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**Climate Change and the distant future:
Expanding our emotional bonds toward future people**

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Summary

The present work explores the individuals' moral motivation problem in the context of intergenerational relations, with respect to global warming's effects in the distant future. More specifically, this dissertation attempts to answer the following research question: how can individuals be motivated to adopt pro-environmental behaviours in order to protect the interests and needs of future people? Using a multidisciplinary approach and conducting a qualitative analysis, this work has attempted to solve the research problem by testing the verification of two hypothesis, using the role of moral emotions and social representations as independent variables. First, we have demonstrated how *future generations*, as object of people's concerns and beneficial actions, present several problems, both on the conceptual and motivational level. Thus, stressing the need to find a different concept, we have proposed the one of *humanity*, considering it as an imagined transgenerational community of systems of relevance and significance, embracing past, present and future people. Consequently, due to the necessity to adopt pro-environmental behaviours and long-term perspectives, we have attempted to demonstrate a second hypothesis according to which a possible way to motivate individuals to act can be the instilling of intergenerational virtues, which are more likely to subsist with respect to the concept of humanity than with the one of future generations. In this regard, we have showed specific intergenerational virtues, namely loyalty, gratitude and beneficence, mindfulness and curiosity, illustrating to what extent they can subsist and they can trigger an inner motivation to act. Indeed, this study has attempted to demonstrate how the motivational strength of these virtues lies in their nature, which is first and foremost connected to people's inner desires and necessities, triggering pro-social behaviours in second place. However, there is the difficulty to practically instil these types of virtues into individuals and the work has limited itself to show a general panoramic of possible practices, such as education and moral enhancement, which are open to criticism and objections. For this reason, the second hypothesis is only partially verified and further research is needed in order to investigate to what extent these intergenerational virtues can subsist. To conclude, despite its shortcomings, this work has succeeded in filling a relevant gap in the literature, while stressing the importance of the individuals' moral motivation problem together with the role of social psychology in climate policies and proposing a topic of inquiry for further investigation.

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Introduction

At the Brussels Forum¹, held in March 20-22, 2015, during the session *New Visions for Energy Transition: Balancing Energy Security, Climate Change and Costs*, the Minister of Foreign Affairs of Norway, the Hon. Borge Brende, concluded his speech by asserting: “We are in many ways the first generation that is seeing the effects of climate change, and we are also one of the last generations that can really do something to change it. So, it is a huge responsibility and we should raise to that responsibility”². This pressing exhortation calls everyone for action: nations, the private sector and individuals. However, despite the need to act in order to mitigate global warming’s present and future effects, few and hesitant solutions have been advanced. The international community is striving in order to reach a binding agreement on the climate and the private sector swings between the need to invest in renewable technologies and the attachment to fossil fuels. At the individual level, instead, there is a considerable gap between a worrisome concern for the well-being of future generations, on the one hand, and an actual engagement in adaptation and mitigation practices as possible solutions, on the other.

The topic at hand and methodology

While extensive literature in political science and philosophy has been dedicated to the role and responsibility of states and the private sector, little or small attention has been given to the question of individual moral motivation. The present research aims to contribute to the discussion of this issue, by investigating at the individual level the relationship between present and future generations, with regard to the uncertain effects of climate change in the distant future. More specifically, this research will attempt to answer the following question: how can individuals be motivated to adopt pro-environmental behaviours in order to protect the interests and needs of future people?

In order to answer our research question, the present research will conduct a qualitative analysis and it will adopt a multidisciplinary approach, ranging from political theory to social psychology and moral philosophy. As previously mentioned, our investigation will be conducted at the individual level and our dependent variable will be the question of moral motivation, which concerns individuals when dealing with global warming’s effects in the distant future. The question of moral motivation can be defined as the individuals’ difficulty to fill the psychological and moral gap between the acceptance of a rule and the actual action in accordance with it. This kind of motivation problem affects the majority of our decisions making processes and actions, as the

¹ The Brussels Forum is a high level meeting organized each year by the American public policy think tank the German Marshall Fund of the United States (GMF). The Brussels Forum gathers together the most influential North American and European leaders from the political, private and academic world, attempting to address the challenges facing both sides of the Atlantic.

² In order to watch the video of the session, please visit: <https://goo.gl/7RxfE9>

acceptance and implementation of a rule is hardly always straightforward and it needs to overcome several psychological constraints. In the particular case of climate change, the motivation problem is enhanced, especially when individuals are asked to adopt pro-environmental behaviours for the benefit of future generations. Indeed, most of the people do not have a direct perception of their responsibility in causing global warming and, consequently, they do not feel any obligation to act against it. However, when they do want to act, they often find themselves unsure about which are the most effective practices to adopt and they need to cope with the high level of uncertainty that characterizes the distant future.

Throughout our investigation, we will answer our research question by attempting to verify the two following hypothesis: H.1) future generations as object of our concerns and beneficial actions set several problems, both on the conceptual and motivational level, thus limiting individuals' actions against climate change. H.2) Consequently, due to the necessity of a long-term perspective and the adoption of pro-environmental behaviours, a possible way to motivate individuals to act can be the instilling of intergenerational virtues, which are more likely to subsist with respect to the concept of humanity than with the one of future generations. Put differently, through the verification of these two hypothesis, we wish to demonstrate that in the context of intergenerational relations and with respect to the distant future, a discourse centred on duties and moral obligations toward future generations fail to motivate individuals. Indeed, we hold that the very object of these obligations reveals conceptual and motivational flaws, which make the fulfilment of these moral demands much harder to be met. For this reason, a valuable alternative can be the development of intergenerational virtues, which are particular kind of dispositions mainly based on positive moral emotions that are considered to trigger both individuals' self-improvement and pro-social actions. However, due to the shortcomings of future generations, we deem necessary to make reference to a new concept toward which intergenerational virtues can actually subsist. In this respect, humanity as an imagined transgenerational community can better address the conceptual and motivational flaws of future generations.

Thus, in order to verify our hypothesis, we will use as independent variables the role of moral emotions and the one of social representations, making reference respectively to the *social intuitionist model* of Jonathan Haidt and the *social representation theory* of Serge Moscovi. Indeed, emotions can play a determinant role in people's decision-making processes and they can be powerful motivation triggers. On the other hand, we also believe that words matter a lot, especially in the context of global warming where individuals' action passes through information and effective environmental education. With respect to an issue as the one of global warming's future effects in the distant future and the related development of just intergenerational relations, we deem that concepts or social representations can help individuals to relate with the issue in a more effective way. This

happens particularly when the normative, cognitive and affective dimension of concepts positively reinforce each other.

Furthermore, we will make reference to several empirical evidence, which will serve as a basis for conducting our analysis and drawing our implications. In particular, we will make reference to a survey conducted by the American Psychology Association's research group for the interface between psychology and climate change, *Psychology and Global Climate Change: Addressing a Multi-faceted Phenomenon and Set of Challenges*, and also to several researches made by Professor Kimblery A. Wade-Benzoni, who has dedicated much of her work on the study of intergenerational behavior and decision- making.

The interest and justification of the research

The interest for this investigation has been sparked by our belief in the individuals' role in being at the same time one of the causes of global warming and the fundamental trigger for possible solutions at both the personal and political level. The individuals' motivation to act in order to benefit future people in their interpersonal and political lives can be a powerful change-setter at the national and, eventually, international level as a spill over effect. Most importantly, we do believe that attempting to solve the question of moral motivation would be a valuable alternative to the option of imposing a green authoritarianism. Indeed, the threat posed by climate change would require a major government intervention and demanding present sacrifices, which cannot be implemented merely through coercion, but they need to find legitimacy and justification among people. This would be possible through well-informed citizens and morally enhanced individuals, personally motivated to take actions for the benefit of future people.

Moreover, we believe in the worthiness of this study not only because it contributes to partially fill a gap in the literature, but also because we hope to encourage further investigation and exploration. We deem that the topic at hand offers a wide area of inquiry, encompassing various disciplines and academic perspectives and this interdisciplinary approach will help to make the research more appealing and comprehensive. It will also help to stress the precious contribution of social psychology in the climate justice's studies and, consequently, it will contribute to highlight a new perspective within the field of intergenerational justice, which regards more the interpersonal dimension of the matter.

The blueprint of the research

The present research will be developed in the following way. The first chapter will be dedicated to the exploration of the relevant literature regarding climate change and intergenerational relations, considering three levels of analysis, the institutional, theoretical and individual level. Through this literature review, which by no means aims at being exhaustive, we wish to illustrate the gaps and

opportunities of investigation, in order to show the reader our background knowledge regarding intergenerational relations and to justify on what grounds we have decided to focus our study on this topic in particular.

The second chapter will be devoted to the illustration of the theoretical framework. We particularly wish to stress the importance of this chapter, in so far as it will aim at clarifying the main components of our research question and at illustrating the theories and theoretical assumptions underlying this work. Both the dependent and independent variables will be explained and, through this chapter, the reader will be able to explore the multidisciplinary nature of the research. For instance, we will make reference to the two-system theory of Professor Daniel Kahneman, the social representation theory elaborated by Serge Moscovi, and the social intuitionist model of Jonathan Haidt, attempting to provide the theoretical and methodological tools in order to conduct the research's analysis.

The third chapter will be dedicated to the first part of our analysis, especially attempting to verify our first hypothesis. In the first part of the chapter, the theories illustrated in the theoretical framework will be applied and the issue raised by the research question will be addressed. We will attempt to show how the concept of future generations presents some problems on the three levels of analysis explored in the literature review, with a particular focus on the individual level. Following this line, we will explain how a different concept is needed, one more reliable on an emotional basis, thus able to touch individuals' emotional strings. We hold that the concept of humanity, conceived as an imagined transgenerational community of systems of relevance and significance, can serve this purpose.

Our analysis will continue in the fourth chapter, which will be dedicated to the demonstration of our second hypothesis. We will explore the intergenerational virtues that we deem necessary in order to solve the individuals' motivation problem and we will provide a general overview of the practices aimed at instilling these virtues. Finally, in the conclusion we will provide a brief summary of the whole dissertation, assessing the general investigation and demonstration of the hypothesis. As one might expect, this research has a number of limitations and, in this concluding chapter, particular attention will be dedicated to their illustration. In the end, the strengths and worthiness of the study will be underlined and we will attempt to provide possible suggestions for further research and investigation.

Chapter 1

State of the Art

This first chapter will be dedicated to the exploration of the relevant literature regarding climate change and intergenerational relations, mainly on three levels of analysis: the institutional, the theoretical and individual level. Through this exploration we will attempt to individuate gaps and opportunities of investigation, while critically assessing the main debates and challenges of the topic at hand.

1.1 Climate change and intergenerational relations

The case of desertification in Australia³ and Sahel and the melting ice of the Arctic⁴ region may provide a glimpse of how global warming is *currently* affecting the world, but it is important to bear in mind that climate changes' risks will be unevenly distributed across time and space. Indeed, the most troubling aspect of this global quandary is that its most critical and visible consequences will manifest themselves only in the distant future. According to the International Panel on Climate Change (IPCC), it is highly estimated that climate change will represent a threat for the well-being and life of future generations and if it will be left unleashed to develop, the possibility of catastrophic scenarios should be contemplated. Global warming will act as a threat multiplier with spill-over effects on other global issues: it will affect food security and water availability; poverty eradication will be a much more difficult task to fulfill; and, as a consequence, the phenomenon of people's displacement will become more prominent⁵. These and other more aspects related to

³ 2014 has been Australia's third warmest year, characterized by six major heat waves (Milman, 2014). Although drought is a familiar aspect of the Australian landscape, this phenomenon has started to become recurrent and it has been noticeably long and severe. Owing to this, Australia has witnessed several changes in the migratory behaviours of wildlife, and not only. The drier climate in the Southern part of Australia is having implications for the agriculture and for the way rural communities live. Indeed, other types of products have started to be privileged, mostly the ones, which require less water, but that, at the same time, create fewer jobs, such as cereal. Many workers have been forced to abandon their job because the work at the farms has become too hard and, as a consequence, there has been an increase in the rate of suicide among farmers (Donaldson, 2014). Moreover, the vulnerability of Australia's landscape and human well-being stands in visible contradiction with Australia's status as the world's largest exporter of coal and with the fact that its citizens are among the major per-capita greenhouse gas emitters in the world (Beeson and McDonald, 2013:331).

⁴ It has been estimated that in comparison to the situation in 1979, the current summer Arctic ice nearly covers more than half the area it covered in the previous years (Broome, 2012:1). The melting of the Arctic ice triggers irreversible local and global implications, affecting both human and ecosystem health (ACIA, 2013). Indeed, the action of climate change in the Arctic region exposes the vulnerability of the polar ecosystem, threatening the life of marine and land species, such as polar bears and ice-dependent seals to name a few, but also the one of local communities for whom these animals represent a primary source of food. Local and indigenous communities, in fact, are experiencing heavy repercussions: not only their food security is decaying, but also their hunting and food sharing culture is undermined. The gradual melting of the Arctic ice cape has effects that expand over the borders of the polar region: glacial melted ice brings more water to river and oceans, thus, slowing the ocean circulation, which conveys heat from the tropical regions to the poles, and raising the global sea level. The melting Arctic ice discloses more ocean surfaces and darker land, which in turn absorb more sun's heat and, therefore, it contributes to further warm the polar region and the planet more generally (ACIA, 2013).

