us do care for at least our own future generations. This psychogenetic disposition enables us to explain why sometimes we act as if we do not care for future generations as well. I believe that instead of telling people what their obligations are, it would be more realistic to reach their feelings deep inside: once people are aware of their true feelings, the situation can change.

Keywords: Future Generations, Hume, Sympathy, gene, psychogenetic

ÖZ

GELECEK KUŞAKLAR: EVRİMCİ BİR YAKLAŞIM

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Gelecek kuşakları neden önemsiyoruz? Bu çalışmanın amacı, bizim gelecek kuşaklarımızı önemsememizin sebebinin, bizim psikogenetik özelliklerimizde yatmakta olduğunu göstermektir. Gelecek kuşakları düşündüğümüzde onlar için bir şeyler yapma ihtiyacı hissederiz. Hepimizde ortak olan bir duygu profili varsa, bu duygu profilimizde bir tür "gelecek kuşakları önemseme" diyebileceğimiz duygu olduğunu varsayabiliriz çünkü hepimiz en azından kendi gelecek soylarını önemseyen varlıklarız. Bu psikogenetik özelliklerin varlığını kabul edince, birçok durumda neden gelecek kuşakları önemsemiyormuş gibi davrandığımızı da açıklayabiliyoruz. İnsanlara "şu tür ödevleriniz var" diye seslenmek yerine derinlerde bir yerlerde olan duygularına seslenmek daha gerçekçi bir politika olacaktır, çünkü insanlar gerçek duygularının farkına vardıklarında durum değişebiliyor.

Anahtar Kelimeler: Gelecek Kuşaklar, Hume, Duygudaşlık, Gen, Psikogenetik

To My Father

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CHAPTER 1

INTRODUCTION

The purpose of this thesis is to examine the problem of future generations as a significant branch of environmental philosophy and to propose a novel approach to this widely acknowledged problem. It is important to note that in this work I try to overcome ethical dilemmas usually discussed in the literature and attempt to establish a new perspective in terms of the philosophy of David Hume and evolutionary theory.

Through the second chapter of my thesis I briefly explain the importance of environmental ethics and start a critical analysis of traditional ethical approaches to the problem of future generations that have been proposed so far. First, I comment on the concept of natural law and Stoic-Christian tradition in environmental ethics and then continue with the duty-right view and explore a possibility of deontological approach to the problem of future generations. In particular, I examine strict Kantian absolutism of duty, and affirm that decisions concerning environment and future generations are not easy to formulate, because the consequences of those decisions are crucial in both cases. After that, with the recognition of the consequences, I move on to the consequentialist approach, trying to examine the problem of future generations in terms of variables of any given situation. However, as these traditional ethical approaches seem to fail in providing any definite solution to the problem of future generations, I continue with such extended "environmentalist" ways of thinking as Aldo Leopold's and J.Baird Callicott's "land ethic" and Paul Taylor's biocentrism. I scrutinize the

"land ethic" approach and emphasize its insufficiency as a solution to the problem of future generations because of its rejection of individuality. I also discuss the problem of intrinsic value in general and its applicability to future generations. As value attribution seems to imply attribution of rights to future generations, so I move on to the theory of justice between generations, developed by John Rawls. I briefly discuss his concept of the "veil of ignorance" and continue with Avner de-Shalit's communitarian theory of intergenerational justice, introducing the problem of rights attributable to future generations and our obligations to them. De-Shalit's approach helps to set difference between near and remote future generations. However, I argue that even if we could attribute any rights to future generations, either near or remote, it is still not clear what our obligations, if any, should be, and, more importantly, the uncertainty of any decision remains intact due to the fact that future generations do not exist yet. I continue with a discussion on the concept of sustainable development, its human-centeredness and lack of applicability at intragenerational level. Acknowledging that generations are not homogeneous entities, I proceed with Derek Parfit's paradox of future individuals: given the constant change in the composition of future generations, how can we have any obligations to future generations, if their identity, number and even their existence are uncertain? Moving forward, I argue that whatever ethical approach we follow, the variety of problems actually enables us to realize that no matter what the consequences would be, we have to choose. I conclude the second chapter proposing that instead of asking "why *ought* we to care for future generations?" we should rather ask ourselves, "why *do* we care for future generations?"

In Chapter 3, I endeavor to develop an answer to this question in terms of Hume's concept of "sympathy", general evolutionary theory and Richard Dawkins' theory of selfish gene. First I explore Edith Brown Weiss' intergenerational equity theory, briefly stating her claims and goals, and then object to her definition of future generations as "an abstract community", because

I think future generations are not only real people with real needs, but they are *our* future generations, in other words, they are our children, grandchildren and so forth. I continue with Hume's definition of parental love towards offspring, his examination of the degrees of relations and his concept of "sympathy". I give examples of emotional connections between people and propose various thought experiments concerning these connections. I then introduce Charles Darwin's comment on people's "instinctive love and sympathy for others", claiming that the reason we care for our future generations is rather biological. With brief explanation of how natural selection favored those who acted altruistically to their children, I finish the third chapter with Dawkins' selfish gene theory, setting forth various examples of parental care and trying to explain altruistic behavior in terms of selfishness.

Finally, in the forth chapter, I first begin drawing a parallel between Dawkins' concept of *meme* and our tendency to behave in contradiction with our knowledge about negative human impacts on environment. Then, given our feeling of responsibility for our environmental behavior, I maintain that due to our sympathy we are able to imagine circumstances of future people. In order to support and develop my theory, I use the article of Robert J. McShea and Daniel W. McShea, who adopted Humean perspective of "human nature" and developed a concept of "feeling profile". I thoroughly examine their approach and apply it to the problem of future generations because I believe that as evolutionary theory in general and Dawkins' theory of selfish gene in particular has helped us to establish genetic grounds for our care for future generations, this "feeling profile" approach may also help in setting forth emotional grounds for our care for our descendants. In other words, I use philosophy of David Hume and its interpretation by McSheas to set forth a possibility of some kind of psychogenetic predisposition to care for future generations common to all human beings. I give examples of the variety of our behavior and claim that through the thousands of years not only our genes manipulated us to care for our offspring, but also we may

have developed a stable feeling of care for our future generations. I also claim that applying this view to future generations not only explains why we feel the urge to do something for our descendants, but it also explains why sometimes we do not. I give examples, (historical references, recent policies and thought experiments), of such contradictory behavior, claiming that if a common feeling profile exists, then it is plausible to say that our feeling of care for our future generations will triumph over all other feelings.

I conclude my work with a broad comment on environmental ethics in general, claiming that with our new evolutionary perspective, it is now plausible to say that it is out of our feelings and genes, i.e. it is due to our psychogenetic predisposition that we care for our future generations, and that perhaps we should shaken up and awake our deepest feelings in order to be able to act in a perfect accord with our nature, so that our environmental behavior would result in rather positive impacts on environment.

CHAPTER 2

A CRITICAL EXAMINATION OF VARIOUS APPROACHES TO THE PROBLEM OF FUTURE GENERATIONS

Environmental ethics deal with the attitude and interaction of humans with environment. In other words, environmental ethics are usually claimed to recommend what we *ought* to do regarding environmental problems: they are usually concerned with the rights of nonhuman natural entities and/or obligations of humans towards these entities. Of course it is not easy to speak about the rights of such nonhuman natural entities as, say, magma or penguins. Environmentalists have developed different conceptions, such as animal liberation[1], ecofeminism[2], or biocentric egalitarianism[3]. But whether it is an exploitation of a gold mine or the rain forest conservation, any environment related issue may boil down to the evaluation of human costs and benefits; however ecocentric the adopted view may appear to be. And in many crucial cases, it seems hard or even impossible to make a choice between a corporative profit and a beautiful sight. What ethical

[1] This term is also the title of Peter Singer's book published in the early 1970's. In this book, Peter Singer, reviving Bentham's utilitarianism, argued that animals are capable of feeling pleasure and pain so that they should be taken into account when we make ethical decisions.

[2] This approach aims to unite the feminist and environmental movements, claiming that the dominations of nature and of women emerged from the same socio-historical foundations.

[3] This concept was introduced by Paul Taylor, who argued that all individual living organisms are equally valuable. According to Taylor all individual organisms that pursue their own good in their own way have inherent worth.

judgments can justify any of these options? What ethical considerations can be just enough both for us and the environment? Increasing environmental problems only strengthen the fact that environmental ethics are concerned with the future. In other words, environmental impacts have temporal dimension one way or another, not only because they are urgent, but because they overlap with the future. Do we have the right to ignore the future? Do "we" owe "them" anything? Why do we care for future generations? Before prescribing any environmental behavior it is important to realize that environmental ethics concern how *humans* ought to behave regarding the environment. Trying to determine this, I find it useful to analyze some of the approaches to ethical thinking concerning the environment and future generations that have been proposed over the centuries.

2.1. Natural Law, Stoic-Christian, Deontological, and Consequentialist Approaches

The natural law tradition is one of the oldest known ethical approaches to the environment. This view implies that there was "an invincible natural law that governed human behavior, the violation of which spelled disaster."[4] Stoic-Christian tradition[5], while establishing the definition of the first sin, refers to the natural law as the divine law, by violation of which the nature's regularity and obedience to God was corrupted, producing such disasters as tsunamis, volcanic eruptions, and hurricanes. According to this view then, disobedient children of Adam and Eve are and will be paying for violating the natural law. "Nature itself is regular, reliable, lawlike, obedient to the rules laid down by God; but a wild

[4] Pojman, p.136

[5] "And God blessed them and God said unto them, Be fruitful and multiply, and replenish the earth and subdue it: and have dominion over the fish of the sea, and over the fowl of the air, and over every living thing that moveth upon the earth." Genesis 1:28

irregularity has been produced by sin..."[6] Natural law here and, moreover, its violation seems to become an excuse for environmental exploitation and an instrument of human alienation from nature. But just as nature is consistent in itself, so everything in nature seems to have a certain purpose. Stoic-Christian tradition developed this approach and relocated the purpose of all living things to serve man:

> The fact remains that the Stoic-Christian tradition has insisted on the absolute uniqueness of man, a uniqueness particularly manifest, according to Christianity, in the fact that he alone, in Karl Barth's words, has been "addressed by God" and can therefore be saved or damned but also, in the Stoic-Christian tradition as a whole, apparent in his capacity for rational communication. If nature, on that view, is not wholly strange, this is only because it has been created by God for men to use.[7]

This view not only celebrated the uniqueness of human beings, but also changed the attitude toward nature in a whole new direction. The blessedness of nature now was replaced by exploitability. Nature was not sacred anymore; it was rather an instrument given by God to humans to utilize. But "the doctrine that 'everything is made for man' does not at once entail that man should go forth and transform the world"[8]. Of course, we had to cut trees for shelter and kill ducks for food, but this does not mean that we can treat nature as a piece of Cartesian wax:

> When men act on nature, they do not simply modify a particular quality of a particular substance. What they do, rather, is to interact with a system of interactions, setting in process new interactions. Just for that reason, there is always a risk that their actions will have consequences which they did not predict.[9]

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[6] Pojman, p.137

[7] Passmore, pp.130-131

[8] Ibid., p.131

[9] Ibid., p.137.

It seems that the idea of natural law has nevertheless influenced some philosophers, though not in a theological context. Beside legal human rights stated in constitutions, many people believe that there are some *natural* rights, like the very right to life which, regardless of whether it is legalized or violated, exists in the world independently. Together with rights, obligations arise; for example, if I accept that one has the right to life, then I simultaneously accept that I have an obligation towards her not to take her life, and vice versa. This duty cannot be withdrawn whatever the consequences might be. Different natural rights theories justify the basis of these rights in various ways, but most commonly accepted view is Kant's idea that human beings have intrinsic value and dignity. Thus it can be said that humans have one fundamental ethical duty: to treat other human beings as ends in themselves rather than as means only to other ends. This absolutist, duty-based approach which is also referred to as deontological[10] was maintained by Kant.

Having this fundamental duty "to treat other human beings as ends in themselves" as a starting point, I think a Kantian could argue that we have an obligation to consider and act towards future generations as to ourselves, assuming that they have the whole package of rights similar to ours. Do we have a duty always to act in the frame of justice and morality, no matter what the consequences would be? According to Kant's categorical imperative[11], the answer is "yes, we do." But as Pojman reminds, "Kant never discusses future people, but seems to require that any object of my moral regard be an *existing* rational agent."[12] Pojman continues that "it is well known that Kantianism can be appealed to in support of abortion, since fetuses are not rational agents. As we have no obligations to potential people in the form of fetuses, we have no obligations to

[10] From the Greek word "deontos" for "duty".