⁵ Quote taken from the conference "Do Climate Change Refugees Exist" held at the University of New South Wales, Australia, on 21 September 2011. Professor Jane McAdam talked about the nature of climate change related movements and about the possibility of expanding on them the protection offered by human rights law and international law. See: <https://www.youtube.com/watch?v=c7fICabMHZg>

climate change are predicted to continue for a long time, even if, hypothetically, governments will be able to drastically reduce their anthropogenic emissions of greenhouse gases in the contemporary context. Indeed, a significant quantity of carbon dioxide molecules remain in the atmosphere for a very long time, approximately for thousands of years (IPCC, 2014). Thus, the future effects of climate change inevitably lead us to think about intergenerational relations, their nature and implications. The very concept of Sustainable Development, indeed, states that *sustainable development is the development that meets the need of the present without compromising the ability of future generations to meet his or her own needs* (WCED, 1987: 43). There is little doubt that one of the main features of this definition regards relations among non-contemporaries and a demand for intergenerational justice (Gosseries, 2008: 39).

Intergenerational relations concerning the present and distant future differ from relations among contemporaries on several aspects. The first and probably immediate difference is that present and future generations do not share any common spatial-temporal space (Gosseries, 2009 and Meyer, 2010). The absence of physical coexistence produces two important consequences. Firstly, there is a lack of overlap and reciprocity and, secondly, there is an unchanging asymmetry of power relations between present and future people. On the one hand, present generations can affect the conditions, the lives and the capabilities⁶ of future people. They can affect the way future people will make their choices and the way they will pursue their lives. On the other hand, future people do not have the power either the potential to affect in any of the previously mentioned ways the lives of present people (Meyer, 2010). In addition to this, the asymmetry of power-relation creates the condition in which present generations can actually have the possibility to harm future ones. Present people can harm future people by, for instance, undertaking policies that will severely exploit the majority of natural resources, leaving almost nothing to future generations. Conversely, future generations will not be able in any way to pose the same kinds of threat against past generations. This is a major difference and it represents a reason of concern and debate in the field of intergenerational justice (Meyer, 2010).

Moreover, relations among non-contemporaries are characterized by the fact that our knowledge of the distant future and of the future people's identities is very bounded. As one might expect, when dealing with the future and the hazards of climate change, there are no reliable truths, but science has to limit itself to predictions and speculations, all obfuscated by a thick veil of

⁶ In this case the term capabilities makes reference to the concept utilized by Amartya Sen. According to Sen, the capabilities are the real freedoms that an individual has in order to accomplish his or her achievements and activities (or functioning). For more details regarding the *capability approach*, see: <http://plato.stanford.edu/entries/capability-approach/>.

uncertainty. In this respect, the uncertainty surrounding the distant future regards not only which consequences of global warming might subsist, but also what solutions should be adopted and what are the true needs and very identities of future generations. While the answer to uncertainty might lie in a rational analysis, through which examining a situation and acting according to all the evidence available⁷ (Thompson, 2010: 9), the definition of future people's identities and needs remains a more complicated task. As a matter of fact, before our eyes, future generations remain undetermined faceless and voiceless entities.

1.2 Intergenerational relations: main debates and challenges

The very nature of intergenerational relations with respect to climate change's consequences in the distant future pose several challenges on three different levels of analysis: on the institutional, theoretical and individual level. While on the institutional level, for instance, it is quite difficult to set institutions able to be efficaciously accountable to future generations, on the theoretical level there is the thorny impasse of creating a feasible and unproblematic theory of intergenerational justice. On the other hand, on the individual level intergenerational relations cause psychological and motivational constraints, which are difficult to challenge and overcome.

1.2.1 Institutional level

Global warming forces national, regional and international institutions to face the delicate task of balancing the necessity to address the need and interests of future people with the immediate and often more urgent demands of present challenges and emergencies. Especially on the national level, where governments are typically characterized by short-termism, combining the interests of the present electorate with the ones of future generations requires efforts and difficult trade-offs. Governments will have to design and justify their policies with no clear knowledge of both the identities of future generations and the uncertain future outcomes of global warming. Owing to this, present citizens will be asked to bear costs and sacrifices for people who are not yet existing and about whom little is known, about their interests, their political values and their needs.

Implementing our responsibilities toward future generations at the institutional level would also be difficult (Weiss, 1992). Indeed, on the one hand there is a problem of representation, in so far as

⁷ However, the actual process of decision-making under uncertainty is not an easy task. John Broome, a British philosopher and economist, Professor of Moral Philosophy at the University of Oxford, suggests that a general rule in order to act under uncertainty can be the expected value theory, according to which it is preferable to make the decision that has the greatest expectation of promoting goodness or well-being (Broome, 2012: 189). Following the expected value theory, policy makers should take decisions valuing the badness of climate change and the increase of well-being obtained, for every action undertaken, in terms of both mitigation and adaptation. In order to do so, it is necessary to assess the probability of each event related to climate change and the value of each possible outcome. With respect to the assessment of probabilities, policy makers have to rely on science and on all the evidence that the scientific community can master.

there is no representative of future generations able to speak in their name and to defend their interests. Consequently, governments will be easily tempted to discount future's well-being in order to address the present needs of their electorate. A similar problem is found also on the jurisprudential level. Difficulties concern the fact that legal rights, in order to subsist and to be appointed, need a judge to whom those rights have to be claimed. In the very case of future generations, there is no judge to welcome future generations' claims and neither there is a representative of future generations who can defend their rights. Moreover, the juridical interpretation of environmental and international law has long questioned itself about the existence of autonomous rights belonging to future generations deriving from a common principle of intergenerational justice (Fodella, 2009:123).

With respect to the lack of representation, institutions struggle to set coercive bodies able to protect temporally distant agents. The moral biases of present generations and institutions, which lead them to accumulate benefits whilst leaving costs to future people, is enhanced by the absence of determinate coercive institutional bodies able to sanction and discourage intra-temporal free-riding. With no institution entrusted to make defection irrational and with the absence of direct interaction and reciprocity, faceless and voiceless future generations are easily not taken into consideration (Gardiner, 2014).

For instance, Gardiner (2014) individuates the institutional gap regarding future generations and the absence of effective institutional wherewithal in order to deal with the future and, hence, he proposes the creation of a global constitutional convention for future generations. According to Gardiner, because the ethical challenge posed by global warming is quite profound, there is the need of a global answer, which should be the drafting of a global convention able to act as a representative body for future generations. This global convention should also set norms and principles in order to limit government's power and authority when affecting the future. Gardiner exposes possible objections to this project and he illustrates several flaws, but he trusts its triggering power at the national and local level. More generally, this global convention should trigger a spill-over effect in order to embody and reflect the intergenerational concern in political decisions and policy designs at the lower level.

1.2.2 Theoretical level

It is possible to identify similar aspects and debates also at the theoretical level, especially with respect to theories of intergenerational justice. The very concept of intergenerational justice is quite difficult to define, in so far as justice between generations can be conceived according to different perspectives, each leading to different conclusions in line with various theories. Indeed,

intergenerational justice can be understood through different operational principles and logics, as there are different interpretations of the very concepts of justice and equality. For instance, the various philosophical theories of justice, such as utilitarianism, Rawlsian egalitarianism or sufficientarianism just to name a few, provide different accounts regarding the composition and the size of the natural and capital heritage that present generations will have to pass on to the future ones. Differences regard also the nature of present obligations and the institutions in charge of enforcing them (Gosseries, 2008: 39).

Investigating the various forms of intergenerational justice would be a way too large topic, requiring both more time and space than the ones destined to this research. Nonetheless, we wish to provide a general account of the main theories, which by no means aims to be exhaustive.

1.2.3 Intergenerational justice: theories and objections

To begin with, among the various theories of justice we can mention the ones based on the idea of *mutual advantage*. According to this type of theory, individuals decide that it is rational to be fair to one another and to follow rules of justice when they get involved in a cooperative commitment, where every participants to this cooperation receive net benefits. When applied on the intergenerational level, this type of theory of justice presents several difficulties to the extent that present generations will be asked to enter in a cooperative action where they will be the only ones to bear the costs, while the future generations will receive only benefits. This is due, in fact, to the absence of coexistence and reciprocity among generations (Gosseries, 2008).

On the other hand, we have the *utilitarianism*, according to which a society is fair, if it is able to maximize the aggregate welfare of its members, with no particular regard to its distribution. When this principle of justice is applied at the intergenerational context, the act of saving for the future is not only allowed, but also required in order to maximize the size of the intergenerational welfare. Two important implications derive from this principle. Conceiving intergenerational justice in this way might lead to sacrificial consequences and for this reason the utilitarian theory of justice risks to be too over-demanding, especially because utilitarianism does not take into consideration how many generations will come after the present one, but only the fact that they will come afterwards. Indeed, the indefinite number of generations would lead to an unending sacrifice. Moreover, this ongoing sacrifice will be paradoxically anti-productive in so far as every generations will be required to do sacrifices for all the generations that will follow them. In order to avoid these types of counterintuitive conclusions, utilitarianism makes reference to the concept of diminishing marginal utility, which states that the utility of a good diminishes with the accumulation of that good with the time. Put in a different way, if we want to maximize society's welfare, it would make more sense to provide goods to whom has less now, instead of sacrificing everything in the present for the

future, in so far as that accumulation in the future will bring less utility. Accordingly, another expedient in order to minimize the over-demanding outcomes of utilitarianism is the social discount rate, according to which, if the rate has a positive value, an unit of welfare in the future will be granted less utility than the same amount of welfare unit in the present. Both the diminishing marginal utility and the social discount rate are two means to minimize the sacrificial outcomes of utilitarianism, but issues persist in so far as the determination of the social discount rate is not an easy task (Gosseries, 2008: 43).

Following this line, Rawls suggests a “two-stage” model in which, first, there is an accumulation phase, where saving is compulsory like with the utilitarianism, and after there is a steady phase. What differentiates the compulsory saving proposed by Rawls from the one of utilitarianism is that the first one has a specific limit. Indeed, present generations have to accumulate benefits for the future to the extent that a minimal stability is assured so that just institutions can flourish. When this point is reached, the saving stops being compulsory and a steady phase follows. What is interesting about Rawls’s position regarding intergenerational justice is that Rawls surprisingly holds that the principle of compulsory saving for the future has precedence over the concern for the worst off in the present. According to Rawls, defending the basic liberties that will ensure just institutions in the future has more importance than the improvement of the social and economic conditions of the worst-off (Gosseries, 2008: 45).

On different grounds, we find theories of justice belonging to the communitarian tradition. For instance, philosopher Janna Thompson⁸ argues that communitarianism can be an adequate intergenerational theory of justice in order to justify and set intergenerational obligations, in relation to both the past and the future. According to communitarianism, present generations should play a beneficial role in transgenerational system of cooperation, in so far as all generations belong to the same transgenerational community, possessing common interests and sharing objects of value. In particular referring to future generations, present generations should work in order to ensure institutions and conditions able to promote life-long transcending interests, which are necessary to have a meaningful life. All generations deem these interests as valuable and as part of their identity and, for this reason, they are willing to cooperate in order to ensure them⁹ (Thompson, 2009).

⁸ Janna Thompson is Professor of Philosophy at La Trobe University in Melbourne, Victoria, Australia. She dedicated much of her work in political philosophy, particularly focusing on reparation for historical injustices, global and environmental issues and on intergenerational justice.

⁹ Thompson’s theory will be analyzed in details in the theoretical framework, see Chapter 2.

Although it is not possible in this research to explore in the same way all the theories of intergenerational justice, we wish anyway to mention other innovative attempts to translate known theories of justice in the intergenerational context. For instance, Professor Lukas Meyer¹⁰ defends a sufficientarian approach as the most appropriate theory in order to set non-over demanding obligations toward future people (Meyer, 2009). Others have proposed a contractualist approach in order to revisit the standard understanding of cooperation in intergenerational terms (Gardiner, 2009). Owing to this, bearing in mind the complexity and variety of intergenerational justice theories, we wish to illustrate their main debates. Indeed, there is something entangling and special about intergenerational justice, which has been able to lure many philosophers in lively and intricate debates. It is not surprising that the reason for the appeal of intergenerational justice lies both in its distinctiveness from justice among contemporaries and in its major challenges and objections, some of which attempt to deeply undermine the very possibility of having justice between generations (Gosseries, 2009: 3).

One of the first challenge encountered by theories of intergenerational justice regards the issue of *world's population*. As we have seen before, present people can affect unilaterally future generations not only by causing several damages and harms, but also by affecting their identity and the very number of individuals coming into existence in the future (Meyer, 2010). Indeed, climate change and world's population are closely linked: the growing world's population will contribute to increase the emission of greenhouse gases in the atmosphere, while, on the other hand, the effects of climate change will alter the size of future world's population by generating more casualties, by enhancing poverty and by constraining economic development (Broome, 2012:169-170). Owing to this, it is widely believed that among the measures of mitigation, aimed at reducing the emission of greenhouse gases, there is also the option of diminishing the growth rate of world's population. Reducing the number of future people will not only contribute to bring less greenhouse gas emission, but it will also help to create a future world environment where a smaller number of people will be exposed to the distant effects of global warming.

However, this suggestion raises several objections. Firstly, it is not an easy task the one of determining the appropriate population size for the future in order to effectively mitigate climate change's consequences. Several questions subsist regarding not only the optimal size, but also concerning the efficacy and the costs of this kind of measure (Di Paola and Pellegrino, 2012:61). A second problem regards the difficulty to assess the goodness and the badness of bringing less

¹⁰ Lukas H. Meyer is professor of Practical Philosophy at the Kalr-Franzens-Universität Graz. His main areas of study regard Historical Justice, Justice and Responsibility in Space and Time and Public International Law.

people into existence. It is necessary to determine on what moral basis and for whom a smaller population would be eventually better than a larger one (Gosseries, 2009). Indeed, even though a reduction of the population growth will contribute to set the conditions for a better future, at the same time, it is also true that the possibility of coming into existence is always better than the option of non-existence, in spite of the probable terrible conditions in which those lives will be lived. In other words, policies that limit population growth on the one hand will benefit future generations, but, on the other hand, they will doom merely possible future people toward non-existence, which will always be a much less desirable option compared to the option of coming into existence in a worst environment. This second issue shows why the field of population ethics is largely considered as one of the most challenging topic regarding both moral and philosophical theory. Indeed, population ethics is confronted by several paradoxes, which have the potential to weaken the consistency in individuals' moral beliefs, thus, undermining the very possibility of claiming duties and actions in favor of future generations (Arrhenius, 2009:24). Among these paradoxes, it is important to mention the well-known Mere Addition Paradox of Derek Parfit (1984) and the consequent "Repugnant Conclusion", which raises several questions regarding the number and the quality of people's lives (Arrhenius, Ryberg, and Tännsjö, 2014)¹¹.

Furthermore, present generations can affect not only the size of future people, but also their composition and identity (Gosseries, 2009). Indeed, the problem of population ethics is intimately linked to another issue, which is commonly referred as the *non-identity problem*. The non-identity problem has been elaborated in the early 1980s once again through the work of Derek Parfit, together with other philosophers, James Woodward and Gregory Kavka (Roberts, 2013). According to Parfit, present actions can have an impact on the very genetic identity of future people, thus causing different types of people to come into existence (Meyer, 2010). The problem related to this issue consists yet again in a paradoxical conclusion, not too dissimilar from the one confronted in the field of population ethics. It is necessary to imagine a situation where an individual is living an existence which is inevitable bad. The only two chances for another person to avoid this scenario are: the option of bringing that individual into existence, or the one of taking certain decisions and actions which will bring into existence a different person, a person genetically

¹¹ The Repugnant Conclusion as formulated by Parfit in 1984 is the following "For any possible population of at least ten billion people, all with a very high quality of life, there must be some much larger imaginable population whose existence, if other things are equal, would be better even though its members have lives that are barely worth living". The Repugnant Paradox is a challenging matter regarding the field of population ethics. The puzzling and complicated nature of this conclusion lies in the fact that it is morally unacceptable, but at the same time it is very tricky to avoid and to overcome it, in so far as its possible solutions lead to just as many counterintuitive and paradoxical conclusions (Arrhenius, Ryberg, and Tännsjö, 2014). Some scholars do believe that one possible way to solve the paradoxes of populations ethics, as the one of the Repugnant Conclusion, is to reason in a more practical way, through which the empirical data of reality may help to overcome the constraints of individuals' natural intuitions (Di Paola and Pellegrino, 2012:76).

different from the previous one, but surely better off. On the one hand the possibility of existence is always better and preferable than the possibility of non-existence, but at the same time there are some situations of living which are objectively wrong (like the scenario of world's temperature exceeding 4° degrees). Thus, the paradox of this situation lies in the fact that in this case it would be better to take certain types of decision in order to avoid bad living conditions, but at the same time those very decisions will bring into existence different individuals, condemning other people to a non-existence's fate (Roberts, 2013). This challenge helps also to underline another difference between intergenerational justice and justice between contemporaries. Present people can affect the existence of their contemporaries only with respect to their integrity and survival, while they can influence their identity, but not their genetic one. They can influence how contemporary people develop their personality by changing their life conditions and process of self-understanding (Meyer, 2010).

Another challenge faced by intergenerational justice is the so called *non-existence challenge*. This is probably the most difficult issue which might deeply threaten the possibility of intergenerational obligations and duties. According to the non-existence challenge, obligations and rights can only be appointed to people who actually exist. Claiming that future people, because not existing, cannot hold rights undermine both the possibility of violating future people's rights and, consequently, the possibility of having obligations toward them. Furthermore, also in the field of intergenerational justice the *uncertainty* regarding the future is a constraining element. Our lack of tested knowledge regarding what will happen in the future and how people will be affected is a daunting factor which prevents the elaboration of any clear theory of intergenerational justice. The uncertainty and the vastness of the future make really hard to define what will be the specific needs of future people and how far in the future our obligations will have to extend. Related to this, there is also the issue concerning the fact that in order to preserve the interests of the future, sacrifices have to be made in the present, serious sacrifice. Nevertheless, at the same time, there are many doubts regarding the entity of these sacrifices and how they have to be balanced with the need and interests of the haves-not of the present.

These challenges and debates show how the field of intergenerational justice is a fertile, although difficult, ground for new ideas and theories. For each objection concerning the existence or not of intergenerational obligations, the number of solutions and argumentations are innumerable and noteworthy, but there is the fear that these tricky and intricate issues may be too hard to solve and that they are doomed to remain a mere mental exercise for political and philosophical thinkers.

1.2.4 The individual level

Exploring the field of intergenerational justice, it is possible to find a number of other issues that so far have received small attention and investigation, in spite of their worthiness both from a philosophical and practical point of view (Gosseries, 2009:2). Indeed, moving on the individual level, scholars have attempted to address specific issues of intergenerational justice by examining intergenerational obligations in interpersonal terms (Kumar, 2009). Intergenerational relations set several psychological constraints among which there is the one concerning the problem of individual moral motivation, which we believe deserves special attention in so far as it allows to embrace more than one discipline, varying from philosophy and political theory to moral and social psychology.

The question of moral motivation regards the difficulty to fill the psychological and moral gap between the acceptance of a rule and the actual action in accordance with it. Indeed, the tricky aspect concerning normative views is that they cannot expect full conformity from individuals: they are mostly presented as recommendations or prescriptions and their receivers are always free to follow or to disregard them. The motivation problem has always been a matter of concern of moral philosophy and many philosophers and scholars have attempted to study how conformity to a rule can be generated in the individuals' minds. For instance, according to the German philosopher Dieter Birnbacher, in order to transform normative views into real actions, certain dispositions belonging internally to the individuals must subsist, namely self-interest, sensibility, rationality and moral attitudes. The combination of these factors or dispositions trigger the motivation for acting in conformity to a determined rule (Birnbacher, 2009:2). In the transition from the reception of a rule to the real action there are four distinctive passages, all of which help to understand the problem of moral motivation. Firstly, there is the process of *accepting the rule*, which occurs when the individual believes that the norm is right and justified; then, the individual has to *adopt* the rule as part of his or her guiding principles. Thirdly, it is necessary to *apply* the rule, which consists in the recognition that that specific norm is appropriate for a specific situation and, consequently, there is passage where the individual *acts* in conformity to the rule. All of these passages are interdependent and the question of motivation problem lies in the malfunctioning of this interdependency. For instance, it can occur that individuals are perfectly able to accept a rule, considering it as justified and right, but, at the same time, they are not able to apply the rule in a specific situation (consequently they do not act in conformity) or there are intervening variables which cause deviation and misinterpretation. More specifically, "a failure to follow one's practical beliefs can be attributed to weakness of will, to an insufficiently developed capacity to identify

situations for which these beliefs are relevant, or to the fact that these beliefs are only asserted and not fully internalized” (Birnbacher, 2009:3).

Moving the problem of individuals’ motivation into the field of intergenerational relations, in this case the question of moral motivation discloses much more complicated problems and difficulties. Indeed, when dealing with relations between not-contemporary generations, the motivation problems presents new constraints and thorny elements. If it is already hard for individuals to accept to have responsibilities and obligations toward the future, so it is easy to imagine how much more difficult it would be to transform these views in actual actions and behavioral change.

Once again, one of the first constraining factor which prevents individuals from taking action for the benefit of future generations is the high level of *uncertainty* surrounding the distant future. Uncertainty regards not only what the true needs of future people will be, but it also regards the real effectiveness of present actions and the capacity of the very next generations to carry on a long-term effort and sacrifice (Birnbacher, 2009). Hence, uncertainty plays a relevant role in not only casting doubts about which is the right action to undertake, but in setting a widespread sense of powerlessness and insecurity, which eventually leads to inaction. In other words, uncertainty increments the abstractness of the decisions for the future, thus, making them more arduous to take, especially among those individuals already armed with skepticism or denial toward climate change.

Professor Robert Gifford¹² believes that individuals have a tendency to interpret uncertainty in a way that best suits their interests. Indeed, recent studies have shown how uncertainty tends to promote optimistic biases (Markowitz and Shariff, 2012: 244). For instance, it is common to discount the future, believing that future generations will have a greater well-being with the passing of time. As one might expect, too much optimism does not always help, but, on the contrary, it runs the risk to blind people and to cause inaction. Moreover, Professor Giffords underlines that people tend to be risk-adverse and, for this reason, they do not want to engage themselves in cooperative and collective actions where it is highly feared the futility and uncertainty of their results.

¹² Robert Gifford is Professor in the Department of Psychology and Environmental Studies at the University of Victoria (British Columbia, Canada). His thoughts present in this research are taken from a lecture entitled: “The Psychology of Climate Action and Inaction held in Brussels at the Institute for International and European Affairs (IEA) the 16 October 2013. See: <https://www.youtube.com/watch?v=jqVPQEzScdc>

The second factor, which together with uncertainty leads to a lack of motivation and inaction is *ignorance*. Climate change is a complicated, global and highly scientific problem which results hard to be conceived by individuals. Therefore, people do not know how to deal with it and which actions must be taken in order to mitigate it. Besides, often ignorance goes hand in hand with skepticism and, in fact, there is a great divide between what people think about global warming and the opinion of the scientific community, which recently has reached 97% of consensus among its scientists. What increments the influence of ignorance it is also the fact that often the majority of present people do not have a direct experience of climate change and its effects (APA, 2009). People know about climate change through the media and educational sources, but they lack a direct and, most importantly, an emotional experience of it, which can trigger motivation and actions. Consequently, people need to rely on scientific reports and they need to seek information regarding global warming (APA, 2009). For this reason, there is little of intuitive about the understanding of global warming: on the contrary it requires an attentive and precise moral reasoning, which lacks emotional grips and motivational force.

Other studies have interestingly shown how human beings often have a *defensing reasoning* against those issues that can represent a potential threat for their worldviews. Indeed, every individual has a proper filter through which new information are accepted and understood. However, this filter acts in order to defend the preferred vision of reality: if the new information is in line with the personal vision of reality, then the information is fully accepted and internalized; on the other hand, if the information risks to threaten that vision, then individuals' mind tries to set several logic arguments against it (Klein, 2014:36-37)¹³. Markowitz and Shariff (2012) talk about *moral tribalism*, according to which individuals' attitude tend to fall along political lines. This mechanism is particularly true when individuals receive information regarding climate change: conservatives are more likely to show less support and belief regarding climate change in comparison to liberals. This different attitude can be explained according to the different moral views and priorities endorsed by liberals and conservatives. Liberals tend to focus more on individual welfare and thus on harm and fairness, while conservatives, in addition to these aspect, tend to stress the importance of the authority and the in-group loyalty. Because global warming poses several questions regarding the unfairness of its consequences and the harm that it will do to future people, then it is easy to imagine how climate change is a less moral concern for conservatives and more for liberals (Markowitz and Shariff, 2012: 244)

¹³ Journalist Klein in this case makes reference to the work of Professor Dan Kahan, University of Yale, titled "Cultural Cognition as a Conception of the Cultural Theory of Risk", in *Handbook of Risk Theory: Epistemology, Decision Theory, Ethics, and Social Implications of Risk*, ed. Sabine Roeser et al., London, Springer, 2012, pp. 731.

Apart from the political affiliations of individuals, the mechanism of defending reasoning is activated also because the acceptance of climate change in its full meaning and consequences demands a complete revision of today's world, in its economic, political and cultural aspects. Global warming will deeply affect the world, not only by changing it physically, as the previous examples of Australia and the Arctic have shown. The whole logic and ideology of the contemporary world will need to change. The underlying principles of economic growth will have to be reconsidered in order to meet the capability of the planet. Everyday actions and habits will have to be transformed in order to produce less greenhouse gases emissions, for instance: less planes, less cars, less consume of meat. However, these behaviors are very hard to change in so far as they require a reconceptualization of our way of life. For this reason, many individuals prefer to comfortably engage a climate change denial¹⁴, even though they partly know that what they do is actually the cause of the problem. As nicely put by journalist Naomi Klein, this form of cognitive dissonance regarding climate change is affecting many of our contemporaries: while we are “faced with a crisis that threatens our survival as a species, our entire culture is continuing to do the very thing that caused the crisis, only with an extra dose of elbow grease behind it” (Klein, 2014:2).