[11] "Act only in accordance with that maxim through which you can at the same time will that it become a universal law", Kant, p.31.

[12] Pojman, p.89 (my emphasis).

those who aren't even conceived, who lack even biological identity."[13] He concludes that "a Kantian would likely allow for the end of humanity, as long as no moral principles were violated."[14] It seems then that from deontological point of view we have no obligations to future persons at all.[15]

Furthermore, consequences of environmental acts cannot be discharged because these consequences would constitute the future environment. In addition, ethical judgments concerning environment are problematic from Kant's perspective because if only duty-based human conditions are taken into account, what seems morally right for human beings might be immoral towards other living things. Duty involved in any environmental act may coincide with a duty towards human beings or create a contradiction, and any choice might be equally moral or immoral. For example, if the only way to save the planet is that every single person in the world voluntarily stops reproducing, a Kantian would not find anything wrong in this decision because from the deontological point of view no one violates anyone's rights by refusing to procreate (the planet would be safer, even if the entire human race eventually comes to an end).

Decisions concerning environment and future generations are not always so easy to formulate as, for example, "never cheat in exams". Universalizability of any principle is problematic, too – how can one be sure that any principle concerning the future is actually universally applicable? As time goes by, it is not clear whether any environmental impact would be actually desirable to become a universal law of nature after all. Besides, is it actually right or wrong for any action concerning environment and future generations—which are no rational agents—to become a universal law? After all, decisions concerning the environment are to be made in order to have consequences. That is why it is

[13] Ibid.

[14] Ibid., p.90.

[15] I do not violate anyone's right if I choose not to have children.

impossible to set forth such a universal duty that would be right regardless of the results of its implementation. Furthermore, there does not exist an absolute state authority that might take the burden of choice and be able to make the right one, too. A question of having the right to choose *for* future generations is another problem, since it is not certain whether future generations would exist in the first place and, more importantly, if any choice would satisfy them at all.

It is clear that deciding what is morally right or wrong cannot be determined by a single ethical duty. Most of our personal decisions are made to bring about the best possible consequences of these decisions. Such an ethical approach is known as consequentialism and is in opposition to duty ethics because it is concerned with the results of our actions rather than any duties we might have towards others or any natural inclination of our characters[16]. Right and wrong are calculated in terms of the consequences of acts: an act is considered ethically right if it aims to produce consequences that are better or more pleasurable than those that any other act could produce. However, the uncertainty of environmental impacts and of the future might restrain the consequentialist ethical decision making. How to decide what the best consequences might be? And for whom? Coordinating acts that would produce the best consequences both for us and future generations is virtually impossible because future generations do not yet exist. Since they do not exist, the utilitarian principle of the greatest happiness of the greatest number is inapplicable because needs and interests of future persons, the identity and number of which are unknown to us, cannot be determined. Furthermore, since most consequentialist approaches do not recognize absolutes values, such as right to life, serious complications might arise. For example, if some state's general wealth directly depends on the controlled usage of its

[16] Humans, going beyond normal growth, development and reproduction and having an advantage of intellectual capacities, also are said to develop virtues. Moral behavior is essential in virtue ethics tradition, though not in the modern meaning of these words because courage and moderation have little to do with actual environmental impacts we need today and hardly bring any solution, no matter how just and prudent man could be.

resources, and over-population might result in critical depletion of these resources causing general decay, then, by principles of consequentialism, it would be ethically right to prevent any reproduction permanently or even spread some sort of controlled disease among citizens in order to reduce population. The former would deprive future generations of existence while the latter would simply be immoral. Evaluating human life and the well-being of environment in terms of human costs and benefits complicates decision making and provides no information whether any particular decision is *actually* right or wrong, because conditions for the best consequences might not be satisfied after all.

2.2. Environmentalist Approaches

It seems that traditional ethical approaches fail to afford any definite solution. Recognizing this, many environmental ethicists have attempted to develop new ways of extending these traditional approaches in order to provide solutions to increasing environmental problems. Making ethical decisions about environmental problems requires strong environmental sensitivity. A new approach that recognizes nature as a whole, also known as the "land ethic", was first introduced by Aldo Leopold and further developed by J. Baird Callicott. According to this view, nature includes man as a member, not as a conqueror or master. The main idea of the land ethic is as follows:

> The key-log which must be moved to release the evolutionary process for an ethic is simply this: quit thinking about decent land-use [the Conservation concern] as solely an economic problem. Examine each question in terms of what is ethically and esthetically right, as well as what is economically expedient. *A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends otherwise*.[17]

[17] Leopold, p.224 (my emphasis)

It seems from this passage that integrity, stability and beauty are the only values that really matter. However, Pojman sets forth an example that illustrates the inconsistency of the land ethic as follows:

> Suppose a biosystem (say, a swampland in a forest) would remain stable, united (maintaining its integrity), and beautiful for 100 years with humans but could maintain these virtues for 150 years if we killed all the humans who inhabit it. What would the land ethic require us to do? This seems anti-anthropocentric with a vengeance – hardly an extension of our morality, but a reductio ad absurdum of it.[18]

In other words, setting the criteria is not enough to establish an environmental ethical policy. Moreover, as Tom Regan reminds, "the implication of this view includes the clear prospect that individual may be sacrificed for the greater biotic good, in the name of 'the integrity, stability and beauty of the biotic community'. It is difficult to see how the notion of the rights of the individual could find a home within a view that ... might fairly dubbed 'environmental fascism'."[19]

The idea that we are members of the natural community is in contrast with the prevailing egoism of the modern society, where seeing ourselves as divided from the world turns us into laid-back people who are not concerned with what is going on around them. What does it mean to conceive of the land as a community? Environmental ethicists who adopted the ideas of the land ethic assumed that there were similarities between natural systems and human communities. Conceiving the land as a community suggests that it includes *us* within itself, not vice versa. According to the land ethic, it is necessary to realize that we would not exist if there was no nature, we would not evolve into what we are now without nature itself: nature is a necessary background for everything we possess now as humans.

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[18] Pojman, p.161

[19] Regan, pp.361-362

Callicott, defending the land ethic, sets forth an argument based on quantum physics. He suggests that in the future the quantum theory might change our way of thinking about nature globally because in accordance with quantum theory, we are inseparable from the nature. To clarify, comparing ecology and quantum physics, Callicott basically argues that people and the "land" are the one, and that "the injury to *me* of environmental destruction is primarily and directly to my extended self, and to the larger body and soul with which I am continuous."[20] But if everything is one, then how are we supposed to determine what is right and what is wrong? And is there any right or wrong at all? From the point of view of Callicott's approach, by harming the environment we harm ourselves, consequently, it seems to me that from this point of view we are suicidal. Moreover, in my opinion, this approach fails to set forth any solutions to the conflict of interests of particular individuals, since, according to this view, there are none – neither individuals, nor conflicts of their interests. I believe that the notion of community in general suggests cooperation in achievement of common goals and even sacrificing personal advantages for the sake of common welfare. But since there are no individuals, but only a large whole, then there seem to be no advantages or any conflicts at all, which is obviously not true. What is the possible application of this approach to the problem of future generations? First of all I believe that land ethicists would distinguish between the welfare of the biotic community and the welfare of future generations.[21] For instance, any actions to preserve the stability, integrity and beauty of the future biotic community are uncertain since human impacts that might tend to harm it are unknown due to the fact that those humans do not yet exist. As to the well-being of future generations, a land ethicist might not even bother to take them into consideration since first, the individuals are not the subjects of the land ethic approach, and second, even if

[20] Callicott, p.275

[21] By "welfare" here I mean not the financial, but rather "being" aspect of this term, like "well-being".

the land ethicist tried to include future generations into the large whole, it is quite possible that future generations might be sacrificed in order to preserve the existing *land*. At first it seems fair from the point of view of the land ethic that the right environmental policy should be to realize that everything is a part of one large biotic community. But the *land* has already been exploited so thoroughly that the only improvement possible might be some kind of altruistic suicide. In fact, William Aiken argues that "massive human diebacks would be good. It is our duty to cause them. It is our species' duty relative to the whole, to eliminate 90 percent of our numbers."[22]

The question of value attributable to environment and future generations is another problem. The value attributed to environment has been strictly instrumental for centuries. I believe this approach has been mainly influenced by the Christian tradition in which nature[23] has been evaluated in terms of usefulness for humans. Although we prefer to believe or feel that we cherish a beautiful sight not because it is useful to us, but for the sake of itself, it is still questionable, because it is not clear whether that beautiful view would still be "beautiful" if there were no human beings to enjoy it in the first place. Although Paul Taylor[24] claims that every living thing has inherent worth as a result of "having a good of its own", he rejects that ecosystems as wholes can have value beyond the individual organisms they consist of (because the wholes are not such beings as to have good of their own). From this we may conclude that if a beautiful view is ecologically regarded as an ecosystem, then Taylor's biocentrism might not find it worthy enough to protect because this sight as an ecosystem has no inherent worth. So, enjoying and protecting a beautiful view can be regarded as an interest and, consequently, instrumental value is nevertheless attributed. Another

[22] Aiken, p.269

[23] Christian tradition does not distinguish between nature and environment as environmental ethics usually do.

[24] Taylor, pp.68-71

perspective is that preserving beautiful view for future generations might contradict with economic profit, because producing wealthier future might seem more important than a bunch of oaks and a lake. Construction of a dam might irreversibly damage environment and destroy not only endemic plants but also deprive us from priceless cultural heritage, as happened in the Zeugma case.

On the other hand, can value be attributed to future generations, i.e. to simply non-existent beings? Can we say that an existing rare plant is much more valuable than some non-existent future generation? This question can be discussed in terms of the notion of the rights and interests of future people. Of course the fact that they do not yet exist does not ease the situation for us. However, as Avner de-Shalit states, "[w]hat matters ... is not that future people do not exist *now*, but rather that if and when they exist, future people will have rights."[25] In other words, when future people will come to existence, they will become right holders with their own interests. Together with that,

> A being with interests should be distinguished from objects like rocks, or from monuments such as the Taj Mahal, which we treat respectfully although not for their own sake because they have no intrinsic value. So, having interests is a status defined as "being intrinsically valuable, i.e. being valuable independently of one's instrumental value".[26]

However, if having an interest is said to be enough to be considered valuable, then I believe that one important distinction should be made. By 'interest' the author means not some sort of desire to be richer in order to live in a bigger house, but something that is rather vital, something that increases one's well-being as human, such as clean air or a basic medical care. Of course one might say that one must exist first in order to have an interest and considered valuable—equal value cannot be attributed to both existent and non-existent entities. Paul Taylor argues that "once we come to understand [a butterfly's] life cycle and know the

[25] De-Shalit, p.114

[26] Ibid. Quotation by de-Shalit from Raz: 1986, p.177

environmental conditions it needs to survive in a healthy state, we have no difficulty in speaking about what is beneficial to it and what might be harmful to it."[27] Consequently, it can be said that since we already understand the life cycle of human beings, we know the interests of future generations. However, having no difficulty *speaking* of the basic needs of future generations, we still are "moving in the dark". For instance, we are not able to determine the circumstances of their lives—what if their circumstances change so thoroughly that the basic needs we assume now would be absolutely useless or even irrelevant then? Moreover, the interests of future generations are much more complicated than those of a butterfly. That is, as far as we know butterflies do not have to make decisions concerning such problems as fair distribution of natural resources or global terrorism; and even if they did, the "butterfly effect" would hardly create any "hurricane" impact in those fields.