Furthermore, there are particular motivational challenges that may lead to think that human beings are mostly un-fit for caring about the future. Indeed, individuals' psychology have a more here and now –oriented mind, which makes it difficult both cognitively and emotionally to feel bonds with the distant future. There are widely accepted assumptions that individuals and communities have a preference to project their actions and concerns only in the time frame of their life-time and for the very next generation that comes after them (Gardiner, 2012). This present-oriented moral psychology is also reinforced by the facelessness and unknown identity of future generations (Di Paola, 2013). The consequence of this is that people affected by climate change are likely to be perceived as less similar to oneself in comparison to close contemporaries. The temporal and spatial distance together with the facelessness of future people risk to make future generations as less deserving of moral obligations (Markowitz and Shariff, 2012: 245). Furthermore, while present people will be asked to make sacrifices and to bear costs for unknown persons in the future, there will always be other present and often more urgent needs or interests which may easily take precedence and relevance in people' minds. Hence, the combination of a here and now oriented mind with the uncertainty and facelessness surrounding future people create a condition where present decisions for the future are extremely difficult to accept and to practice. Individuals' moral

¹⁴ About this point, Klein writes: “Remember and then forget again. Climate change is like that; it's hard to keep it in your head for very long- We engage in this odd form of on-again-off- again ecological amnesia for perfectly rational reasons. We deny because we fear that letting in the full reality of this crisis will change everything. And we are right” (Klein, 2014:4)

motivation is often too weak, in so far as it easily surrenders to more immediate and foreseeable needs.

Other constraints originate from the question regarding individuals' responsibility toward the future. On the one hand, people are more likely to feel responsible for a harm that they cause instead of a benefit they fail to provide. This happens especially because individual responsibility is largely based on causation, so that people feel more responsible for an outcome that they produce instead of an outcome that they fail to create (Persson and Savulescu, 2012). If this is true, it is also true that individuals struggle to recognize their responsibility in causing harm to future generations. Climate change is perceived as an unintentional side effect of present actions and, therefore, individuals do not see a direct causality and intention between their actions and their effects in the future. In addition to this, when people are held accountable for the consequences of climate change, in order to avoid the feeling of guilt, they attempt to minimize their involvement in the harm, posing the blame to other actors or by being skeptic about the disastrous effects of global warming (Markowitz and Shariff, 2012: 244). The lack of felt responsibility and the tendency to escape the feeling of guilt are also powerful constraints to effective action and mitigation.

One last, but not less important, point to stress is that all of these psychological and moral constraints tend to reinforce each other creating a dense web of obstacle which severely limits individuals' moral intuitions and motivation to act (Di Paola, 2013). It is like these elements make people myopic regarding the threat posed by global warming. People show to be concerned about climate change and its effects in the future, but at the same time they fail to recognize its urgency and its demands for action in the immediate present. Indeed, as previously illustrated through the concept of cognitive dissonance, there is a wide gap between a deep concern about the future and a widespread inaction and (apparent) indifference.

Taking in consideration the EU region, the Eurobarometers regarding climate change and people's attitude toward the environment (2014) show that 50% of all Europeans think that climate change is one of the world's most serious problems, after the threats posed by poverty, hunger and lack of potable water and the economic situation. Despite this widespread concern, Europeans citizens believe that the responsibility for action lies in the hands of both governments and business and industries. Only the 25% of Europeans thinks that they have a personal responsibility in addressing climate change. This data show how individual perceive the threat posed by climate change, but at the same time they do not recognize their responsibility in taking action in order to mitigate it. This not-recognition regarding responsibility largely prevents actual action and it also shows how the

issue of global warming is a too complicated one: individuals do not consider themselves as ready to handle it and they fear futility and inefficacy.

However, almost half of the European citizens affirm that they have undertaken some forms of actions in order to tackle climate change. Among these actions, it is possible to recall the reduction of waste and the regular recycle of it; the effort of being local and of using environmental friendly forms of transports. Others have improved their home insulation in order to reduce their energy consumption and to reduce the consumption of disposable items. If these actions can be a sign of positive commitment toward climate change, at the same time it also true that the proportion of people who engage in these practices varies considerably from country to country and, thus, there is a wide discrepancy and irregularity. Moreover, when asked about their thoughts regarding the future, individuals express their concerns for their children and for the very next generations, without acknowledging the fact that the effects of global warming will be felt also and most importantly in the distant future, embracing a spatial-temporal dimension difficult even to imagine.

1.3 Conclusion

Through this state of the art we have attempted to explore the relevant literature regarding intergenerational relations, in particular investigating their most salient aspects on three level of analysis. It emerges from this exploration that intergenerational relations with the respect to the effects of climate change in the distant future pose several problems and challenges, which are quite difficult to overcome. The relationship between present and future generations forces us to find new institutions able to take into consideration future's concerns; it pushes theories to create innovative attempts to translate theories of justice in intergenerational terms; and it tests individuals' motivation to act.

Through this exploration, we also acknowledge that one part which has not received much attention regards the study of the moral motivation problem that affects individuals when attempting to deal with global warming and the distant future. While most of the literature has been dedicated to the analysis of theories of intergenerational justice attempting to test them against the non-existence challenge and the non-identity problem, little and small attention has been given to the study of the motivation problem and on what can push individuals to care about future generations. Thus, we deem that a relevant gap in the literature is represented by the small investigation reserved to the study of the intergenerational justice in interpersonal terms and especially regarding the question of moral motivation.

We are aware of the fact that some might argue that a possible solution for the moral motivation problem and one of the reasons why it has received little attention is that it can be limited through more government intervention. Indeed, through the Eurobarometers we have seen that the individuals themselves, because they do not know how to handle the situation, they prefer to have more intervention and action from governments. However, we believe that this conclusion narrates only one side of the story and that in the long run it risks to be not an optimal decision. Indeed, the existential risk posed by global warming will demand an heavy and unprecedented government's intervention in the everyday life of individuals. Governments will have to regulate not only the economic system, putting aside the theory of the invisible hand and of free market, but it will also have to regulate individuals actions and decisions, from the smallest things to the biggest ones. For instance, people will be asked to consume less meat, to take shorter showers, to use less the car and more public transportation. There will be more taxes on major polluters and the normal way of life and travel will have to change. Green solutions will eventually lead to a *green* authoritarian government in order to implement very unpopular policies: the hand of the government will have to extend in areas, which have always been considered part of the personal sphere of individuals (Persson and Savulescu, 2012). Government could ask to regulate the population rate growth, the consumerist lifestyles of its citizens and the well rooted *laissez faire* in economy. All these measures not only will require high costs on coercion and control, but they will also, and most importantly, represent a challenge and an issue for liberal democracy. In addition to this, even if government's intervention is required, at the same time the role of the individual is fundamental in accepting and internalizing the norms. Governments always depend on the legitimacy given by their citizens and to the same extent green measures need to be accepted by individuals, as necessary and fair.

For instance, governments will have to impose determined norms on their citizens for the benefit of other, far way, future people, who do not have a defined identity and who will only be receivers of benefits. However, people's willingness to engage in cooperation strategies always involves a sense of present justice and fairness. In the case of climate change, present people do not see fairness in the green measures in so far as they will be the only ones to bear sacrifices and costs, while the future and faceless people will just enjoy the positive results. Thus, even if government will have full authorization to take actions to deal with global warming, at the same time it will always need the participation and acceptance of its citizens. Furthermore, political change will be more effective if it is not only supported, but also initiated from the bottom. The willingness to change the system and to face the existential risk posed by global warming lies in the hands of citizens and people who have the power to make certain issues worthy of attention and action, through the means of vote, manifestation and not only (Klein, 2014).

Hence, we believe that what liberal democracy really needs is not a green authoritarian government, but the participation of well-informed and morally evolved citizens, able to engage themselves in pro-environmental behaviors in order to mitigate climate change and to benefit future generations, even if the motivational challenges are considerable and cannot be ignored. However, human moral development is possible and especially in a changing world as the one of today where human morality, responsibilities and choices have always attempted to evolve at the same pace of technological and scientific innovation. Climate change poses the same challenge and is demanding for an evolution which starts from the individual with spill-over effects on politics, culture and society. Global warming is an existential risk, but on the other side of the coin it is also the catalyst opportunity to change and to act (Klein, 2014: 8).

Owing to this, it seems that the key for change and for real actions lies in the individuals, in their capacity to frame and understand climate change at first and then to act in order to respond to it. But, as it has been illustrated, individual actions is not always effective because between the phase of comprehension of the problem and the moment of actual action there is a wide motivational gap due to psychological and social constraints. Due to the necessity of actions at the individual level, for this reason, we truly believe that the question of moral motivation is a relevant topic of investigation. Thus, considering these final remarks, throughout this research we wish to attempt to answer the following question: how can individuals be motivated to adopt pro-environmental behaviors in order to protect the interests and needs of future people?

Chapter 2

Theoretical Framework

Through the exploration of the relevant literature regarding climate change and future generations, we have highlighted an area of research which regards the motivational problem affecting individuals' mind toward the distant future. This topic requires an interdisciplinary approach and, for this reason, it is necessary to spend few words about the theoretical foundations and criteria of observation of this investigation. In particular, before moving any further with our research, it would be useful to linger upon a brief clarification of our research question: how can individuals be motivated to adopt pro-environmental behaviours in order to protect the interests and needs of future people?

2.1 Moral Motivation

The focus of our research and, thus, the dependent variable that we wish to explain is the individual moral motivation problem regarding the distant future. Through the exploration of the relevant literature, in the first chapter we have attempted to illustrate the motivation problem, describing it as the difficulty to fill the psychological and moral gap between the acceptance of a rule and the actual action in accordance with it. With respect to the topic of our research, we want to refer to the motivation problem that affects individuals that are aware of the risks for future generations and of their responsibility in causing harm, but who fail to act. Thus, more than the discrepancy between the acceptance of a specific rule and the action in accordance with it, we consider the difficulty that individuals encounter in responding to a moral demand regarding people in the distant future.

In this regard we wish to express here one of our assumptions that are at the basis of our investigation. Indeed, when we deal with the moral motivation problem we embrace the *internal reasons thesis* of Bernard Williams¹⁵. According to Williams, all reasons to action are internal to the individual, while there is no such a thing as external reasons. More specifically, the basic idea expressed by Williams's thesis is that individuals cannot have any motivation to act, which at the same time has no link with what individuals care about (Chappell, 2015). Motivation to act can be found internally and it is connected to what the agent deeply cares about and to his or her inner

¹⁵ Bernard Williams (1929-2003) was an English moral philosopher and one of the most influential thinker in philosophical ethics in the latter half of the twentieth century. His major contributions have been made on moral psychology, personal identity, morality and emotions, equality and on the interpretation of philosophers including Wittgenstein, Nietzsche, Descartes, Aristotle, and Plato. In particular he refused to codify ethics in precise moral theories, as Kantianism and Utilitarianism have done, holding that the human's ethical life in all its complexity and diversity cannot be captured in any systematic moral theory (Chappell, 2015). The internal reasons thesis has been illustrated in the paper *Internal and External Reasons* (1981: 101-113).

necessities¹⁶. It might follow from this that it is not possible to have universal moral rules in so far as moral reasons can only be found internally in individuals and, consequently, if an individual does not have such motivations, then she will not assume a particular moral conduct. In this respect, it is useful to make a difference between *moral reasons* and *moral demands*. While moral reasons are internal to individuals, at the same time, there are shared moral demands that are based on the internal reasons of almost all individuals. For instance, someone might not care about the badness of stealing, lacking an internal reason not to do it, but at the same time there is a moral demand which condemns such acts and which is based on the shared necessity of all to live in an ordered and peaceful society (Chappell, 2015). Eventually, that individual will adopt the other's reasons as her own internal moral motivation to not steal anything.

Following this line, Williams holds that morality is better served by internal motivation and connection and empathy among individuals instead of reason alone. Moreover, he argues that there is an universality of motivations or internal reasons that are common to all individuals because of their human nature and which are always related to what the individuals actually care about (Chappell, 2015). Owing to this, the internal reason thesis will be relevant for our research because it will allow us to focus on the individuals' internal motivation to adopt pro-environmental behaviours for the future, especially because we have seen through the first chapter that it is quite difficult, on all three levels of analysis, to externally impose legitimate demands for future generations. We believe that the challenges posed by the uncertainty of the distant future make the claim of a moral rule of conduct for future people more difficult to justify and to be accepted by present generations. Hence, we think that it would be more effective to consider the internal moral motivation, which is more solidly based on the psychological and emotional needs of individuals. Furthermore, Williams's thesis will be a precious tool for our analysis and for the demonstration of our hypothesis.