2.3. Theories of Justice

One of the most popular approaches to the problem of future generations is theories of intergenerational justice. The most extensive attempt to build a theory of justice between generations was developed by John Rawls. He introduced a formula of "just savings", which tried to estimate a fair distribution of benefits between present and future generations. He supports his theory by assuming that "[a]ll generations are virtually represented in the original position..."[28] In other words, Rawls conceived all generations behind a "veil of ignorance" meaning that any given generation would *not* know under what circumstances they would come to being. Hence they would try to set rules that would apply to *all* generations

[27] Taylor, p.66

[28] Rawls, p.278

regardless of their status so that no generation would be favored or mistreated. "No one knows his situation in society nor his natural assets, and therefore no one is in a position to tailor principles to his advantage".[29] However, setting rules before the game begins might jeopardize the game itself. That is, if the earlier generations use up natural resources faster, due to the lack of resources left, the number of future generations might change, consequently, "since the rules drawn up, therefore, could reduce the number of generations that are represented in the original position, it cannot constitute a position in which all the potential generations are represented".[30]

Interests and needs of the present and future generations seem to conflict regardless of the rules of the hypothetical game proposed by Rawls. Avner de-Shalit gives the example of the CFC gases and the Ozone layer depletion:

> It takes a very long time—about thirty years—for CFCs released on the earth's surface to rise up through the atmosphere to the Ozone layer. Once there, they will be active for several decades. This suggests that the people most likely to suffer from the chemical effects of our use of CFCs are those who will be living in sixty to eighty years from now. Should we then immediately stop using CFCs? What about people who live now and benefit from them?... Here again, obligations to future generations seem to conflict with the interests of (some) contemporaries.[31]

De Shalit proposes a communitarian theory of intergenerational justice, a theory which sets forth a notion of so called "transgenerational community", which is not necessarily a community of one's birth – it can be a nation, an academic community or even a religion. Not being a community of one's birth allows the author to extend it to include even most remote future generations. This theory, de-Shalit claims, overcomes the problem of identifying future generations and is

[29] Ibid, p.139

[30] Beckerman and Pasek, p.35

[31] De-Shalit, pp.9-10

helpful in identifying the content of our obligations to future generations.[32] Identity of future individuals and our obligations towards them are major difficulties discussed by many environmental philosophers, economists and even politicians.

However, the fact that future generations do not yet exist makes it hard to define their needs, interests and, more importantly, their rights, if any. We can only guess their number and status, and consequences of our actions in the remote future are absolutely vague. Nevertheless, de-Shalit argues that "[w]e have... positive and negative obligations to close and immediate future generations."[33] He defines "positive obligations" as "those beyond merely preventing damage, e.g. providing resources"[34], while "negative obligations" are namely those "to avoid causing future generations enormous harm or bringing them death, and to try and relieve any potential and foreseeable distress."[35] But when it comes to very remote future generations, it is hard to pursue with positive obligations since they seem to fade away as time passes. In ideal circumstances, there should be no time limit in setting and applying moral grounds for intergenerational justice, since justice requires fairness even to very remote future generations. However, as de-Shalit points out, "a theory of morality, or of applied philosophy (as environmental philosophy is), should not demand what is absolutely impossible."[36] He continues:

> If people are told that they should share natural resources, e.g. coal, with people who will be alive six or twelve generations from now, they will at least listen and may even tend to agree. But if they are told that they should share access to coal with someone living in the year 2993 or 3993, the response will probably be, "To

[32] Ibid., pp.127-129

[33] Ibid., p.13

[34] Ibid.

[35] Ibid.

[36] Ibid., p.14

> hell with morality and intergenerational justice! This is ridiculous; such policies do not make any sense because they are inconceivable!" I am not claiming that what people think is always right or moral, but rather that our principles of intergenerational justice should not go beyond what is reasonably intelligible and imaginable. This is important to bear in mind because we are discussing relations with the remote future, which in itself is difficult to conceive.[37]

As it was told before, with time our "positive" obligations seem to vanish. De-Shalit sets forth degrees of our obligations to future generations, beginning with those who exist now. Namely, we have wide and substantial obligations to our contemporaries: "I may even go to war for their sake."[38] With those to exist in the near future, the degree of obligations is not high enough to die for, but it is "enough to make us pay regular taxes and so forth".[39] As to the very remote future generations, "I may have to give up the use of nuclear energy"[40], but tax enforcement is out of question, even if those taxes would help to launch a spaceship with the last generation of human race.

De-Shalit argues that we have obligations to future generations based on the common notion that they *are* part of our community. As a matter of fact, the Preamble to the Universal Declaration of Human Rights (UDHR) begins as follows: "whereas recognition of the inherent dignity and of the equal and inalienable rights of all members of human family is the foundation of freedom, justice and peace in the world." In other words, in accordance with UDHR, future generations should be conceived as members of human family as well. However I find it plausible to emphasize that future generations, either immediate or remote are not *actually* part of our community, since they do not exist yet. But "we

[37] Ibid.

[38] Ibid., p.54

[39] Ibid.

[40] Ibid.

cannot simply turn a blind eye to a needy person, even if she is not in our community,"[41] can we?

The problem here is that it is hard to determine the degree of the "need" of a future person and the degree of the effects of any actions on other generations. Nevertheless, de-Shalit states that "we *do* have certain obligations to *remote* future generations, although they are not based on, or derived from, communitarian relationships."[42] De-Shalit offers the example of difference between justice and humanity[43], simply implying that the decisions made concerning more immediate future generations are a matter of justice in transgenerational community, while our obligations to very remote future generations are in fact derived from humanity. To de-Shalit, "justice is concerned with principles of ownership or the control of resources, while humanity is concerned with people's well-being."[44] Distribution of resources seems to be possible in the context of justice to immediate future generations only.

If so, can we say that if every generation takes its part in just distribution, ownership and control of goods, then we *might* actually succeed in fulfillment of our humane obligations to very remote future generations? De-Shalit does not imply that "our obligations to human beings may be reduced to simply refraining from certain policies."[45] On the contrary the author argues that,

> We should therefore accept the principle that we should sacrifice something (how much and what is the separate question) for the sake of remote generations. At the same time it is unreasonable to think in terms of sharing control over goods with people who will live two thousands years from now.[46]

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[41] Ibid., p.63

[42] Ibid. (my emphasis)

[43] Here humanity is not "human beings collectively", but rather "being humane", "kind-heartedness".

[44] De-Shalit, p.63

[45] Ibid., p.64

[46] Ibid., p.65

Posterity matters because we have strong obligations to immediate and less remote generations in the context of justice throughout transgenerational community, and because we have fading obligations to very remote generations in the context of humanity. However, not every obligation implies a right. Bandman sets forth various positions on the rights and duties attributable to future persons and us. One of them is that,

> ... future generations have rights substantially like our rights, which imply obligations against us. For some defenders of the rights of future generations, these rights take the form (a) of an extended eternal contract between members of one generation, linking them and members of all other generations inextricably (Edmund Burke). For others (b), the rights of future generations flow from a less extended contract model between members of adjacent and near-adjacent generations. The rights of any generation are due to what a predecessor generation would justly set aside for them (J. Rawls). For yet others (c), the move to attribute rights to indefinite others and "not-yet-determinate persons" (A. Baier) includes potential beings who will have interests, needs and rights very much like ourselves (A. Baier, G. Pletcher, E. Partridge). For all three variations, the rights of future generations are like our rights.[47]

However, recognition of such rights is problematic, since we tend to accept rights of those who are able to claim those rights in the first place. Rights claim requires actual presence or at least representation, consequently, even Rawlsian virtual original position cannot convince us fully to acknowledge the future rights of future persons. Article 3 of the UDHR states *the right to life*: "Everyone has a right to life, liberty and security of person". Given respect for the human right for life or health, we can say that future people seem to have, if not legal rights, but at least some *interests*, such as an environment free of toxic pollution, clean water resources or "an interest to be born"[48]. De-Shalit argues once again:

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[47] Bandman, p.95

[48] De-Shalit, p.115

> Of course, if we wanted to respect such an interest or such a right, we could not. Acting in the name of the rights of the future persons could justify environmental policies, but also the worst Malthusian scenario. In that case, can we really speak of future people's rights that exist *now*? ... Imagine that all the inhabitants of our planet decide together that they no longer wish to reproduce, no woman conceives, and there are no future generations. ... [S]ince none of the rights of future people are being violated by such a decision – their existence being a prerequisite for their having rights – the proponents of the right theory cannot condemn the earth's inhabitants for this unfortunate decision. If there are no interests now, how can we say that future people have claims?[49]

As Anthony D'Amato states, "a common assumption underlying every book or essay on a global environment is that the present generation owes a duty to generations yet unborn to preserve the diversity and quality of our planet's life sustaining environmental resources."[50] Consequently, our "moral obligation to act to preserve the environment *for* future generations results from a common notion of 'future generations' and not because we have any particular future individuals in mind or have such an obligation at all."[51] Unable to identify future generations, we fail to attribute them any rights, but somehow we manage to assume that we have certain obligations to them.

This assumption is reflected in *Our Common Future* presented at The World Commission on the Environment and Development (WCED) in 1987, introducing a concept of sustainable development. Sustainable development was defined "as meeting the needs of the present without compromising the ability of future generations to meet their own needs"[52]. This idea might seem promising at first, but it might not be sufficient to make the present generation wealthy and to

[49] Ibid.

[50] D'Amato, p.190

[51] Ibid. (my emphasis)

[52] Brundtland, p.12

expect gratitude from future generations, if that is the case. Furthermore, since environment is involved in one way or the other, and the wealth achievement comes with resource use, there should be introduced some sort of a strict model of intergenerational resource consumption that would be fair enough for everyone and applicable all over the world. However, such a consumption model does not seem to apply to the world today. Distribution of resources affects future generations, consequently, governments should take future generations into account in a reasonable way and at a sufficient degree. However, the "sufficiency" factor seems to be determined politically, which is another obstacle to the fairness of distribution: political decisions must not favor any generations at all, but applicability of this principle is questionable because politics usually tend to take sides.

World-wide application is problematic; for instance, the search for and development of alternative resources seem to be rather an advantage of developed countries, while poor communities would have to estimate these goals at the expense of their own resources which are limited or over-used already. Future generations of these poor communities therefore would benefit at the expense of present generations which are already worse-off. Furthermore, sustainable development seems to value exclusively human beings and their welfare. It aims to solve environmental problems so that future generations would be better-off, but while judging strictly economically, sustainable development disregards any ethical judgments. Unfortunately we have "to predict what the most important interests of future generations are likely to be and which of them are most likely to be at most risk".[53] Sustainable development policies seem to take into account the material side of environmental impacts in general. They seem to avoid environmental hazards in terms of poverty and economic growth of future peoples.

[53] Beckerman and Pasek, p.194

Of course Beckerman and Pasek do not advocate sustainable development; on the contrary they "argue that our main obligations to future generations do not lie in the material field at all but in the field of human relations"[54]. For them, what is sustainable is not necessarily ethical, and most of the times what is ethical is definitely not sustainable. By definition, sustainable development cares for humans and humans only, consequently any environment related decision that is to be made would aim to satisfy human needs and would be in accordance with human interests only. The authors also argue that the solution lies in a society that protects basic human rights, "a decent society in which there is respect for basic human rights, tolerance for differences in conceptions of the good life, and democratic institutions and traditions that enable people to sort out their inevitable conflicts peacefully and free of fear of oppression and humiliation."[55] Although these seem to be very promising, unfortunately, these principles do not apply even at intragenerational level, let alone being effective among generations.

2.4. Parfit's Paradox

"Generations are not homogeneous entities,"[56] since the number and composition of generations are uncertain. Yet even "slight difference resulting from our intervention in the environment will affect the ecosphere in the years subsequent to our intervention."[57] Changing environmental conditions, on the other hand, might "affect the conditions under which human procreation takes place."[58] To

[54] Ibid., p.195

[55] Ibid., p.196

[56] Ibid., p.1

[57] D'Amato, p.191

[58] Ibid.

give a more straightforward example, let us picture a couple planning to conceive a child. Can we say that a child conceived by this couple today would be different from the one conceived two days later? Strictly speaking, different eggs would be fertilized by different sperms, consequently, biologically speaking, the child would not be the same. To enlarge the picture, "when the environment is disrupted even a slight amount, a different future person will probably be conceived. … Different people will be born from those who would have been born if we had not intervened in the environment."[59]

It is a prevailing opinion that we ought to care for the Earth because we have duties towards future generations. But given that the composition of future generations is continuously changing, can we actually *have obligations* to future persons if their identity and existence are uncertain? This problem is known as Parfit's paradox about future individuals. While it is certain that our environmental impacts would *change* environmental circumstances one way or another and affect future persons, it is still *not* clear whether these effects would make future generations live better or worse lives if there should exist any. Parfit gives example of two policies, the risky energy policy and the safe energy policy.[60] The risky policy, while being safe to us and slightly increasing the standard of living over the next century, might likely have hazardous effects on a future generation, say two hundred years from now. The safe policy might likely not be the best solution for us, but would be perfect not only two hundred years from now, but even for the most remote future generations. If we choose the risky policy, "two centuries later, thousands of people are killed and injured. But if we had chosen the alternative safe policy, these particular people would never have existed. Different people would have existed in their place."[61] Risky policy, while

[59] Ibid.

[60] Parfit, pp.114-116

[61] Ibid., p. 116

dramatically affecting thousands of people, would nevertheless increase the overall wealth. Furthermore, given the risky policy, the increased wealth would provide these people with better lives worth living, while the safe policy, affecting *our* lives, would deprive future generations of slightly higher living standards.

From strict deontological point of view, future generations cannot have rights that would imply obligations for us. Furthermore, our acts in the present have effects on the future; consequently "we have a moral obligation to take account of the interests of the future generations in our policies, including those policies that affect the environment."[62] However, who has those obligations? It is easy to say that we have certain obligations to future generations, but how should we determine what they are? Our actions have consequences that we might not even be aware of, so what possible obligation could force us to make the right choice, unless we are some sort of fortune-tellers? Establishing grounds for our obligations on rights theory or through theories of intergenerational justice does not set forth what our obligations actually are or whether some obligations are more important than the others, and on what grounds. Extending basic human rights into the future hardly solves environmental problems, since the environment itself is not attributed any actual rights so that an equal consideration could be made for, say, deciding what is right for humans and the environment simultaneously. No matter what the consequences could be, we have to choose. Given the obligations to future generations, we are responsible for the choice we make. Assuming that we have obligations to future generations we also assume that acting in accordance with these obligations would make future generations better off. But as Parfit illustrated, this might not always be true.

These discussions raise other problems, such as whether it is better for someone to live in bad conditions than not to be born at all. Nevertheless, it is clear that the uncertainty of environmental impacts complicates the problem of

[62] Beckerman and Pasek, p. 28

choice between one environmental impact and another, because the consequences for remote generations would not be predictable or preventable in case of misjudgment. Although Parfit's approach seems problematic, it is nevertheless important because such dilemmas emphasize the fact that "future generations are not an abstraction; they consist of individuals."[63] Whether we are able to predict and prevent consequences of our actions or not, "the fact that somebody will be born does not mean that the person lucky enough to be born is indifferent about who it is."[64] So, just as *they* would care for whom they are, so do we, "if we feel we owe an obligation to *them.*"[65] But is that so? The question "why *do* we care for future generations?" seems to be right. But changing the question into "why *ought* we to care for future generations?" we drag the problem to a dead end.

[63] D'Amato, p.194

[64] Ibid.

[65] Ibid.

CHAPTER 3

HUME, EVOLUTIONARY THEORY AND FUTURE GENERATIONS

3.1. Identity of Future Generations

So far it seems that establishing ethical grounds for our attitude towards future generations hardly leads us to any particular solution. Various opinions tend to contradict with each other and none of them is definite enough to prescribe such an environmental behavior that would be fair enough towards us, environment and the posterity altogether. Not only do the solutions proposed tend to contradict with each other, but the very definition of future generations seems to be vague. Of course there are probably two possible answers to the question of who the future generations are: they are either real persons, or some abstract community. If we assume that they are some abstract community, then it is hard to attach them any particular rights, since under traditional approaches to the law, rights are attached only to identifiable individuals. Yet by definition "there are no identifiable individuals in future generations because they have yet to be born."[66] Consequently, neither rights nor obligations can be attached to them or to us, respectively.

[66] Susskind, p.54

However, Weiss tries to avoid this problem by setting forth the so called planetary rights, which are "the rights which each generation has to receive the planet in no worse condition than that of the previous generation, to inherit comparable diversity in the natural and cultural resource bases, and to have equitable access to the use and benefits of the legacy."[67] Weiss notes that these "planetary, or intergenerational rights... are not rights possessed by individuals. They are, instead, *generational* rights."[68] By defining these rights as generational Weiss assumes that these rights are attached to all of us, past, present and future generations altogether. Consequently, does it mean that by defending the rights of future generations we, as the present generation, actually defend our own present rights? As a matter of fact, Weiss states that "the present generation, as a beneficiary of the legacy of past generations, has certain rights to benefit from this legacy."[69]

In other words, if you were to rent a house, you would expect to receive it in no worse condition than it was received by the previous tenant, which, on the other hand, makes it reasonable for you to return it in no worse condition to next renters to use. Using the analogy, we can say that according to Weiss, we once had a right to receive this planet from past generations in no worse condition that it was before, and now we have an obligation to pass it on to future generations in no worse condition than it was when we received it, since future generations will have the right to receive the planet in good condition. Weiss proposes drafting a Declaration of Planetary Obligations and Rights:

> The Declaration must reaffirm several general assertions: that we have responsibilities to future generations, and therefore must conserve the planet for them, that we are also entitled to enjoy the fruits of our planetary heritage in a manner consistent with this responsibility, that we face many threats to the integrity of our

[67] Weiss:1989, p.95

[68] Weiss:1990, p.205

[69] Weiss:1989, p.95

> natural and cultural resources, and that only by working together can we alleviate the poverty of some communities in the present generation and conserve the planet and our cultural resources for future generations. It should set forth guiding principles for achieving justice between generations and detail the planetary rights and obligations.[70]

However, sometimes I seriously doubt that people can "work together" – at least not nowadays. Even if people of the world joined together for future generations, I again doubt that there would be present some kind of ideal state power that might have a primary duty to implement planetary rights and to enforce them. Weiss sets forth various planetary rights and obligations, such as a duty to prevent disasters or right to resources essential for a continued health and well-being of the human beings and our planet. But since these hypothetical rights and obligations are not individual rights and obligations, for Weiss, "since the rights of future generations exist only as generational rights, it does not matter who the individuals are and how many they may be."[71]

At this point I have to object. I believe that future generations are real people with real needs, and instead of conceiving future generations as some abstract community and setting forth any rights or obligations, planetary or individual, it would be more plausible to admit that the future generations we keep talking about are actually *our* future generations. It is important to point out that when we speak of future generations, we do not usually picture some abstract community living in year 3000, but rather tend to think of those related to us one way or another – mostly our existing or yet unborn offspring – people we really care for/about[72]. In other words, future generations are our children,

[70] Ibid., p.105-106

[71] Weiss:1990, p.205

[72] However distinction should be made concerning the term "care". "To care for" means to take care of, whereas "to care about" is more to be concerned about someone. For immediate descendants, I believe we should "care for", while with others, meaning remote generations and other people perhaps "care about" is more convenient term.

grandchildren, great grandchildren and so forth. I think that our actual relatedness to our future generations, or, as Hume puts it, "the affection of parents, the strongest and most indissoluble bond in nature"[73] might enable us to recognize the future generations not as just mere unidentifiable individuals to live in some uncertain future, but as the future generations of our own, yours and mine. Of course, I do not say that having this in mind, i.e. picturing future generations as our offspring would ease the choice between right and wrong without dragging ourselves into ethical dilemmas and paradoxes. It might be even harder, if one assumes that the future generations are actually of her own flesh and blood; moreover, the burden of making decisions might overweigh her wish to ensure the safer future.

3.2. Reconsideration of the Problem of Future Generations in terms of Some Humean Concepts

David Hume states in *A Treatise of Human Nature* that "... the relation of blood produces the strongest tie the mind is capable of in the love of parents to their children, and a lesser degree of the same affection, as the relation lessens."[74] That is, the more is the temporal distance between relatives the less is the degree of kinship, consequently, it is true that we care for our immediate descendants, but when it comes to remote generations, the genetic bond seems to fade away. Given that, however, it still seems hard to explain why people care for/about *any* future generations other than their own at all. Perhaps, the answer is that "the happiness and misery of others are not spectacles entirely indifferent to us."[75] Hume states

[73] Hume:1975, p.240

[74] Hume:1978, p.352

[75] Hume:1975, p.243

that though blood relation is the closest bond between people, yet we have strong feelings towards others - our neighbors, friends, co-workers or countrymen. Even the slightest degree of acquaintance enables us to prefer between strangers and any person we have contacted previously. However the stronger the relationship is, the stronger our feelings are. For example, when we think of a possibility of a war, we are first concerned about ourselves and our families. Any other disastrous possibility would first encourage us to protect ourselves and those we care for.[76] Of course, our feelings about our offspring are much stronger compared to those we feel for our neighbors, but if the degree of contiguity lessens, the feelings fade away accordingly. These feelings, according to Hume, are the result of a natural "great resemblance among all human creatures"[77] and these natural feelings produce *sympathy* among people. And it is due to sympathy that "whoever is united to us by any connexion is always sure of our love, proportion'd to the connexion, without enquiring into his other qualities."[78]

Of course sympathy might require some relation between people, either acquaintance, contiguity or blood relation. In other words people, in order to establish emotional connection with others, would have to share same space or time line or genes. We can think of people living 100 years from now or 100 years ago and give thought for the circumstances they might be under, however I believe it is hard for us to establish emotional connection with those who might live 5 million years from now or those who invented the wheel. Even nowadays we give little thought about inhabitants of such places as Chad or Greenland. Due to the lack of information and relationship, it is hard for us to establish emotional connection and understanding even towards those with whom we share the same

[76] Some might describe such a behavior as selfish but I believe it is necessary to realize that the instinct of self-preservation tends to fade away when it comes to the survival of those you really care about.

[77] Hume:1978, p.318

[78] Ibid., p.352

space and time line. But as soon as we gain some information, we enable our minds to acquire relationship with them and reconnect at emotional level. So far so good. But what about future generations? We might share the same space in the future, but the conditions of that "space" go through constant change; we have no information on them, moreover, *they* and their possible circumstances might suffer dramatic change almost every second – all these seem to constitute a desperate, almost impossible combat.

Perhaps to be able to overcome this uncertainty, we should try to find something in-between all the vagueness of the future that we are hundred percent sure of. Humean natural resemblance tells us that it is possible for us to sympathize with those yet to come simply because they would be just as human as we are. Due to this natural resemblance in feelings and mechanisms of thinking, people have feelings for others (their offspring), are able to make decisions about actions that cannot be immediately observed or about actions that do not directly involve them. Though we are not certain about possible existence of future generations in general including any obligations towards them, when it comes to our own future generations, our descendants, we *are* able to establish emotional connections. In other words, people can maintain "sympathy" towards future generations of their own.

To give an example, picture yourself planning to conceive a child nowadays. If for some reasons (job, date, personal) you decide to postpone the conception, i.e. decide to restrain a possible existence of an individual, this decision would probably not cause you to experience any serious emotional disturbance: as it was told before, from a strict Kantian perspective, I do not violate anyone's right if I decide not to have children, now or ever. Many people all over the world take such decisions on a heart beat. On the other hand, imagine yourself as an individual planning to have a sterilization surgery. It is obvious that such decision would not make you feel as comfortable as in the previous example, since by this decision you would not only restrain a possible existence of an

individual, but also deprive yourself of all possible offspring you could have. However uncertain the identity of an unborn child is, the emotional pressure of the very idea of *not having any* offspring might be enormously disturbing. But again, this emotional pressure has nothing to do with ethical judgment, since no one can force you to have children, and even if you don't, this is, after all, nobody's business. Why then feel bad about this?

Let's picture another example. Imagine that every single person in the world including you voluntarily plans to have a surgery for sterilization. Almost everyone would agree that such a decision would not create any serious moral dilemma, since the action is voluntary and no one's rights are violated. However none of us would easily agree to restrain possible existence of the human race (possible existence of *all* future generations) without having serious emotional breakdown. The reason for this is that we care about our own future generations (as in the previous example), but we are not indifferent to the entire human race, either. Compared to individual sterilization, it would not be a mistake to say that this decision would be much harder.

3.3. Evolutionary Reconsideration of the Problem of Future Generations

Charles Darwin in his *Descent of Man* stated that,

> [a]lthough man, as he now exists, has few special instincts, having lost any which his early progenitors may have possessed, this is no reason why he should not have retained from an extremely remote period some degree of instinctive love and sympathy for his fellows. We are indeed all conscious that we do possess such sympathetic feelings; but our consciousness does not tell us whether they are instinctive, having originated long ago in the same manner as with the lower animals, or whether they have been acquired by each of us during our early years.[79]

[79] Darwin, p.132

Can this paragraph be interpreted in the way that we possess sympathetic feelings for our future generations, but our reason is unable to tell us the origin of these feelings? Darwin thought that we might have acquired such social instincts with our early ape-like progenitors.[80] If so, can we say then that the reason we care about future generations is rather biological? Hamilton states that "it is generally accepted that the behavior characteristic of a species is just as much the product of evolution as the morphology."[81] Consequently, just as we evolved into *Homo sapiens*, so we might have developed a certain mechanism to care about our future generations.