2.2 Why starting from the individuals

Although it is possible to observe a wide gap between motivation and actions among various actors, such as national governments, international organizations and business companies, we believe that the motivational problem of individuals deserve a special role in so far as individuals seem to be the preferable actors in order to set systemic change for the benefit of future people. In the previous chapter we have attempted to show that starting from the individuals is a necessary step in order to avoid eco-authoritarianism, a major government intervention and the consequent costs of coercion, enforcement and monitoring. These factors would seriously represent a challenge for

¹⁶ If we do not have an internal reason for a particular action, at the same time we can build an internal reason through the motivations and beliefs that we already have, thus, through what we already care about (Chappell, 2015).

liberal democracies and we have attempted to illustrate how an alternative to that challenge is the participation of well-informed and morally evolved people able to take actions both as citizens and as individuals in order to mitigate climate change. Nonetheless, further explanations are needed.

Let's begin by generally stating the second assumption, regarding our research question. Before dealing with individuals' motivational problem we assume that individuals are morally responsible for causing current and future climate changes and that, therefore, they have an obligation to act. Moreover, we do believe that individuals' actions can make a difference, thus, resisting the institutionalist argument according to which individuals have only a duty to prompt their governments to take actions against climate change (Di Paola, 2014:145). In making this assumption, we acknowledge the difficulties for individuals to feel their responsibility for causing climate change. Indeed, climate change does not pose a standard moral problem where it is possible to individuate a causal relation between those who intentionally cause harm and those who suffer from it. On the contrary, the effects of global warming create a situation where the individuals causing harm are not clearly identifiable and where the individuals and the harms often do not share the same spatial-temporal dimension (Jamieson, 2014: 34). As Dale Jamieson (2014) nicely puts, a diffuse group of people will trigger harmful consequences that will be felt mostly in the future and by a likewise diffuse group of individuals. Nevertheless, this research will hold the assumption that individuals are morally responsible for causing global warming as an essential basis in order to build our argument and to conduct our investigation.

Having expressed our general assumption, we need to explain what makes the individuals suitable actors and unit of analysis in comparisons to other actors, such as governments and international organizations. We are aware that among the possible actors there is also the role of business, which when dealing with global warming often acts in two directions. On the one hand, it can operate as a lobbying interest group which urges governments to take actions on climate change, whilst, on the other hand, it can play a decisive role in the mitigation process against global warming by directing its investments toward new forms of less carbon intensive sources of power and new measures to obtain energy efficiency. By no means we underestimate the efficacy of this type of actor, but for the aim and scope of our investigation we are going to limit ourselves by comparing only the role of individuals and governments.

Looking at the other actors and proceeding with order, moving from the global to the national level, it is possible to see that there are other alternatives to individual actions, but they present several shortcomings and structural flows. Starting from the global level, David Held illustrates how global warming represents a severe challenge for the contemporary and future multilateral

cooperation. In particular, there are two main limits: the first one regards the set of institutions created after WWII that does not structurally consider global warming among its priorities; and, secondly, the difficulty among states to create a global governance in order to tackle a global challenge such as the one represented by climate change (Held, 2014: 18-19). Even though the international cooperation has made considerable efforts in order to tackle the problem of climate change, at the same time, those efforts have been constrained by the very international cooperation, which is characterized by institutional fragmentation and inertia. Indeed, it is not often clear which agencies has the responsibility and priority to act and there are uncertainties and disagreements concerning the objectives, the means and the costs of actions (Held, 2014). Furthermore, geopolitical and national interests often prevail during international meetings and organizations and it is commonly difficult to reach a binding agreement regarding CO₂ emissions¹⁷.

Moving on the national and state level, also in this case concerns for climate change and for future generations struggle to obtain prominence and efficacious action. Considering liberal democracies, governments fail to address long term policies in order to mitigate climate change because of the short-termism which characterizes almost every government in charge. That is to say that current governments and coalitions tend to focus on policies able to collect success in the short term and aimed at contenting the median voter. Moreover, it is common to observe interests and pressure groups constraining and directing the decision making process often toward policies not really promising from a sustainable development perspective (Held, 2014, 19-21). However, the shortcomings present in liberal democracies should not lead to the temptation of arguing that authoritarian governments might be structurally better in adopting policies to mitigate global warming. A well-known example could be the one-child policy adopted by China in order to face its social, economic and environmental problems. The one-child policy, although it has been widely criticized for its painful episodes of coercion and violation of human rights, at the same time it has been so far one of the few policies which could praise remarkable CO₂ emissions reduction. However, it would be incorrect to think that forms of eco-authoritarianism are the best options available to tackle climate change. Indeed, liberal democracies, despite their shortcomings and internal constraints, present positive promising features for pro-environmental policies. Liberal democracies favour more access to information and they give more space and visibility to science, both indispensable elements for boosting people's awareness and action regarding climate change. Most importantly, liberal democracies are sensible to the incentives brought about by civil society,

¹⁷ The exemplar case, which represents the failure of international negotiations regarding climate change and CO₂ emissions, is the Conference of Copenhagen, December 2009, organized through the mediation of the United Nations. Great expectations are directed to the upcoming Paris Summit, COP-21 in order to reach a binding agreement concerning CO₂ emissions (Giddens, 2015).

free media and well informed citizens. Liberal democracies create the condition in which information, education and participation can actually lead to better policies for mitigation and adaptation against global warming. For instance, the newspaper *The Guardian* has recently begun a “climate journey”, attempting every week to dedicate articles and special sections on the discussions concerning the contemporary climate crisis. It has also launched a divestment campaign, *Keep it in the ground*, aimed at urging two of the world’s biggest charitable funds, the Wellcome Trust and the Gate foundation, to divest from the top 200 fossil fuel companies in five years and, at the same time, freezing any new investment toward them¹⁸. Thus, liberal democracies provide valuable contexts for taking actions and decisions regarding climate change. Nevertheless, it is also true that liberal democracies and governments are located at the very heart of the interconnected web of institutional, cultural and economic infrastructures that do not want to change the system and that are at the very basis of environmental degradation (Di Paola, 2014: 145).

Owing to this, considering these constraints, present at the global and national level, and considering the potential role of the individual in promoting changes toward sustainable solutions and policies, we believe that it is worthy to start from the individual level and to investigate the motivational problem that prevents people to move from concern to real action.

2.3 What do we mean by pro-environmental behaviors?

Once explained why it is important to start from the individual level and how the individuals can be fundamental drivers of change against global warming, it is necessary to define what kind of pro-environmental behaviour we are referring to when attempting to motivate individuals to act for the benefit of future people. The term pro-environmental behaviour (PEB) generally refers to the group of actions aimed at reducing the negative impact of individuals’ actions on nature. For the sake of our research, we will refer to a broader concept of pro-environmental behaviour, able to embrace actions undertaken both in the private sphere by the single individual and actions at the social and political level in order to encourage environment’s protection and sustainable development. Indeed, individuals’ commitments for tackling climate change and benefiting the distant future cannot be limited to the single actions carried out in the private sphere, such as consuming organic food, using public transportation and eating less meat. There is no intention to diminish the value of these individual actions, which by no doubts will contribute to reduce individual ecological footprint and to develop an environmental friendly behaviour in everyday life, but the existential risk posed by climate change demands from individuals a commitment, larger in

¹⁸ For more information regarding the campaign see: <http://www.theguardian.com/environment/ng-interactive/2015/mar/16/keep-it-in-the-ground-guardian-climate-change-campaign>

scope and efficacy. It is necessary to do something more than simply offsetting our emissions. Pro-environmental behaviour, in the broader conception that we want to utilize, sees individuals acting as citizens and encouraging governments to face global warming. Apart from day-to-day pro-environmental practices, it is necessary to boost sustainable development policies at the centre of national political agendas. Voting, protesting and public discussions are precious means, and particularly interesting is the role of individuals when acting through social movements. The Climate March and the Earth Day are two popular examples of successful individuals' collective actions aimed at raising awareness and consciousness about climate change and at creating community activism. Another example can be the La Via Campesina which is a grassroots mass movement founded by farmer's organizations at the national and local level and committed to defend small scale sustainable agriculture, while opposing transnational companies and corporations¹⁹. Following this line, this last example allows us to introduce another form of pro-environmental behaviour, which consists in interpersonally coordinated private actions that have a deep political impact (Di Paola, 2014). For instance, an example of this type of pro-environmental behaviour is urban and peri-urban gardening, which consists in producing and distributing food in a city, town or village. It is a way to produce food in a more sustainable way, to create a more self-reliant economic system and to promote a wiser and sustainable land use. This practice undertaken by individuals and collectively coordinated requires no coercion and no government intervention, and at the same time it can have a strong impact at the political and global level, by confronting governments and global corporations with a change in the making (Di Paola, 2014). A nice example of urban agriculture and gardening can be the *Sharing backyards*, which links people who want to cultivate their own food with people who have unutilised yard space²⁰.

Hence, when attempting to motivate individuals to care about the future and to act for the benefit of future people, we are referring to pro-environmental behaviours comprising a large group of actions. They range from individual practices at the micro and private level toward actions at the social and political sphere, all having in common the commitment to reduce humans' negative impact on nature and to promote a systematic change. All these types of actions can contribute to open the path toward a more sustainable future and to partly diminish the dramatic consequences of global warming, thus benefiting future people.

¹⁹ For more information regarding La Via Campesina see: <http://www.earthday.org/earth-day-history-movement>

²⁰ See: <http://www.sharingbackyards.com/> and <http://foodtank.com/news/2013/10/five-different-examples-of-urban-agriculture-from-around-the-world>

2.4 The well-being of future people

The third element of our research question that requires clarification regards the interests and needs of future people. In the previous chapter among the psychological constraints, which often lead to individuals' inaction toward the distant future, there was the difficulty to determine precisely which are the interests and needs of future people. Indeed, with the advancement of technology and the changing conditions of human life on the planet, it is quite hard to predict with precision what future generations would desire and need. Within the field of intergenerational justice, indeed, there is a large debate regarding the size and the content of the natural, cultural and economic heritage that present generations will have to pass on future people. Some have argued that we are required to pass a planet whose quality should not be worse than the one we have received from past generations. Others, instead, would prefer to put a major emphasis on the conservation of options and diversity available to future people (General Assembly, 2013). Besides, even if we could know the needs and preferences of future people, it would be quite difficult to compare and balance them with the ones of contemporary people, which are surely different and probably more limited (de-Shalit, 2005: 5).

For the limited scope of our research we will leave the debate regarding the determination of the interests and needs of future generations open. That fact that we do not discuss it should not be read as implying the irrelevance of the debate, but, on the contrary, it is highly relevant and it deserves more dedication than we can offer here. Owing to this, when taking into consideration the action of benefiting the interests and needs of future people, we are generally referring to the promotion of the well-being of people both in the near and distant future. This allows us to express our second assumption, according to which human well-being is all that eventually matters morally. The goodness of individuals' actions will be measured according to their capacity to not only protect, but also to promote human life and its overall quality (Crips, 2014). Moreover, the action of benefiting human well-being will be against both spatial and temporal discounting. That is to say, that our conception of human well-being is not bounded to any particular geographical area or community and, at the same time, it is regardless of temporal dimensions. We assume that human well-being has an equal value not matter if we are referring to present or future generations.

2.5 The theoretical foundations of this research

The *how* part of our research question will be answered by referring to two main theories and adopting an interdisciplinary perspective. The dependent variable of our research is the moral motivation problem, which affects individuals when dealing with the effects of climate change in the distant future. In chapter one we have defined the question of individuals' moral motivation as the difficulty to fill the psychological and moral gap between the acceptance of a rule and the actual

action in accordance with it. More specifically, in our research we are addressing those individuals who are concerned about the well-being of future people and they share the view that we have responsibilities and obligations toward them, but that, at the same time, fail to transform these concerns in real and effective actions. These individuals lack a motivation to act and our research problem is to study how it is possible to motivate them. In order to do so, we need to borrow insights and explanations from a wide range of disciplines, such as cognitive and social psychology, political theory and philosophy. Among these disciplines, our research design will focus on the *two-system theory* of Professor Daniel Kahneman, the *social representation theory* elaborated by Moscovi, and the *social intuitionist model* of Jonathan Haidt.

2.5.1 The two-system theory

The two-system theory elaborated in the book *Thinking, Fast and Slow* (2012) by professor and psychologist Daniel Kahneman²¹ offers an interesting perspective from which studying how human-mind's thinking and decision making works, especially in face of uncertainty and risk. Daniel Kahneman's theory reveals the logical inconsistencies and biases present in human psychology that accompany every decisions and cognitive process. The two-system theory is relevant for our research in so far as if our aim is to investigate the individuals' moral motivation problem, it is indispensable to start from a theory which it allows us to study how individuals' mind works and which are the factors that mainly influence its decisions. Through this theory, we come to understand that human mind is not a rational computing system, as most of the cognitive psychology tends to argue. On the contrary, we become aware of human rationality and of the unconscious errors that influence individuals' judgment of the world.

According to the two-system theory, individuals' mind comprises two thinking system: system 1 and system 2, respectively corresponding to intuition and reasoning. The first system is characterized by a way of thinking that is fast, associative, effortless and often emotional. System 1 comprises all the thoughts that come to an individual's mind with not reflection and intuitively. It is a way of thinking mainly governed by emotions, but also by habit which makes it difficult to control or modify. On the other hand, the system 2 corresponds to a way of thinking which is slow, serial, conscious and deliberate. It differentiate itself from system 1 to the extent that the action of thinking requires efforts and it is consciously controlled. What is interesting is that system 2, which is the one characterized by control and conscious deliberation, is not the prevailing one. Indeed,

²¹ Daniele Kahneman is professor of psychology and public affairs at Princeton University's Woodrow Wilson School of Public and International Affairs. He dedicated much of his studies to the psychology of decision-making and to behavioral economics. He revealed the logical inconsistencies and bias in human thinking, challenging the assumption of human rationality at the basis of modern economic theory. In 2002 he won the Nobel Memorial Prize in Economic Sciences.

human rationality reveals to present several biases and in many case it is the emotional part, or alternatively called system 2, which prevails in decision-making. Especially under uncertainty and in face of risks, emotions play a leading role and, therefore, there are distortions in individuals' judgements and deliberations.

The two-system theory is useful for our analysis not only because it offers the possibility to understand how human mind works, but also because it stresses an important independent variable which will be used in our analysis. With this theory, professor Kahneman reveals the important role of emotions in our thinking and throughout our analysis it would be worthy to see how emotions can influence the motivation to act for the benefit of future people, considering the risks and the uncertainty which surround climate change and the distant future.

2.5.2 Social representation theory

If the two-system theory allows us to understand how individual human mind works, the social representation theory is a social psychological framework of ideas and concepts, elaborated by psychologist Serge Moscovici in 1961, which attempts to explain how cognitive processes work through social interactions (Wolfgang and Others, 1999). According to this theory, individuals construct social representations in order to make unfamiliar objects and concepts part of their common sense understanding. More specifically, social representations are systems of values, ideas and practices that individuals adopt with the aim of communicating and behaving within a determinate community (Wolfgang and Others, 1999:96). Owing to this, the social representation theory will be useful in order to investigate how new and complicated concepts, such as the one of climate change, are collectively acknowledged through known concepts, experiences, images and values.

Moreover, the social representation theory shows how the social representations constructed by individuals have three main components or dimensions. The first one is the *cognitive* dimension which is about defining a determinate object; the second dimension is the *normative* one which regards what ought to be; and, finally, the third component is the *affective* one which concerns the emotional response that individuals have toward the considered object (Fischer and Others, 2012). The particular aspect regarding these three dimensions is that they interact with each other, creating often tensions and, therefore, having important implications for people's thinking and behaving. According to the social representation theory, people negotiate their everyday decision-making and thinking with these three dimensions. Varying on the contexts and the objects considered it might happen that tensions arise because strong normative views are not supported by the cognitive and affective dimensions, and vice versa. In the case of global warming it is recurrent that the cognitive

and normative dimensions are not accompanied by a strong affective dimensions or, on the contrary, they are supported by types of emotions which lead to inaction and resignation (Fischer, 2012). Indeed, it has been observed that the major emotional responses that accompany the process of understanding climate change are concern, a sense of guilt and fear. However, these emotions often lead to confusion, sense of powerlessness and, therefore, to inaction.

Thus, the social representation theory, as the two-system theory, underlines the importance of emotions in influencing individuals' cognitive processes. Emotions can prevail over the rational and deliberative part of our mind and, at the same time, they are important elements for accepting and understanding objects in order to communicate and act in a community. In addition to this, the social representation theory stresses also the role of concepts and ideas in triggering and coordinating people's actions. Socially constructed and shared conceptions of the world are significant action drivers and they work better when they create less tensions among the cognitive, normative and affective dimensions.

2.5.3 The role of emotions

When studied together, both the *two-system theory* and the *social representation theory* stress the role of emotions, a common independent variable able to play a considerable impact on individuals' mind and in their social interactions with the world. Owing to this, before moving on with the exposition of our theoretical foundations, it will be useful to linger on the clarification of what do we mean by emotions and how this independent variable will be framed throughout this research.

The study of emotions has become increasingly important not only in the philosophy of mind, but also in other neighbouring disciplines, such as cognitive psychology, evolutionary biology, neurology and also economics. According to Professor Ronald de Sousa²², emotions are conscious phenomena, which typically involve vivid bodily manifestations, even though they cannot be discriminated merely on physiological grounds. Emotions can vary according to their intensity, valence, type and scope of intentional objects and duration and they can play a decisive role in relation to both individuals' rationality and morality (de Sousa, 2014). De Sousa describes emotions more as ways of seeing things than as perceptions of the world, in so far as emotions highlight certain elements of a situations, giving them a meaning and a relevance that they would have otherwise lacked in the absence of emotions. For this reason, emotions help rationality by making sense of the world, by framing problems and objects of cognition and in directing our attention.

²² Ronald de Sousa is Emeritus Professor of Philosophy at the University of Toronto. Much of his work has been dedicated to the philosophy of emotions, while other relevant contributions are also found in the field of philosophy of mind and of biology.

To put it in another way, emotions work as agenda setters of individuals' desires and beliefs, reducing to a controllable number the amount of information in front of us and by providing an interpretative framework through which codifying those information and experiences.

Paradoxically, emotions, which have always been considered as irrational, result to be a *sine qua non* for our rational cognitive processes. At this point it might be easy to see how de Sousa's argument can be easily connected to the two-system theory of Professor Kahneman, in so far emotions are placed in the System 1 of our mind, the emotional and intuitive part, which affects the rational and conscious part of System 2. For long emotions have been pictured as antagonists of rationality, but, instead, they crucially contribute to the definition of our purposes and priorities, thus, determining the quality of both our personal and social life. However, it is important to underline that emotions can play also an opposite role. Indeed, the influence that they exercise on our cognitive process can also distort what we see and it can build our beliefs and thoughts in a way very dissimilar from reality²³ (de Sousa, 2014).

On the other hand, as underlined by Professor de Sousa, emotions can provide a positive contribution also to our moral judgements and moral lives more generally. For instance, David Hume saw emotions as factors able to trigger moral consciousness and behaviour, in so far as certain emotions, such as sympathy and compassion, can help "to motivate other-regarding behaviours" (De Sousa, 2001: 110). Whilst Hume contented that only determinate emotions could trigger decent behaviour, de Sousa, on the other hand, holds that all emotions are intrinsically important. Emotions are both subject and basis of our moral judgements, being important not only as motivating factors of moral behaviours but also for the general quality of human life (de Sousa, 2001:110). Hence, for the scope of our research and in order to investigate how to motivate individuals to care about the well-being of future people, we are going to focus specifically on *moral emotions*, which are those emotions linked to the interests or well-being of a society or other people, different from the person feeling those emotions (Haidt, 2003). However, in order to investigate

²³ For instance, we can have biases when thinking about both the past and the future. We can record our memories, by highlighting pleasing events, while ignoring unpleasant ones or we can make our predictions toward the future by applying discounting schemes that influence our preferences and decisions (de Sousa, 2014).

the link between moral emotions and individuals' motivation, we will not embrace the position of Professor de Sousa²⁴, but the one of professor and psychologist Jonathan Haidt²⁵.

According to professor Haidt, moral emotions are those emotions that are triggered by disinterested stimulus and that produce pro-social action tendencies. Moral emotions are emotions that are not strictly self-interested²⁶ and that can motivate certain types of action aimed to benefiting the others or the general social order. It might happen that sometimes real action is not taken, but, nevertheless, moral emotions trigger into individuals a motivational and cognitive state characterized by an increased predisposition toward goal-oriented actions (Haidt, 2003). Haidt distinguishes four families of moral emotions: the other-condemning family (anger, disgust and contempt), the self-conscious family (shame, embarrassment and guilty), the other-suffering family (characterized by compassion) and, finally, the other-praising family (gratitude and elevation). For each of these emotions Haidt individuates their disinterested stimulus and their consequent pro-social action, for instance, the emotion of guilt is felt when an individual violates moral rules and especially when this violation causes the suffering or harm of other people. Consequently, the emotion of guilt motivates the individual to make up for her transgressions or to help the others. Moreover, Haidt also adds that the mapping of moral emotions is culturally determined, being moral emotions shaped by culture and by local meanings (Haidt, 2003).

What is interesting for the purpose of our research is how Haidt conceives the role of moral emotions in comparison to the one of moral reasoning. Haidt, in the debate regarding who is in charge between emotion and reason²⁷, holds that individuals have moral judgements through moral

²⁴ De Sousa defend the position of *axiological holism* according to which all kind of emotions are modes of perception, which give individuals access to a certain knowledge or otherwise described as “the relatively objective world of human values” (De Sousa, 2001:120). Indeed, emotions provide perceptions of certain realities, which are connected to certain individuals and to certain social environments. There is no transcendental and independent reality that emotions help to discover. The interesting aspect of this position is that de Sousa does not take for granted the infallibility of emotions in perceiving realities. On the contrary, like any other mode of perception, emotions can be inaccurate and, for this reason, de Sousa stresses the importance of moral education through which emotions' deliveries can be improved. Moreover, in order to distinguish between nasty emotions from emotions that are part of a good life, de Sousa holds that it is necessary to verify our emotional responses using reason, logic, knowledge and also comparison with other types of emotions and emotional responses (de Sousa, 2001).

²⁵ Jonathan Haidt is a social psychologist and he is professor of Ethical Leadership at the New York Stern School of Business (since 2011). He has taught for 16 years at the University of Virginia and his major research has focused on the intuitive foundations of morality. For more information visit the page: <http://www.stern.nyu.edu/faculty/bio/jonathan-haidt>

²⁶ However, it is important to underline that almost all moral emotions are likely to trigger indirect benefits to the self. For instance, an ongoing debate regards whether it is possible to experience genuine altruism, through the emotions of sympathy, empathy or care (Prinz and Nichols, 2010). Indeed, in the case of altruism, it is not always easy to discern whether a person helps another simply for the sake of helping her or whether that person acts altruistically for a selfish pleasure in feeling gratitude and admiration.

²⁷ In cognitive psychology and moral philosophy between the 1960s and 1970s there has been a dominant view, which regarded the predominance of reason in the formulation of moral judgements. Nevertheless, during the 1980s scholars started to dedicated more attention to the role of emotions, setting the beginning of an “affective revolution”. Social psychologist Robert Zajonc observed that human mind works in a way according to which **higher-level human**

intuitions, or otherwise called emotions, which trigger moral reasoning as an ex-post process (Haidt, 2003). Haidt formulates this idea through the *Social Intuitionist Model* according to which people formulate moral judgements through the experience of “gut feelings” that lead them to conclude if something is right or wrong. The position held by Haidt, for instance, is completely different from the affective rationalism, which is another current of thought that sees uniquely a rational genesis for moral judgements. According to affective rationalism, it is only through reason that people can recognize if an act is moral or immoral, then they might need emotions in order to care about the respect of the moral rules (Prinz and Nichols, 2010). Thus, Haidt’s approach would be useful for our investigation because it will allow us to study moral emotions from a perspective in line with the two-system theory and the social representation theory that see emotions as determining factors for the formulation of moral judgements and for the consequent moral motivation.

2.6 Conclusion

Through this chapter, first, we have attempted to clarify our research question and, consequently, we have illustrated the main theories at the basis of this investigation. In the third chapter we are going to apply these theories to our analysis, attempting to formulate and justify our hypothesis. Owing to this, what we wish to recall here is that our dependent variable is the individual’s moral motivation problem and in this regard we have assumed that there are no external reasons to action, but only internal ones, which are connected to what individuals care about and to their interests. Consequently, we have introduced our independent variables, namely moral emotions and social representations. In this regard, through the two system theory of Daniel Kahneman and the social intuitionist model of Jonathan Haidt we have seen how emotions often prevail over reason and they are at the basis of our moral judgements and moral actions. To the same extent, the social representation theory stresses the role of emotions and it illustrates how concepts can be useful in order to frame the issue of the distant future in a way to involve individuals’ affective dimension. To conclude, the vast and complex nature of our theoretical framework is due to the interdisciplinary approach that we chose to adopt: if on the one hand it can make the research more interesting and dynamic, on the other hand it pays these positive aspects with less clarity and the risk of being a slightly messy. Thus, it would be the task of next chapter to attempt to compose all the theories in a coherent and justified way.

thinking is always preceded and deeply influenced by affective reactions. This observation, together with the maturation of cognitive psychology, brought to a major focus and attention on the role of emotions, considering them as decisive factors in not only perceiving the reality, but also in the formulation of human morality (Haidt, 2007).

Chapter 3

Analysis part-1

In this chapter, we will conduct the analysis' first part of our research problem, applying the theories illustrated in the theoretical framework and examining how our independent variables, the moral emotions and the social representations, can help to answer our research question. In particular, we will attempt to verify two hypothesis:

H.1 Future generations as object of our concerns and beneficial actions set several problems, both on the conceptual and motivational level, thus limiting individuals' actions against climate change.