The dictum promoted by the theory of evolution is "the survival of the fittest", the fittest being an individual, at least from an orthodox Darwinian perspective. Natural selection is expected to allow/favor the development of instincts that promote competition rather than cooperation. But it seems that natural selection might have favored the development of traits of self-sacrifice, altruism and cooperation. Why? The answer is actually simple: in order to increase the chance of survival of the offspring. First of all, human reproductive instincts demand almost heroic care for the offspring (because, for instance, of vulnerability of human babies and children). Any group, herd or society not composed of individuals with strong instincts for the protection of their offspring, would be condemned to extinction: "[p]arents who are not altruistic to their children have fewer children survive to reproduce than those who are altruistic to their children. As a result, over time, those with the trait of altruism increase in number, and those without the trait decrease."[82] No one would argue to the contrary that readiness of mothers (and sometimes even fathers) risking their lives

[80] Ibid., p.133

[81] Hamilton, p.354

[82] Thompson, pp. 476-477

for protecting their offspring is a natural (i.e. biogenetic) disposition, not a learned behavior.

On the other hand, parental instincts of animals last as long as the offspring needs care and protection; as the offspring grows up, parental care diminishes. Dawkins illustrates this with an example of parental investment. He defines parental investment as "any investment by the parent in an individual offspring that increases the offspring's chance of surviving (and hence reproductive success) at the cost of the parent's ability to invest in other offspring".[83] Suppose a mother has two children, a young one and an older one. Mother's readiness to invest in her children might be determined by their ages. For instance, if she had to choose between saving the life of one child at the expense of another and the one she had chosen not to save would definitely die, then, Dawkins states, "she should prefer the older one"[84], because she had invested more into the older one. On the other hand, if the choice to be made does not involve any "life or death", "her best bet might be to prefer the younger one,"[85] because the older child is more likely to survive by himself without mother's help in search for food or shelter, while the younger one is more needy and would be more likely to die if the mother stopped caring for him:

> Now, even though the mother would prefer the little brother to die rather than the big brother, she may still give the food to the little one, because the big one is unlikely to die anyway. This is why mammal mothers wean their children, rather than going on feeding them indefinitely throughout their lives. There comes a time in the life of a child when it pays the mother to divert investment from him into future children.[86]

[83] Dawkins, p. 133

[84] Ibid., p.134

[85] Ibid., p.135

[86] Ibid.

Parents care for their offspring as long as their parental investment is worth it. Such a disposition for the protection of offspring is very likely to be carried through generations. Any "anomaly" would be eliminated in the end, because offspring of the anomalous generation would not survive and the defected trait would be eliminated. Herd animals expand their parental instincts to the whole herd, otherwise absence of such instinct would cause extinction, because among many species, not the pair of parents but only the whole herd is simultaneously able to execute signalization of potential danger, protect the offspring and supply food. Primates also care for their offspring as a herd and in case of danger babies jump on the backs of the closest grown ups regardless of their relation. Of course even without carrying experience throughout parental education, herd instincts are carried and consolidated just as camouflage, claws and various other skills and ways of self-protection. Consequently, the parental instinct for caring about offspring is carried through, and even improved in, if possible, each generation.

As mentioned earlier, evolution of human beings necessitated development of strong instinct for cooperative care and altruistic protection of the offspring. As our ancestors became bipedal, used tools and increased their intellectual capacities, the process of evolution fastened. Walking on their legs has narrowed females' pelvis, which, unlike their primate relatives, made them give birth to babies with smaller heads. Together with that, children were born with fontanelles[87] in their skulls so that the skull could slowly grow and harden, enabling the development and improvement of the nervous system. Moreover, the newborns were unable to walk immediately and their mothers would have to carry them in their arms for a long period of time unlike their primate relatives and other animals. Consequently, offspring's dependence on their parents increased. Furthermore, since female sexual activity has lost its seasonal characteristics,

[87] I.e. soft spots in the skull.

babies were born at any time of the year, which also increased the need for intensive care and raised the role of social interaction in raising offspring.

Continuous care, feeding and protection of the offspring could have been accomplished only by the whole group. Vulnerability of one family would endanger the whole group; consequently, it would be for the interest of the whole group taking care of everyone rather than endangering those in need. And such care sometimes would require courage and self-sacrifice, an altruistic behavior not only towards the members of the family, but towards all offspring, developing immediate reactions to protect other children or pregnant and nurturing females. Contrary to the common opinion about "contradiction" between altruism and power, it is more likely that altruistic instincts must have been combined with strength and intelligence, because only those who could take care of themselves were able to take care of others too, being smart enough to calculate potential risks and fast enough to react.

In other words, you might be altruistically willing to protect your offspring, but it might be useless unless you are strong and intelligent enough to take action. I remember a nature show on TV that illustrated an example of such altruism-power relationship. When a leopard attacked a herd of baboons, two male baboons fought back – one of them jumped on leopard's back, the other aimed to leopard's throat. The leopard's claws tore the first baboon's stomach off and broke the second baboon's neck, but at the last moment second baboon's teeth closed on leopard's throat – as a result, all three died in couple of seconds, but the enemy was defeated and the baboon herd was safe. It is a high possibility that other monkeys were willing to save the herd, too – they screamed and jumped, and some even showed attempts to join the fight, but only those two actually responded to the attack and succeeded – in their altruistic death the herd found relief of safety. Now one might ask what the use of being altruistic is, if you die on your offspring.

At first, it seems foolish, but if you look closer, this whole altruism thing is quite peculiar. Let's say a person possesses an altruistic gene. According to Mendel's law[88], this gene has to be possessed by 1/2 of his brothers and sisters, by 1/4 of his nephews and nieces, by 1/8 of the children of the latters etc. If she sacrifices herself for her, say, 4 brothers or sisters, one altruistic gene will be lost. Still, every survivor of given 4 will necessarily, by Mendel's law, have 50% chance to possess the altruistic gene. Consequently, now 2 altruistic genes will survive. Now imagine that during several generations one altruistic gene-owner will sacrifice herself for others, and some survivors will also carry this altruistic gene. Given that, frequency of the gene will increase. As a result, the altruistic gene providing survival of close and even not very close relatives (though individually non-profitable), will flourish even more intensively if the individual sacrifices himself for larger number of people.[89]

It is important to keep in mind that early females used to give birth to 10-15 children, and only 2 or 3 of them would actually survive and become adults while the rest would die from disease, accident or carnivore attacks. Only through delicate and continuous care and protection was it possible to raise even half of the offspring. To follow Dawkins, it is evident that throughout her life, any parent has a certain amount of parental investment to give away: "[t]his represents the sum of all food she can gather or manufacture in a lifetime of work, all the risks she is prepared to take, and all the energy and effort she is able to put into the welfare of children."[90] Having this in mind, we can assume that it would not be wise to have too many children – the amount of parental investment available

[88] You pass on one of each chromosome pair through a random process. The probability of passing on a particular chromosome is 50%. This probability is independent for each chromosome pair, a principle known as Mendel's law of independent assortment.

[89] Such gene-based approach was developed by Williams, who stated that the gene was the fundamental unit of selection. In other words, selection is performed rather on genetic than on individual level. This concept was further developed by Richard Dawkins and is referred to as selfish gene theory.

[90] Dawkins, p.133

would eventually diminish and the offspring would die. Moreover, the parental investment would be wasted not only for her children, but for her grandchildren, too: "...rivals who invest in the optimum number of children will end up with more grandchildren."[91] Survival of this offspring would enormously increase the probability of altruist individuals in the future, since the genes of caring and protecting offspring would be carried and consolidated successfully. The very fact that human beings have survived so far is a great success of human altruism.

However, being biologically established and consolidated, this quality might show difference in a social area. Some social structures might improve this quality, while some others might diminish, suppress or even distort it. For example, we all are familiar with birth-control and welfare state[92]. As Dawkins put it, "[t]he welfare state is perhaps the greatest altruistic system the animal kingdom has ever known".[93] However, as a modern social structure, it tends to distort the optimum investment balance. For example, normally, if a couple can afford only three children, planning to have four is not altruistic, and "[t]he obvious reason for this would be that the food is so thinly spread between the four babies that few of them survive to adulthood."[94] In other words, having too many children would decrease the survival rate of the offspring. But with the welfare state, parents nowadays can count on state support and have more children than they are actually capable of raising to adulthood. Consequently, instead of ignorant exploitation of the welfare state, the whole birth-control in families

[91] Ibid., p.134

[92] A system of ensuring the welfare of the citizens by means of social services (e.g. pensions, family allowances, free medical care) provided by the State. (Oxford Advanced Learner's Dictionary)

[93] Dawkins, p.126

[94] Ibid., p.125

perhaps should be practiced "in order to maximize the number of surviving children they actually have"[95]. Nevertheless,

> Individuals who have too many children are penalized, not because the whole population goes extinct, but simply because fewer of their children survive. Genes for having too many children are just not passed on to the next generation in large numbers, because few of the children bearing these genes reach adulthood.[96]

Such natural birth control seems altruistic towards existing offspring, but it is rather selfish on the genes level. According to Dawkins, it is not the group or species that is of evolutionary importance, but genes. He comments that "Darwin's 'survival of the fittest' is really a special case of a more general law of *survival of the stable*"[97]. And what is more stable than our gene type? According to the selfish gene theory, human behavior is determined evolutionarily by stable strategies set to replicate the gene. Our altruism is limited in this sense because we are essentially not sterile, i.e. we are capable of reproduction.

To clarify this, Dawkins gives example of so called "kamikaze bees, who sting honey-raiders but commit almost certain suicide in the process."[98] Such behavior seems highly altruistic, but is "not astonishing once we accept the fact that they are sterile."[99] In other words, it is not certain whether their genes would force their suicide if they had an offspring or a possibility of an offspring to care for. Cooperative behavior of bees, ants and even spiders is fascinating if we picture them as one body:

> The majority of individuals in social insect colony are sterile workers. The "germ line" – the line of immortal gene continuity –

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[95] Ibid.

[96] Ibid. pp.125-126

[97] Ibid., p.13

[98] Ibid., p.184

[99] Ibid., p.185

> flows through the bodies of a minority of individuals, the reproductives. These are the analogues of our own reproductive cells in our testes and ovaries. The sterile workers are the analogy of our liver, muscle, and nerve cells.[100]

So, for the analogy to continue, a body can sacrifice an arm with no harm to a future offspring. Dawkins argues that "[t]he body of a *normal* animal is manipulated to ensure the survival of its genes both through bearing offspring and through caring for other individuals containing the same genes"[101]. It is well known that some animals, e.g. fish or crabs, are able to produce enormous amount of eggs, but only few of them survive to adulthood. Of course we agreed before that having many children might not be an altruistic behavior, but only by producing many eggs these animals ensure the survival of the few, because sometimes almost 99% percent of the eggs are eaten by other animals. However such behavior must not be confused with sacrifice, because it is actually the most efficient way to ensure the survival of the offspring.

Nevertheless, however controversial it seems, we act altruistically towards our kin for entirely selfish reasons. Of course one should not confuse this selfishness with plain conscious egoism. It is our genes that are "selfish" – we have selfish biogenetic disposition to care for our kin in order to be able to pass on our genes. For genetic reasons only a mother cannot have "favorites". If she shows more care for one child than she shows for the other, "it should be based on differences in expectation of life, depending on age and other things."[102] On the other hand, such gene approach can also explain the abandonment of children by, say, some young single mothers, but can also explain why sometimes mothers want abandoned child back:

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[100] Ibid.

[101] Ibid. By "normal" here Dawkins means capacity to reproduce. (my emphasis)

[102] Ibid., p.137

> The mother, like any individual, is twice as closely "related" to herself as she is to any of her children. Other things being equal, this means that she should invest most of her resources selfishly in herself, but other things are not equal. She can do her genes more good by investing a fair proportion of her resources in her children. This is because these are younger and more helpless than she is, and they can therefore benefit more from each unit of investment than she can herself.[103]

The first part of the paragraph clearly states the reason a mother can choose to abandon her child – she basically prefers to ignore her child for the sake of her own good, because the parental investment she is capable of is sufficient only for her needs. However, from the second part of the paragraph we can see that her selfish genes might manipulate her to take her child back, because genes are even more selfish when it comes to survival. Survival of a child means a possibility of a grandchild, a great grandchild and so on.

Thus selfish genes not only, metaphorically speaking, "want to survive" at the present generation, but they also want to be passed on to future, because "genes for investing in more helpless individuals in preference to oneself can prevail in the gene pool, even though the beneficiaries may share only a proportion of one's genes".[104] It is fascinating how grandparents sometimes dedicate themselves to their grandchildren – it even seems that they love their grandchildren more than their children. Usually a parent weans her child so that she can prepare herself for the next one. However, when a child is old enough to reproduce, the parent usually is too old to reproduce, but is still capable of parental investment. Consequently, the parent basically switches her investment to her grandchild, while her child can prepare for the next one. As we can see, parental care eases with cooperation of generations, and the only purpose here is

[103] Ibid.

[104] Ibid.

preserving genes. According to Dawkins, we are survival machines that behave as if our only agenda is to carry on our genes[105].

> What, after all, is so special about genes? The answer is that they are replicators. The laws of physics are supposed to be true all over the accessible universe. Are there any principles of biology which are likely to have similar universal validity? .... [i]s there anything which must be true to all life, wherever it is found and whatever the basis of its chemistry? ... Obviously I do not know, but, if I had to bet, I would put my money on one fundamental principle. This is the law that all life evolves by the different survival of the replicating entities. The gene, the DNA molecule, happens to be the replicating entity which prevails on our own planet.[106]

It is the selfishness of our genes that manipulates us to care about our future generations. Of course manipulation is a strong word, but it is better than just plain assumption that we have hypothetical obligations to hypothetical future generations. Nevertheless, I believe people's readiness to aid their future generations would increase on genetic rather than on some ethical grounds. However Dawkins' selfish gene approach might also help us to understand why we do have this common *notion* of caring for future generations in the first place. In other words, after explaining whether we do care for our future generations or not (and I believe I did), it is now time to explain our sudden urge to care about them in the last 30-40 years. Dawkins argues that "a new kind of replicator has recently emerged"[107]. He refers to it as *meme*, "a unit of cultural transmission, or a unit of *imitation*"[108]. He continues that "[j]ust as genes propagate themselves in

[105] In a way, it is. For example, I believe that during our lives most of us fell in love many times, but only with few of our lovers we actually pictured having a family. Selfish gene theory might explain it as it was actually our selfish genes that manipulated us to prefer one person to the other, because that person's genes were in a way more "suitable" to copulate and reproduce with, than the other's.

[106] Dawkins, pp.205-206

[107] Ibid., p.206

[108] Ibid.

the gene pool by leaping from body to body via sperms or eggs, so memes propagate themselves in the meme pool by leaping from brain to brain via a process which, in the broad sense, can be called imitation."[109] Memes are in a way "alive", they are capable of propagating and spreading themselves, e.g. the same legends or proverbs can be found all over the world. E.O. Wilson in his *In Search of Nature* mentions the common dragon myth that placed fear in hearts of people all over the world. He argues that this common idea of fear of snakes or giant lizards originated and consolidated successfully in the hearts and minds of our progenitors.[110] Dawkins gives example by considering the idea of God. No one can exactly say when this idea was originated, but we can surely argue how it was consolidated in our minds: "[b]y the spoken and written word, aided by great music and great art".[111] What is so fascinating about this idea of God is that it is so stable and penetrated in our cultural environment? It is because it promises better life after death, comforts the doubts about existence and "[t]he 'everlasting arms' hold out a cushion against our own inadequacies."[112] Similarly, we cannot tell how this lately emerged environmentalist idea of "caring about future generations" have emerged, but it is possible to say that it basically caught on because it did not contradict with our biogenetic disposition, i.e. propagated itself in our minds and spread all over the world.

[109] Ibid.

[110] Wilson, pp.3-30

[111] Dawkins, p.207

[112] Ibid.

CHAPTER 4

A NEW APPROACH: PSYCHOGENETIC PERSPECTIVE

As I tried to explore the main approaches to the problem of future generations, we have seen that many writers suggest that we have certain obligations to protect the environment, either because "we, the human species, hold the natural environment of our planet in common with all members of our species: past generations, the present generation, and the future generations"[113], or because without a decent environment the human race would suffer together with the environment, or simply because "it is widely acknowledged that we do have certain obligations to future generations."[114] So, we have seen so far that environmentalists argue that we ought to not harm our planet any further simply because we have a duty to posterity not to do so.[115] However, we tend to behave in contradiction with the knowledge we acquired so far. For example, we know that murder is wrong, but some might say that it is fine if people are fighting a "just" war. I know that smoking can cause lung cancer, but I continue to smoke, as I write this. The tragedy of Chernobyl (and Hiroshima and Nagasaki before that) showed us that

[113] Weiss:1990, pp.198-199

[114] De-Shalit, p.2

[115] Of course some could propose that the planet should be protected for the sake of itself, however it is obvious that from practical point of view it would be and *is* more convincing to involve the posterity in order to force people to action.

nuclear energy is a dangerous toy to play with, but preliminary work for a nuclear plant in the Black Sea Region in Turkey continues, as you read this thesis. Weiss notes that,

> [t]he data on the effects of radiation from the nuclear tests in the Pacific from 1956 to 1958 on the residents of the Bikini Islands and Rongelap show markedly increased rates of cancer in the children and high levels of nuclear poisoning through the food chain.[116]

Is it wrong to produce cheap electricity using nuclear energy? Probably not. Nuclear energy is relatively cheap, but radioactively contaminated soil, air and water all over the world continues to cause cancer, miscarriages and birth defects for many generations. Together with that most of us would agree that such actions as atmospheric nuclear weapons testing are more dangerous and definitely more inconsiderate towards future generations. Yet another example is the depletion of the Ozone layer:

> The gases known as CFCs are cheap and widely employed in aerosol spray cans and refrigerators, to mention but two uses. But since 1974 scientists have been concerned that the continued release of these gases will lead to damage to the ozone layer, which is vital to maintain life on earth because it serves to filter out dangerous solar radiation.[117]

As it was mentioned before, continued release of CFCs into the atmosphere is a problem that concerns our future generations. Another worldwide environmental problem, which lately appears on the news almost every week, is global warming, or, as better known, the "greenhouse effect". More than 20 years ago scientists predicted that increasing concentration of greenhouse gases, such as carbon dioxide and methane, would cause global temperature increases, which would cause serious climate changes and disastrous rises in sea levels. In December 1997, more than 160 nations met in Kyoto, Japan, and established the Kyoto

[116] Weiss: 1989, p.172

[117] De-Shalit, p.9

Protocol, in which the governments of many countries agreed to limit their greenhouse gas emissions. However, the United States and some other countries took no obligation to limit their emissions of greenhouse gases. These countries argued that it is not in their interests because the reduction of their use of fossil fuels would seriously affect their economy.

> These interpretive variations cause people to conclude that there are no universal standards for ethics, and that moral responsibility is relative to cultural practices. This is a dangerous conclusion that relieves us of any responsibility other than what we choose in our own interests, what has been dictated by the rules of our faiths or governments, our personal values, or the local status quo.[118]

4.1. The Concept of Feeling Profile: Explaining Why We Care

With thousands of books and articles about our responsibilities to future generations published, while the meme of care for future generations spread all over the world, it seems that the meme of negative human impact on environment showed low capacity of catching on. However, when we think of our future generations, we feel the urge to do something for them, or as D'Amato puts it, "we feel we owe an obligation to them."[119] As it was mentioned earlier, we have a strong feeling of concern for our posterity due to our ability to develop sympathy towards others. Hume argues about sympathy as follows:

> No quality of human nature is more remarkable, both in itself and in its consequences, than the propensity we have to sympathize with others, and to receive by communication their inclinations and sentiments, however different from, or even contrary to our own.[120]

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[118] Colero, retrieved from http://www.ethics.ubc.ca/papers/invited/colero.html

[119] D'Amato, p.194

[120] Hume:1978, p. 316

Sympathy enables us to understand other people's feelings by imagination. For example, Hume notes that "'tis certain we may feel sickness and pain from the mere force of imagination, and make a malady real by often thinking of it."[121] Of course, strength of sympathetic feelings depends on how the object is related to us. In this sense, it is plausible to say that the strongest sympathetic feelings we are capable of are those we feel for our offspring. Similar to Hume's example, we can imagine our future generations suffering from air pollution and feel bad about and, consequently, try to do something in order to reduce it. Any of our actions towards our future generations are caused by these sympathetic feelings, and not by reason: "[r]eason is, and ought only to be the slave of the passions, and can never pretend to any other office than to serve and obey them."[122] This fundamental principle that it is not the reason, but our passions which are the causes of our actions, was adopted by Robert J. McShea and Daniel W. McShea, who state that any of our behavior at any given situation is caused by our feelings. Now I shall try to apply their view to the problem of future generations because I believe that this view might help us develop a new perspective. We agreed so far that the future generations are actually our children, grandchildren and so forth. They are genetically inseparable from us, and being connected to them by blood, we altruistically care for them out of our "selfish genes". We do care for our future generations, consequently, perhaps our environmental behavior, such as attempts to keep the neighborhood clean, or avoid pesticides is caused by these feelings.

According to McSheas, "feeling causes behavior, but does not uniquely determine behavior."[123] In other words, we may have a feeling of responsibility, but this does not necessarily mean that we would act in perfect accord with it and

[121] Ibid., p.319

[122] Ibid., p.415

[123] McShea and McShea, p.311

actually act responsible. "[O]ur evaluations are universal, but behavior ... varies widely."[124] Our response to various situations is directly dependent on our feelings and is correlated with what we want at the moment. For these responses to be objective, the decisions must be made apart from circumstances, beliefs and even feelings. However this is almost never possible. We are rarely capable of making objective decisions concerning even our daily lives, so how right is it to act out of our feelings while making decisions about the future that can actually affect the future? Wrong question. We already do affect the future one way or another. It is not possible to purify ourselves from emotions and become some kind of disinterested Humean "spectator" when it comes to our descendants, because I think we have a psychogenetic predisposition to care for/about them and our actions are actually caused by this predisposition.

"In most animal species, behavior can be understood (at a high level of analysis) as a response to perceptions, to external stimuli."[125] How can we interpret this sentence in terms of our psychogenetic predisposition towards our future generations? McSheas give examples of flatworms that avoid bright light, and knee jerking if someone hits one's kneecap. In these cases, the external stimuli are the bright light and the tap: "the connection between stimulus and behavior is fairly tight, meaning that given the stimulus, the motor sequence of the response is fairly predictable and relatively invariant."[126] But to set forth a more complicated example of behavior, authors continue as follows:

> But now consider the following behavioral sequence: A lioness lies low and alert in the tall grass, not far from a herd of grazing zebras. The prey have become restless, as several of her fellow huntresses have moved into positions along the herd's flanks. The attack is launched from one of the flanks, and she crouches as the herd wheels in her direction. She picks out a juvenile zebra headed

[124] Ibid.

[125] Ibid., p.315

[126] Ibid.

> her way and tenses for action. As it streaks by her, she springs, and misses. Hunting behavior in lions is not a relatively invariant motor sequence like the described behaviors in flatworms and honeybees. No particular hunting behavior ... is hard-wired in lions. Indeed it almost could not be, because too many variables are involved. .... In sum, each hunt is unique, and there can be no single preprogrammed sequence of physical movements that will work every time, or even most of the time.[127]

In this case, the lioness' stimulus might be her hunger, or simply the sight of the zebra herd (most of us have watched nature shows on TV with lions attempting to hunt even though they were not hungry). Her behavioral response to these stimuli is the act of hunting itself and not the result of such act. "More proximately, the cause of hunting is likely to be hunger, but this, too, is somewhat in the background; the lion does not actually experience hunger during the hunt, or at least she need not. More proximately yet, a lion hunts because she wants to. She experiences a motivation, a feeling, or and inclination to hunt."[128] In fact she might experience various feelings simultaneously – she might wish to spend time with her relatives, to improve her hunting skills, to escalate her instincts or to prove her position in the pride. "The feelings are numerous, and many may be in play at once."[129]

Imagine yourself seeing a group of men beating a beautiful young woman. What would your feelings be? First of all you would appreciate her beauty and/or get angry at the crowd. Then you might experience a great urge to find out the reason she is beaten for. Then, in accordance with the information gained, you might join the emotions of the crowd, or feel sorry for the woman. On the other hand, you also might feel responsibility to inform authorities so that a proper justice could be applied, either for the woman or for the crowd. You might feel a

[127] Ibid., pp.315-316

[128] Ibid., p.316

[129] Ibid., p.317

need to walk away for various reasons – for instance, you might not be able to stand the sight of blood, or hear her scream, or listen to the crowd's horrifying laughs of satisfaction. Or you might just feel nothing and walk away – in other words, there are plenty of feelings you might experience, it might depend on the natural inclination of your character, your social position, your strength etc. I set this example to illustrate the variety of feelings, which are "emotive reactions to situations, and which feelings are evoked depends on the details of the situation."[130]

McSheas use the example of a mother cat faced with the approach of a large dog towards her layer. They claim that a mother cat could experience a so called "brood-defensive feeling"[131]. Authors apologize for using such expression, but they note that they had to use it due to the inadequacy of language to express feelings in words:

> For example, we might say "I mean by 'red' the color you see when you look at this paint chip." Similarly, "I mean by 'parental feeling' the feeling you experience when your child is crying." Obviously, this would not work if we did not all have very similar visual responses to the various wavelengths of light, and likewise very similar feeling reactions to classic, evocative situations.[132]

The authors continue their example with a slight variation of dog's hostility. If the dog is hostile, the cat's feelings for her litter might contradict with the feeling of self-preservation. We all have seen nature TV shows where a mother cheetah would silently watch from a safe distance her cubs being killed by lions – this is because there is little she can do without serious injury to herself or even death. So a mother cheetah prefers to live and be able to reproduce again. As to the cat, McSheas state that "[o]ne feeling will inevitably be stronger than the other and

[130] Ibid., p.318

[131] Ibid.