H.2 Owing to this, due to the necessity of a long-term perspective and the adoption of pro-environmental behaviours, a possible way to motivate individuals to act can be the instilling of intergenerational virtues, which are more likely to subsist with respect to the concept of humanity than with the one of future generations.

Our research question requires us to study how individuals can be motivated to care about the promotion and protection of future people's well-being. The uncertain and worrisome effects of global warming in the distant future do worry present generations, but, at the same time, there is a wide gap between this thorny concern and an actual engagement in practices of mitigation and adaptation. Indeed, people do not feel motivated to act and they often oscillate between a disarming sense of powerlessness and the denial of personal responsibilities. However, through the exploration of the pertinent literature, we have seen how, despite these difficulties, the threat posed by climate change imperatively demands to act promptly in order to avoid not only the catastrophic events in the future, but also the enhancement of the worrisome situations that already affect many regions of the world. Moreover, if it is true that more government intervention and authoritarian impositions may surge people to effectively adopt pro-environmental behaviours, at the same time this would happen at the greater price of sacrificing the quality of liberal and democratic societies. For this reason, we believe that it is worthy to dwell on the question of individuals' moral motivation, holding that the individual can be a powerful change-trigger at both the interpersonal and political level, offering a valuable alternative to green authoritarianism and to the gridlocked international community²⁸.

However, the threat posed by climate change, which is slow and distant in space and time, represents a serious challenge for people's habits, perceptions and information processing. Looking at the individual's mind functioning, thanks to the two-system theory of Professor Daniel

²⁸ As we have seen in the literature review, we believe that the participation of well-informed, active and morally enhanced individuals may represent a promising starting point to set a systematic change against global warming's future consequences.

Kahneman, we know that our brain cannot be always depicted as a rational and conscious machine²⁹. Besides, emotions, notably moral emotions, play an important role for individuals' motivation and decision-making processes. Indeed, making reference to the social intuitionist model of Jonathan Haidt (2003 and 2007), emotions are fundamental in order to compose our moral judgments and they can exercise a powerful motivational force, especially when triggering pro-social behaviours aimed at benefiting others and at protecting the social order³⁰. However, triggering emotions is not an easy task and in order to experience moral emotions there must be a disinterested elicitor able to generate those emotions into individuals and, consequently, to encourage pro-social actions. With respect to climate change, the peculiar thing is that there are apparently numerous and relevant disinterested stimulus that may generate moral emotions into individuals. People are aware of the current and future threats posed by global warming and environmental degradation, but still, it is hard to understand why, although we have many reasons to care and no excuses for not taking actions, we fail to do so and we lack an internal motivation to act.

3.1 Emotions that do not work with climate change

Going through the psychological and social barriers that affect individuals' motivation to engage effectively in mitigation and adaptation practices, we hold that among these barriers there are determinate factors that more than others prevent individuals to connect themselves emotionally with people in the distant future. Notably, while the effects of climate change in the future fail to trigger the right kind of motivating emotions, at the same time the very object of concern, future generations, presents several constraints on both the conceptual and motivational level.

3.1.1 Guilt, shame and fear

Research in psychology show that people, generally aware of their contribution to environmental degradation and to the increasing climate change, experience variable levels of concern toward the future effects of global warming in the distant future, according to their age, education and exposure to environmental threats (APA, 2009). Owing to this, it would be reasonable to expect from people to match their concern and consciousness with feelings of guilt, shame and fear, which are powerful motivation triggers for pro-social actions and amendments. For instance, guilt usually can be a strong moral emotion, able to set the motivation to act so as to make up for the wrong

²⁹ On the contrary, irrationality seems often to characterize its working and, surprisingly, after a long time spent thinking that the reason is the master of passions (since Plato, indeed) we come to know that emotions, feelings and habits actually prevail over our rational side. System 1 (the emotional and faster part of our brain) and System 2 (the rational and slower part), as described by professor Kahneman, work together, but System 1 operates in a way as to "effortlessly originating impressions and feelings that are the main sources of the explicit beliefs and deliberate choices of System 2" (Kahneman, 2012: 21).

³⁰ In accordance to this, several studies in psychology confirm that personal-philosophical values and emotions can influence people's environmental behaviour. Generally, the more intense the emotions with which individuals deal with environmental degradation, the more promptly and appropriately they will attempt to behave (Grob, 1995: 201).

actions committed or to benefit the persons that have been affected by it (Haidt, 2003). Whilst, shame is a result of individuals' reflection more on themselves and their personal characteristics than on a wrong committed behaviour (APA, 2009: 85). However, surprisingly global warming fails to activate such moral emotions in an effective way.

Policy makers have attempted to focus public discussion and reflection around the concept of "eco-guilt" or shame, but researches show how this expedient has revealed itself ineffective (APA, 2009). With respect to climate change, guilt and shame tempt people to turn their faces away from the problem, as the technicality and complexity of the issue and the lack of clear and certain solutions make it more likely that people will fail to take action. Indeed, when people feel guilty about bestowing climate change, they do not see any effective pro-social solution before them, or, on the opposite, the solution that they can adopt in order to compensate for their behaviours is often too costly, in terms of money, time and change of habits (APA, 2009). For instance, sustainable solutions require changes in people's life styles or costly investments in order to switch to renewable forms of energy. On the other hand, the temptation to discredit personal responsibility and to expect intervention to be endorsed solely by governments is way stronger than the motivation to engage in small every-day practices of sustainability, which often are seen as worthless. Besides, there is also no real and immediate gratification for taking action against climate change. People will have to bear sacrifices, but with no certainty of seeing beneficial changes in the climate stemming directly from their actions (Moser, 2010: 34). Owing to this, people tend to allay their sense of guilt or personal shame by attempting to minimize the perception of their own complicity in the matter. Sometimes, it is not a simple mechanism of ignoring the problem, but it is a widespread effort to discredit all the evidence that support individuals' role in causing global warming (Markowitz and Shariff, 2012: 244). Moreover, the sense of powerlessness and the uncertainty surrounding climate change make this mechanism even more seducing.

The inefficacy of guilt and shame is further reinforced by the individuals' difficulty to recognize their responsibility in causing climate change in the first place. Indeed, people find it hard to perceive their responsibility for something to which they are not causally and directly responsible and it follows that climate change is the largest and most complex collective action problem in the world, where perpetrators and victims of climate threats are not directly, spatially and temporally aligned (Jamieson, 2014). As pointed out by psychologist Daniel Gilbert (2006), human beings tend to be more sensitive to threats that come from specific actors, instead of quandaries caused by the involuntary and diffuse collective action. Besides, climate change does not violate or disturb individuals' moral sensibilities, at the same time tricking people's danger and responsibility detector with its uncertainty, distant location in the future and its gradual manifestation (Gilber, 2006).

Owing to this, the lack of perceived direct responsibility is another relevant factor that enhances the already preponderant tendency to avoid taking action.

Following this line, several studies in communication have revealed how climate change's representations based on stimulating fear and concern, although they have a large potential for drawing people's attention toward climate change, at the same time they reveal themselves to be an ineffective tool for triggering true personal engagement and action. Firstly, the appealing aspect of fear is dependent on the individual's perceived sense of effectiveness and self-efficacy (O'Neill and Nicholson-Cole, 2009)³¹. In other words, fear succeeds in triggering action when individuals have a certain degree of certainty regarding the effectiveness of their actions in order to avoid the feared situation or outcome. However, in the case of global warming, we have seen how individuals often do not know how to respond to climate change and to cope with uncertainty, thus having as a result that fear creates a paralyzing effect. Other studies on terror management suggest that the more people think that global warming will have catastrophic effects in the future, the more individuals will be tempted to ignore or deny the problem. Part of the reason for this behaviour is that climate change might remind individuals of their mortality and they wish to avoid this dreadful thought (Gifford, 2011:296). Furthermore, there is not only a fear regarding the future effects of climate change, but also about the extent of the change required in order to mitigate it. As previously mentioned, money and time will have to be invested in climate change adaptation, but, more than that, also entire systems of beliefs and ideologies will have to change. For instance, the need for pro-environmental actions will clash with the worldviews of capitalism and free trade, whose rhythm of expansion and growth is not compatible anymore with the capability of our planet. Changing ideologies and worldviews is not an easy task and it might result scary for many people and societies. For this reason, individuals are likely to respond to this fear with a stubborn defence of the social status-quo (Gifford, 2011:293).

The experience of fear, guilt and shame stand in a sharp contrast with the powerful and different impact that positive moral emotions can have on individual's moral motivation. While fear, alarmism and guilt often have a paralysing effect on individuals, on the other hand, positive moral emotions have the power to inspire people and to enlarge their momentary thoughts regarding actions and possibilities (Haidt, 2003). Among the positive moral emotions, we can mention gratitude, hope, involvement, optimism and elevation. They are all kinds of emotions that can make people more open to new ideas, new perspectives and new possibilities in life and relationships.

³¹ For further information regarding the communication of fear, I suggest to look at the article "Fear Won't Do It" (O'Neill and Nicholson-Cole, 2009) where it is conducted a detailed analysis of fear communication regarding climate change in order to promote individual engagement.

Indeed, when people experience positive moral emotions they are encouraged to better themselves and their lives, conscious also of the fact that their life-quality improvements will benefit their future selves and others as well. With regard to climate change, a focus on positive moral emotions, for instance, will help people to see global warming not only as a threat, but also as an opportunity to change and improve the existing social order. When faced with a thorny and scaring situation, people instinctively activate their brain in a get-away mode, which prompts people to attempt to find a way to avoid the problem or to discredit their responsibility for it (Gilbert, 2006). Conversely, the arousal of positive emotions can encourage people to solve the issue, giving them a motivation to engage in projects that inspire hope and that can possibly provide meaning in their lives. Another interesting aspect related to positive moral emotions is that people tend to be more sensitive and receptive toward examples of good deeds or high moral gestures (Haidt, 2003). Haidt illustrated how examples of good and outstanding moral lives can elevate other people and spur them to act in a similar way. Thus, translating this feature in the case of climate change, the starting of pro-environmental behaviours may also act as an example for other people, triggering a self-enforcing mechanism.

3.1.2 The problem with future generations

Moving backwards throughout our research, in the first chapter we have explored three levels of analysis, the institutional, the theoretical and the individual one. Among these levels, it is possible to identify common issues, such as the problem to define the interests and needs of future generations, the non-existence challenge and the difficulty of making decisions under an high degree of uncertainty. What we wish to demonstrate at this point of our analysis is that the very concept of future generations is not only a common problematic element in all these three levels, but also a major limit for individuals' motivation and action, presenting both conceptual and motivational flaws.

It is possible to recognize the conceptual shortcomings of future generations particularly on the institutional and theoretical level. For instance, at the institutional level, future generations represent a problematic legal subject as they are not easily identifiable and they cannot directly represent themselves and their interests when long-term decisions are made in the present. We have seen how there are thorny controversies regarding whether it is possible to appoint effective rights to people who are not yet existing and with no precise legal and personal identity (Fodella, 2009). Moving on the theoretical level, the conceptual flaw of future generations becomes explicit with respect to the very determination and definition of generations. Indeed, individuals do not come into existence at a determinate time of entry and they do not cease to exist all together at a certain time. On the contrary, there is an ongoing flux of entry and exit. Thus, in order to define a

generation, it is essential to define a precise starting point, but the very determination of this point of beginning is not easy and slight changes can have deep repercussions on policy decisions and theoretical designs (Gardiner, 2011). Moreover, the difficulty to assess the duration of a generation is also increased by the possibility that two or more generations can overlap with each other. In that case, the borders are blurred and it becomes difficult to define which generations is responsible for the following one and, consequently, which generation should bear sacrifices and costs or gain benefits. In other words, individuating a generation is not unambiguous and according to how we define it, we have different time spans and different theoretical and policy implications (Gardiner, 2003).

Conversely, at the individual level it is possible to recognize the motivational challenges stemming from future generations. Individuals' moral psychology is accustomed to function within limited communities and time periods, responding with reactions and making connections with other human and living beings (Gilbert, 2006). Having future generations as the object of our moral concerns is not something that comes straightforward, as it is really hard to experience emotional attachments and connections for people that are undetermined and faceless to us. Indeed, because of their anonymity, future generations do not represent living agents with which our moral psychology is used to deal, thus they fail to trigger any direct and intuitive feeling or emotion in people's mind, remaining obscurely indefinite. For this reason, individuals need *to think* about the well-being of future generations and when they are asked to make difficult trade-offs between urgent and present needs compared to the ones located in the distant future, it is easy that present demands, emotionally and cognitively stronger, will take precedence³².