[132] Ibid.

will eventually triumph and cause some behavior."[133] The cat might prefer to run and hide or to stay and fight the dog for her litter. "Which feeling will be stronger? The answer is once again that it depends on the details of the situation, such as the proximity of the dog and her past experience with it. Just as the situation determines which feelings will be evoked, so it determines the relative strength of each one."[134] As to humans, we are capable of a greater variety of feelings due to the complexity of our lives, especially when it comes to our future generations.

For example, picture yourself having a pregnancy test, say, tomorrow. First of all, you would feel excited and nervous trying to imagine yourself as a parent; then, if you desire this child, your feelings would be different from those if you did not. Once you receive the test results, your feelings, again, would vary in accordance with those results. For example, if the result of the test is positive and you desire this child, your feelings would vary from a soft smile to screaming joy. However, if the test is negative, your desire of having a child would crash into the wall of various negative emotions – from disappointment and frustration to the fear of being sterile. Which feeling would triumph over others depends on your situation (e.g. single/married, young/old etc.). On the other hand, if you do not want this child, the feelings caused by the test result would be quite different: the positive result might frighten you, while negative result would bring a relief, but again, in accordance with your situation, you might even prefer to keep this child even though you did not wish one at the beginning. Similarly, even if the child is not desirable, you still might feel sorry that you are not pregnant. I know I did.

> Obviously we have greater cognitive powers than cats, which give us the ability to pursue longer and more detailed imaginative sequences, to react with feeling to a wider range of possible situations. We also seem to be able to invest situations with a greater variety of interpretations or meanings, perhaps in turn

[133] Ibid.

[134] Ibid.

> evoking a greater range of feelings. But a period of indecision is for us, as for the cat, nothing more nor less than a struggle of feelings for dominance. And behavior results for us, again as for the cat, only as a result of a triumph of one feeling, or a coalition of feelings, over all others.[135]

So, whether you are pregnant or not, which feeling would eventually triumph over others depends on you. McSheas also draw a line between feeling and rationality. Authors define rationality as "logical entailment, or calculation, of the sort useful in inferring consequences, estimating risks, and so on."[136] Reading this definition, I remembered the movie "I, Robot", in which the hero blamed robot for saving his life in a car crash instead of the life of a little child, because the robot analyzed the situation and calculated that the probability of the little child to survive was much lower than the one of the hero's. Of course the situation in the movie was quite a difficult scenario because the robot could save only one of them. But the hero claimed that a human would never prefer a man over a child, especially if such a choice would be based on probability calculations. "Rationality has no further comment, because it is value-free and has no preferences, even for life over death. The preferences are the feelings."[137] We are emotional beings, and "[t]he feeling does not follow logically from the imagined consequences, but only experientially."[138]

Such questions as "What are our obligations towards future generations?", "What should we do for them?", "Should we first consider ourselves and the present generation, or should we rather prefer the future generations and their needs?" are still legitimate and sound, but they are caused by reason. I believe that instead, we should ask ourselves how ready we are to do something for them. Our

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[135] Ibid.

[136] Ibid., p.319

[137] Ibid.

[138] Ibid.

so called sense of morality that we try to inject in our decisions concerning our future generations cannot be an object of reason. Hume illustrates this in a following example:

> Take any action allow'd to be vicious: Willful murder, for instance. Examine it in all lights, and see if you can find that matter of fact, or real existence, which you call a *vice*. In which-ever way you take it, you find only certain passions, motives, volitions and thoughts. .... You never can find it, till you turn your reflexion into your own breast, and find a sentiment of disapprobation, which arises in you, towards this action. Here is the matter of fact; but 'tis the object of feelings, not of reason.[139]

In other words, it is our emotions that cause our so called values, as our eyes enable us to see the variety of colors. "[F]eelings rule absolutely, with no hindrance from anything else. We are utterly incapable of doing anything other than what, finally we want to do."[140] McSheas follow Hume in saying that any decisions we make are caused by our feelings. The following lines illustrate their interpretation and adoption of Hume's idea:

> But neither the preferences for this or that consequence nor the resulting decision can be rational (or irrational, for that matter), because rationality delivers no impetus, it has no driving force, so to speak, and thus it cannot drive decision any more than it can drive behavior. Only feelings can do that.[141]

Hume's influence on the above paragraph can be found in *Treatise* as follows:

> Since reason alone can never produce any action, or give rise to a volition, I infer, that the same faculty is as incapable of preventing volition, or is disputing the preference with any passion or emotion. .... 'Tis impossible reason cou'd have an impulse in a contrary direction to our passion; and that impulse, had it operated alone, wou'd have been able to produce a volition.[142]

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[139] Hume: 1978, pp.468-469

[140] McShea and McShea, p.314

[141] Ibid., p.319

[142] Hume:1978, p.415

Our feelings, depending on situations, vary and cause various patterns of behavior. However, as it was told before, our feelings do not determine our behavior. Of course our environmental behavior towards our future generations is rather unpredictable and too complex to say that it might be caused by some programmed motor sequence and certain stimulus. Too many variables are involved. Hume, however, states that,

> ... there are certain calm desires and tendencies, which, tho' they be real passions, produce little emotion in the mind, and are more known by their effects than by the immediate feeling or sensation. ... either certain instincts originally implanted in our natures, such as benevolence and resentment, the love of life, and kindness to children. [143]

In other words, such calm passions might be our instinct of self-preservation, our care for our offspring, or our sympathy to other human beings. McSheas interpret this argument of Hume stating that all humans have a common feeling profile. In other words, their concept of feeling profile corresponds to Hume's "calm state of passions". While behavior varies in accordance with situations we face, the feelings underlying those behavioral patterns are much more stable, or, as Hume would put it, are much more "calm". Remember the example of a common dragon myth I mentioned earlier. The visual representations of dragons varied for thousands of years all over the world together with the contents of the myth – but in almost all cultures people's feelings towards dragons are generally a mixture of fear and respect. Of course, as I said before, this mixture of fear and respect probably has its origin in our ancient progenitors. They actually learned this fear and respect through rather unpleasant experiences.

> The profile may be adaptive in the sense that each feeling is (or was) functional in a specific problematic situation faced by individuals in a species' evolutionary history and that it may have

[143] Ibid., p.417

> evolved (presumably on account of its selective advantages) for that reason.[144]

Roughly 30,000 years ago human beings were already "anatomically modern". In other words, it can be said that we completed our evolution of larger brains and smaller faces and teeth very long time ago. Our "early developmental steps have more consequences, and more significant consequences, than later steps."[145] For example, as we evolved, our bipedality has become a so called "bodyplan", a "general and relatively invariant feature"[146] of our bodies. Given this invariant bodily structure, can we say that we somehow managed to develop a general and stable "feeling structure", a feeling profile that enables us to behave one way or another in a given situation? McSheas argue that we did:

> We propose that feelings or motivations are the generatively entrenched structures of what might be called a species-level "behavioral bodyplan". They are general outlines of behavior, just as the bodyplan in its usual sense is a general outline of physical structure. .... Members of a species share a common motivational structure for the same reason, and in the same sense, that they share a common early physical development.[147]

This proposition seem to be influenced by Hume's notion of "great natural resemblance among all human creatures"[148], that was mentioned earlier, and supported by theory of evolution in general. As an example, McSheas picture two hypothetical humans with identical feeling profiles raised in different circumstances.[149] According to authors, these individuals, though having identical feeling profiles, would examine and respond to a given situation and "ultimately

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[144] McShea and McShea, p.321

[145] Ibid., p.322

[146] Ibid.

[147] Ibid.

[148] Hume:1978, p.318

[149] McShea and McShea, p.320

would present their identical feeling profiles with very different imaginative scenarios."[150] Dawkins would probably interpret this hypothetical case in terms of memes. For example, suppose two identical twins having been raised in different cultural environments. Due to the difference in cultural transmission, they might react differently to a given situation, because even though their genetic profile is identical, their "meme profiles" might be completely different.

Nevertheless, we can maintain that even after thousands of years, together with our genes some of our feelings remain intact. Furthermore, I think it is plausible to say that our common feeling profile might include some kind of feeling of "caring for future generations", because we seem to care for our own descendants. Of course one could ask why I would need a proof of such a feeling even though it is already psychogenetically entrenched that we care for our offspring. Let me explain why. The world is full of examples of contradictory behavioral patterns, such as abortions or water pollution. The problem here is that human behavior caused by feelings is enormously variable. McSheas suggest a model that they believe can actually explain why sometimes we act opposite to our psychogenetic predispositions:

> Stimuli are analyzed by the brain's cognitive structure to produce an interpretation or an understanding of a life situation in the form of narratives, images, or any of a number of devices. And it is this understanding that evokes the feelings. In any given situation, multiple feelings may be evoked, but eventually one feeling or a coalition of feelings triumphs over all others and causes some behavior.[151]

[150] Ibid.

[151] Ibid., p.323

4.2. The Struggle of Feelings: Explaining Why We Do Not Care

Although we have a common feeling of caring for future generations, some other feelings (e.g. self-preservation instinct or greed) might override it and cause a different behavior. Using this model, we can explain various controversial behaviors we exhibited through time. Ishtvan Ráth-Végh in his *Istorija Chelovecheskoj Gluposti*[152] gives examples of *mundi termino*[153] madness. According to him, it is a fact that when some anonymous source announced that the world is coming to an end, "[в] 1866 году в Пеште народ бросил мастерские, орудия труда и несколько недель пьянствовали в корчмах."[154] Another example of massive madness, as Ráth-Végh informs us, took place in a little province nearby Wittenberg, lead by some Lutheran priest who not only announced the date of the so called "doom's day" but also gave precise hour of this remarkable incident:

> "[п]олный конец света наступит в 10 утра 3-го октября 1533-го года, - заявил он без всякого милосердия. .... обошел соседние деревни и с кафедр оповещал людей о приближающемся страшном суде, предлагая всем пожалеть о содеянных грехах и покаяться. Убедить деревенский народ ему удалось, вот только с покаянием вышло по-иному. Люди за гроши продали все движимое имущество, скот, корма, а деньги прогуляли. Когда зловещий час зловещего дня минул, а конец света так и не наступил, прогулявшие все свое состояние люди, разозлившись, избили предсказателя."[155]

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[152] *A History of Human Stupidity* (my translation)

[153] "the end of the world", lat.

[154] Ráth-Végh, p.387 "In 1866 citizens of Pesht left their work places, instruments and spent few weeks consuming alcohol at pubs." (my translation)

[155] Ibid., p.389 "The world will come to an end, the priest stated, at 10 o'clock in the morning on 3rd of October, 1533. He was so fanatically addicted to this idea that he announced it not only to the neighborhood but even visited all villages in the province and kept telling the story at churches and tried to convince people to confess their sins until it's too late. He succeeded in his propaganda locally, but the results were quite unexpected: people sold their all properties, farms, even houses for handful of coins and spent the money on drinks at local pubs. When estimated

Nevertheless, such behavioral patterns as consuming alcohol instead of repentance is interesting mostly because it is funny, but also because it actually might be useful to make my point. The end of the world in general suggests the end of the human race. We have already discussed the emotional disturbance of the idea of bringing the entire human race to an end. It is apparent that even almost 500 years ago people could hardly stand the idea. Of course some might say that the idea of the end of the world in those times was probably more horrifying in religious sense. However, if Ráth-Vegh's sources are trustworthy, people's actions had nothing to do with religion – after all, they preferred to live what was left from their lives rather than beg for eternal forgiveness in churches.

Imagine yourself to be about to face the end of the world. The idea of *mundi termino* is actually the idea of "nothing", e.g. nothing is left to do, nothing is meaningful anymore, and there is no future. Having this in mind it is not surprising that people preferred to have fun instead of mourning. Suppose that we are the last generation of human beings to inhabit the Earth, though the scenario might be quite different than the one of *mundi termino*. Say, some cosmic incident took place and we suddenly became unable to reproduce. Considering that, what would happen, i.e. what would be our actions towards each other and towards nature? It seems that those who were lucky to have children before the incident would try to ensure that their children gain wealthy-enough status in order to live as long and as good as possible.

But wouldn't most of us just live the day? For example, humanitarian aid might be reconsidered in terms of profit and most probably would be terminated. For many, Kyoto Protocol would become meaningless. For some, killing the neighbor would be just another exotic and satisfying "last wish". Death penalty would be surely cancelled and any imprisonment would be pointless. Various adjustments in constitutions might take place; moreover, no one would need one

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hour of doom of doom's day passed and the world did not come to an end, bankrupt countrymen got angry and beat the fortune-teller." (my translation)

at all. Ignorance would flourish, and grief for those who pass away would loose its origin. As to environment, unfortunately, widespread instrumental evaluation of nature might flourish among desperately willing-to-survive human beings: if we are the last to explore benefits of natural resources, let's use it up, no one will need it after all! Reciprocal altruism may help some communities to survive, but in general, people would show egoistic tendencies. I wonder whether international borders would be cancelled or not? After all, economical struggles would be pointless, and wars would only reduce present population. But some nations might have a will to destroy some other nations, as an example, destructive bomb-suicides may increase in numbers and their justification would be much easier – sooner or later everyone will die, humanity will eventually come to an end, so what's the difference between "then" and "now"?

All these seem horrifying perhaps because for most of us, the idea of the "future" is associated with our descendants. Five hundred years ago people might have preferred to sell their properties because they thought there would never be future generations to enjoy them in the first place. Is it too pretentious or speculative to say that it was pointless for them to save money or work in the fields, because it would mean nothing without a legacy for posterity? Could this feeling of "meaninglessness" replace their feelings of care about their future generations? Probably yes.

To give a more recent example, let's consider recycling. For example, most people in Russia are familiar with the idea of recycling, but do little to support it and do not bother to classify and filter their garbage. This is mainly because the necessary background for recycling is not established yet and a working system does not exist as in, say, Japan. Consequently, even if the system existed and worked, it is still not clear whether citizens would bother to recycle after all. Some people might regard the waste management as a waste of time, while the government might regard it as a waste of money, because recycling happens to be a very expensive business. So, any behavior concerning recycling

policy would be caused by our feelings about it, and those feelings might not always be in its favor.

On the other hand, in their introduction to *Justice, Posterity and the Environment*, Beckerman and Pasek claim that if we look at the world, we would notice that the idea that environmental problems and our harm to the environment seriously affect future generations is mainly a concern of developed countries. According to the authors, the reason of this is,

> [t]hat the environmental problems in poor countries such as lack of clean drinking water or decent sanitation, are problems that affect them here and now, whereas in rich countries the environmental problems that people worry about most are those that – largely as a result of current prosperity and economic growth – seem likely to harm mainly posterity."[156]

People of such countries as Somali or Pakistan have to deal with war, hunger and poverty, and it is not a mistake to say that they can hardly take care of themselves, leave alone think about future generations. Don't they care about their future generations? Some might say that they don't, because as we can see in the news, the inhabitants of say, Somali, seem to be more interested in fighting each other for various reasons. However, their feeling profile might be mostly directed to survive the day, which does not mean that their feeling of caring for future generations does not exist. This common feeling of care for our future generations should not be confused with sophisticated salon conversation about the future of our society. It exists in every human being, but in different ways – in general, people try to survive so that they can live and be able to pass on their genes to the next generation. They struggle for a better future of their potential children, and sometimes they simply have to hope for a rain, or humanitarian aid from Europe. Rich countries, on the other hand, have time and resources to organize environmental conferences, support alternative energy projects or supply weapons to encourage war within poor communities.

[156] Beckerman and Pasek, p.1

As McSheas state, feelings "cause behavior by providing general goals, but without specifying particular actions."[157] In other words, a person is capable of various decisions in accordance with her feelings. Also it is apparent that those decisions of hers get more precise in the course of her lifetime:

> She comes, in time, to understand the relative strengths of ... feelings that are likely to come into conflict with each other, learns more (through personal and vicarious experience) about the probable consequences of various actions in various circumstances. .... This does not mean that an individual can achieve total certainty ... because there is always more to learn, there are always gray areas.[158]

Let's further develop our example of the pregnancy test. Given your feeling of caring for your future generations, you might give up such harmful substances to your baby as alcohol or nicotine, and try to avoid unnecessary stress or dangers. In a way, you would actually change your behavior in accordance with the recognition of being a parent, i.e. you would change your behavior due to this feeling of caring for your offspring. This feeling is present in your feeling profile but might be rather hidden until the moment you realize you are pregnant. However, as we all know, some mother candidates continue to practice dangerous habits. Consider a pregnant drug addict that continues to use drugs during her pregnancy and afterwards.

Fortunately, the concept of psychogenetic predisposition enables us to explain such a behavior. The drug addict's feeling of caring for her offspring might arise the moment she realizes she is pregnant, however, other feelings such as, say, the pleasure she gets from drugs or the recognition that the fetus has already been exposed to drugs from the moment it was conceived, might triumph over her feeling of care for her offspring, and she would continue to do drugs. On the other hand, she also might prefer to have an abortion due to her very feeling of

[157] McShea and McShea, pp.324-325

[158] Ibid., p.314

care for her offspring – for example, she might realize that her drug use might destroy her child's life, and she would prefer not to have a child before she gives up the drug use.

McSheas continue that "[i]f we seem often to do some things with great reluctance, it is because we have conflicting feelings, and the victorious feelings have won out by rather narrow margin."[159] If you apply this approach to our problem of future generations, then we can say that even if we sometimes seem to be ignorant towards posterity, this does not mean that we actually are. Our feeling of care for our future generations might have been awakened by the sight of immediate effects of such environmental disasters as Chernobyl – such disasters can be regarded as the "stimulus" and our urge to do something to prevent them can be referred to as our "response".

> Differences in how situations are interpreted, in how they are presented to the feeling profile, vary significantly among individuals, ultimately producing differences in behavior. In humans (at least) interpretative schemes, or modes of thought, also vary systematically among groups, accounting for cultural differences in behavior. But all of these variations in behavior are completely consistent with a species-universal feeling profile.[160]

Perhaps, each and every one of us would have a different interpretation of any given situation. However, if this common feeling profile exists, then I find it plausible to claim that with further experience and proper examination of the consequences of different impacts, our feeling of care for our future generations will finally prevail and triumph over all other feelings and we shall finally manage to act in accordance with our nature.

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[159] Ibid.

[160] Ibid., p.325

CHAPTER 5

CONCLUSION

The problem of future generations is widely discussed in the literature as a branch of environmental ethics. It is a worldwide accepted notion nowadays that environment deserves our consideration. We have been on this planet for a considerably short amount of time and we have managed to harm our environment in a very short term. Human impact on the environment is enormous. That is why environmental ethics as a term is a very recent concept: the so called environmental awareness occurred in the last 40-50 years, only after some severe and unfortunately irreversible damages have emerged. Our current relation with nature is disproportionate, and the situation seems to get worse every day.

Such attempts as sustainable development, intergenerational equity or religious models are man-centered. Anthropocentric movements aim to protect man from nature, its disasters; weaknesses and inconsistencies of nature such as water resources depletion or extinction of some species *can* be results of human activities, but no one, they argue, should choose to blame big industrial corporations, non-recyclers or even God. From anthropocentric point of view man cannot harm nature – everything that man attempts to do in order to survive and develop is right – it is not something to be blamed: if deforestation is a quest for survival, such destruction is justified by such vital purpose as agriculture. Similarly, everything that man attempts to perform in order to help environment, is done for the sake of future survival and development. For Western

anthropocentrism in general, nature is just a resource to be used for human purposes, and its protection is just a mere precaution for depletion of resources that might be useful in the future.

When it comes to future, all environmentalists claim that one of the most important reasons we should protect the environment is that we owe our future generations a decent environment. Furthermore, it is often pronounced that future generations have a right to blue skies and uncontaminated resources. But what kind of rights, if any, can future generations have? Whether we or future generations have ability to explore new limits of science, apply sustainable development, rely on intergenerational justice theory, improve our environmental consciousness or even ignore all and enjoy the riches of present life is optional. What ethical judgments can justify any of these options? What ethical considerations can be just enough both for us and the future generations? These are some exemplary questions environmental ethicists keep asking. However I believe that with the evolutionary approach I tried to apply to the problem of future generations, I hope I managed to overcome various ethical dilemmas of the problem. In this work I explored various approaches to the problem of future generations. For example, I discussed different definitions of future generations. Many writers avoid defining future generations directly, rather preferring to discuss them in terms of their rights and our obligations to them. However, who are they? How can one attach them any rights or prescribe us any obligations without knowing or at least trying to define who the future generations are? Some writers defined future generations as an abstract community, while others preferred to say that they are individuals with interests. However, when we took a closer look, we realize that future generations are our actual descendants.

In this work I argued that once we recognize future generations as our offspring, with a help of evolutionary theory it becomes possible to explain our altruistic behavior towards them. Genetically it is possible to explain why we are so anxious when it comes to our descendants. I used selfish gene theory of

Richard Dawkins to stress our relationship with future generations, basically stating that future generations we keep talking about are our kin and that it is due to the selfishness of our genes that we show a great inclination to care for them. Such an evolutionary approach is also an echo of Hume's idea of "human nature", which I used for explaining our sympathetic feelings for our descendants, since the closest bond a man is capable of is the relation of blood. I used Hume's concept of "sympathy" between all human beings to emphasize the importance of our emotional connection with our future generations. On emotional level, I argued, we are capable of imagining their possible suffer from environmental problems. This emotional quality to sympathize is to some degree common to all human beings. Together with that, while trying to explore a possibility of not only genetic, but emotional grounds for our care for future generations, I benefited from McShea's 1999 article. I chose their approach for three reasons. First of all, authors adopted philosophy of David Hume and developed an interesting concept of "feeling profile", which they based on Hume's idea of "calm passions": together with examining physical natural resemblance, (e.g. such human body structure as bipedality), McSheas presented a profile of human emotions that not only is common to all human beings, but also cause variety of behavior. Secondly, their idea of a common feeling profile suggests that we are capable of different feelings which cause different behavior in different circumstances. Given this capacity of different feelings, I applied their approach to our already established biogenetic disposition towards future generations and assumed that there actually might be some kind of a feeling of care for our future generations that all human beings are capable of. Then I proposed that this possible feeling of care for future generations together with our biogenetic disposition to preserve our offspring forms some kind of psychogenetic disposition also common to all human beings. I believe that this approach not only explained our variable behavior, but also was able to explain why sometimes we tend to contradict with this psychogenetic predisposition. I gave various examples of such contradictory cases, and aimed to

declare a new, evolutionary dimension of the problem of future generations, which, I believe, also provides a new perspective, a so called evolutionary dissolution of the problem of future generations.

Of course such questions as “What should we do for them?” or “What are their needs?” are still legitimate and sound, but I believe that instead, we should ask ourselves how willing we are to do something for them, or what sacrifices we are ready to make for them. From this new perspective, our so called general morality that we try to inject in our decisions concerning environment is irrelevant, because environmental philosophy is not some kind of abstract science that deals with moral dilemmas; it is rather an applied philosophy that should aim to solve real environmental problems. Instead of imposing various obligations on ourselves, it might be a more realistic policy to entrench our feeling profiles, awake our “calm passions” and develop solutions that would “feel right” in terms of our psychogenetic predisposition.

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