In addition to this, other studies have underlined how the spatial and temporal distance that separates present generations from the future ones makes the future victims of global warming less similar to ourselves in comparison to contemporary people (Markowitz and Shariff, 2012). Indeed, present people do not have any direct interactions or relations with future generations and, consequently, they know little and almost nothing about their future identities, their interests, their worldviews and their values. Thus, what is missing is a real sense of affinity and similarity between distant generations. We can describe affinity as a combination of empathy and perceived closeness and, in the extreme case, the lack of it can make future people be perceived as out-group members and, thus, less deserving of moral standard (Harris, 2006). In this respect, various research experiments conducted in psychology have demonstrated how an increase of intergenerational

³² This idea can be clearer if we make reference to the two-system theory of Professor Kahneman, indeed we can imagine how the concept of future generations activates the system 2 of our brain which requires cognitive efforts and reflection, having no leverage on the emotional and faster part, system 1, which has resulted to be the prevailing one.

affinity may help to perceive future people as belonging to a more immediate and personal sphere. Besides, the sense of affinity and of shared group identity are important factors for the development of moral emotions such as empathy, care and compassion (Wade-Benzoni and Tost, 2009:171). Hence, the more the future victims of climate change are dissimilar and temporarily and spatially distant, the more present generations feel less obliged to act (Markowitz and Shariff, 2012).

Finally, the perceived considerable gap between the present and the distant future sets a tempting situation for social discounting characterized by egocentric biases or, in other words, for what Gardiner calls the intergenerational buck-passing behaviour. In this regard, each generation will be tempted to secure benefits for itself, while leaving costs and eventual negative drawbacks for the future. The worrisome aspect of the buck-passing behaviour is that it can be easily iterated, in so far as each generation will have a personal and selfish incentive to accumulate benefits for itself and to avoid costs. This behaviour is very similar to a form of what we may call intergenerational free riding or, as Gardiner describes it, as a form of tyranny of the contemporary. For this reason, it is possible to argue that the conceptualization of time divided in generations contributes to the making and iteration of the buck-passing problem, as present generations know that they can always shift costs and burdens on future and distant people.

3.2 Finding a new concept

In this first part of our analysis we have illustrated the main reasons for individual's inaction, attempting to demonstrate how future generations as object of our concerns set several problems, both on the conceptual and motivational level. Besides, we have also discovered how the perceptions of global warming's future effects together with the very concept of future generations fail to trigger effective moral emotions, setting challenging problems both from a conceptual and emotional perspective. If our hypothesis is indeed correct and because of these limitations, before moving forward to address precisely our research question, we deem necessary to find a different object of people's care, concerns and action, which may be more reliable on an emotional basis and, thus, able to trigger an inner motivation to act. If we wish to study how to motivate individuals to protect and promote the well-being of people in the future, this would be a quite hard challenge if we continue to use the very concept, which has revealed itself to be a major limit for action. Owing to this, it is necessary to find a different concept and the social representation theory³³

³³ As we have seen in chapter two, the theory of social representations focuses on socially constructed concepts (or representations) that are fundamental for individuals in order to understand and act in their social and interpersonal reality. Indeed, social representations are images or network of ideas composed of emotions, opinions and judgements that people use for the purpose of making highly scientific and complicated concepts more familiar and part of their everyday common sense (Höijer, 2010). Furthermore, according to the social representation theory there are two basic mechanisms through which social representations are created: anchoring and objectification. The first one refers to the process of translating a difficult concept into a well-known group of concepts or other social representations to

comes to our help, offering a possible solution to this impasse. As we have seen in the theoretical framework, social representations are known concepts that help individuals to understand and act in their social and interpersonal reality. In particular, they are more effective when they create fewer tensions between their cognitive, normative and affective dimensions. In the case of global warming, where people have no direct and personal experience of its consequences (especially the ones in the distant future) and where its effects and causes are considered as a matter of scientific and political concern, the use of social representations can be a useful mechanism, through which people can understand and get involved in climate change debate and action.

Indeed, we do believe that words and concepts matter a lot. For instance, Haidt and Joseph (2004) show how a different way of picturing issues might help conservatives to reconsider the possibility of gay marriage. Conservatives value social order and stability as the most important pillars of a society. If gay marriage is seen as a way for people to make life-long commitments that will create order and stability for their children, then it is possible that conservatives will change their opinion about it. With no intention of entering in the merit of a communication analysis, we hold that it is important to find a new concept able to frame the problem of global warming in the distant future so to harmonize the three dimensions, the normative, the cognitive and affective one. Most importantly, this new concept should be able to touch individuals' emotional strings so to provide internal motivation to adopt pro-environmental behaviours for future people' well-being. In other words, we deem that it is important to find a new language able to arouse emotions and new moral intuitions in order to care about people in the near and distant future. As one might expect, the new concept or social representation should be able to overcome the flaws of the one of future generations, namely it should reduce the perception of temporal distance and consequent temporal discounting and also increase the sense of similarity and affinity of identity between present and distant generations.

3.3 Humanity

With respect to our research, we believe that what may actually work in the context of intergenerational relations from an emotional and psychological perspective is the concept of humanity. This concept is not new and it has been broadly used in various disciplines and fields. We find an extensive use of the concept in philosophy, in international criminal law³⁴ regarding

allow comparisons and interpretation. On the other hand, the process of objectification it is the transformation of unknown concepts into something concrete that people can perceive with their senses. For the scope of our research we will focus on the mechanism of anchoring in so far as it happens through the use of metaphors, names and also emotions (the so called emotional anchoring, according to which new phenomena are linked to well-known emotions) (Höjjer, 2010:3).

³⁴ The concept of crime against humanity is officially and intentionally used on May 24, 1915 when France, Great Britain and Russia agreed on a common declaration in order to condemn the deportation and systematic extermination

the crimes against humanity, in the religious thought and in the human rights discourse. Besides, recent academic works on sustainability and conservation have attempted to define humanity in relation to the Anthropocene and the natural environment. In the academic literature, apart from a more objective definition of humanity, which describes it as the whole humankind, we find also an attempt to define it through the individuation of the group of characteristics that constitute the essential structure of the human condition. However, this has not always been an easy exercise, in so far as the boundaries of the definition do not often comply to a clear delimitation and they risk to be the object of controversial and worrisome manipulations. For instance, defining what is to be considered as belonging to human nature and humanity can easily become an instrument in order to dehumanize certain groups of persons for strategic political reasons. Nevertheless, despite these difficulties, it is possible to mention several examples.

According to the Aristotelian tradition, man is a rational animal (*ζῷον λογικόν*) and what essentially distinguishes humanity is his rationality (Morselli, 2008: 228). Kant, for instance, described humanity as the individuals' rational nature and capacity to make rational choices, by referring to rationality as men' ability to set and pursue determinate ends. Through rationality, human beings distinguish themselves from other animals and objects and they can decide what is valuable in their lives, finding also ways to achieve and promote that value. Moreover, this very characteristic at the same time distinguishes and elevates human beings, giving them a status of inner worth or dignity³⁵, which is owned uniquely by them (Papadaki, 2014). Other currents of thoughts, such as essentialism, hold that the fundamental characteristic of humanity lies in the capacity of individuals to determinate and project themselves in their world. Whilst, according to the Christian doctrine, the distinctive nature of humanity in comparison to other animals and objects is the creation of man in God's image and likeness and in the consequent presence of human soul, which represents the intimate connection between God and the mortal nature of man (Morselli, 2008). Further in time, Hannah Arendt in *The Origins of Totalitarianism* (1952), championing her notion of personal responsibility with respect to the Nuremberg Trials, argued that the crimes witnessed during the Holocaust were more than a crime against Jews, but a systematic and complete destruction of the freedom and rights that are attributed to men in virtue of their humanity. This destruction does

of the Armenian population carried by the Ottoman Empire. Later on, there has been an increasing necessity to design a new legal framework for state's brutalities against humanity and it is with the Nuremberg Charter in 1945 that a proper definition of crimes against humanity is provided, however, still anchored to the context of war's crimes and crimes against peace. The modern conception of crimes against humanity is set forth with the Statute of the first permanent International Criminal Court (ICC) of 1998, through which the strict connection to war's crimes is abandoned and new actions are contemplated, such as sexual violence, apartheid and forced disappearance (Sevane, 2008). To consult the Statute of Rome on which the International Criminal Court is based, see: <http://goo.gl/VRpE8W>.

³⁵ It is because of this inner dignity or worth that Kant asserts that individuals should never be treated solely as means, but they must be considered at the same time as end.

not regard the mere physical liquidation of individuals, but also their legal, moral and political dimensions and their spontaneity. For this reason, Arendt considers to be proper of human beings and, thus, of humanity³⁶, the capacity to make moral choices, to have political rights, a community, family ties and a home (Fine, 2000).

Thus, the concept of humanity stretches across various disciplines and currents of thought, assuming different connotations and characteristics. The number of interpretations is considerable and it requires more dedication than the one available for this research. For this reason, when talking about humanity, we wish to refer to it with a working definition, based on a determinate understanding of the human condition and able to meet the conceptual and motivational flaws of future generations. Hence, we start from an assumption that all human beings share the same moral identity³⁷, which is intimately connected to what characterizes an individual in his or her sense of self and life's project (Hardy, 2005), thus, something which, we think, might join all individuals in a more independent way from their cultural, historical and temporal dimension. This shared moral identity determines a human condition, characterized by the individuals' constant desire and tension to create relevance and significance in their life. According to Professor John Vervaeke³⁸, what makes human beings special is their capacity to care about what they do in their life and the fact that they attempt to realize relevance and value. For instance, in comparison to other animal species and forms of artificial intelligence, human beings do not only process information or pay attention to what surrounds them, but they also attempt to find and create something in which they can invest commitment and passion. Consequently, the tension toward the creation of significance and relevance contributes to the creation of many diverse systems of traditions, culture, beliefs, projects of life and institutions.

Owing to this, we wish to consider humanity as an imagined transgenerational community of systems of relevance and significance, which embraces past, present and future individuals. In this regard, we conceive humanity as the whole humankind together with the group of communities, traditions, history, cultures, projects and social understandings that create a framework of

³⁶ However, in *The Human Condition* (1958), Hannah Arendt rejected her notion of human nature, arguing that is quite impossible to define the essences of human beings, as we cannot grasp the essence of the natural elements surrounding men. For this reason, in this book she prefers to talk about *human condition*, in so far as the concept of humanity is a construction of modern political life (Fine, 2000).

³⁷ By shared identity in a transgenerational community, we do not want to refer to an idea of identity anchored on specific culturally based values, in so far as we wish, indeed, to consider a community which largely expands through time, comprising a vast number of individuals living in different periods of time and places. For this reason, when considering the passage of time, elements of change are inevitable and we cannot expect that people in the future will share the same exact values, traditions and culture (Noonan and Curtis, 2014).

³⁸ John Vervaeke is professor at the University of Toronto, teaching in the Cognitive Science program, in the Psychology department and in the Buddhism, Psychology and Mental Health program.

reference, where individuals can exercise their ways of life, valuing attitudes and relevant connections. In other words, humanity represents both a continuum of generations and the background of significance and meaning in which the unfolding of people's lives takes place. Indeed, humankind as a species requires not only to be surrounded by the environmental world, from which it depends for its survival, but also by a cultural and historical background in which the results of its actions and understanding are collected and preserved. We believe that humanity can exercise a better emotional appeal and connection on individuals in comparison to future generations, as it is possible to recognize among people a certain tension to care about and to protect humanity and its fate. For instance, it is worth mentioning the widely recognized effort to preserve and protect the common heritage of humankind, formalized through the UNESCO Convention on World Heritage in 1975³⁹. In this, it is possible to see a generalized commitment of people and states to adopt, through international law, a cosmopolitan view in order to preserve the heritage composed by the collective culture and natural sites. This pledge has been made with a clear intention to benefit future generations and to avoid a possible tragedy of commons in the future. When we acknowledge that a natural or cultural site has been ruined or is in risk of being permanently damaged, we often encounter an immediate feeling of discomfort and sorrow. We think that it is in this feeling that we can read a more unconscious concern to protect humanity's collective history and memory which stands against the passage of time and which is often interpreted as the mere consolation against the inescapability of death. It seems that there is, indeed, an inner motivation to preserve determinate elements, as results of the practices of significance and relevance of humankind through history. Furthermore, some scholars argue that there is a duty to protect humanity in virtue of its uniqueness in the world. As we have seen through the exploration of the main characteristics of the human conditions, there is indeed a special distinctiveness, which makes human beings and the result of their actions unique in their own kind and, for the simple reason of being unique, there is also a duty to protect and preserve their existence (Di Paola, 2013: 505). In addition to this, we wish to demonstrate our argument in favour of the concept of humanity through the illustration of two examples: one is an imagined scenario projected in the future, while the second regards the more concrete example of Peru and its agricultural landscape. Both examples can illustrate the connection between climate change and our working definition of humanity, attempting to show how humanity can be a valuable object of concern with a better psychological and emotional appeal than future generations.

³⁹ Information retrieved from: <http://en.unesco.org/>

3.3.1 An imagined future scenario

By chance, one day we randomly encountered an article on *The Guardian*, titled “Aliens may destroy humanity to protect other civilisation, say scientists”. The article dwells on an imaginative scenario speculated by NASA affiliated scientists and other scholars of Pennsylvania State University. According to their scenario, an imaginative contact with aliens might happen in the future, as extra-terrestrial beings will see the rising greenhouse gases and the changes in the Earth’s atmosphere as a worrisome threat, which has to be halted with a pre-emptive destruction of humankind. Having in mind our working definition of humanity, let’s assume for one moment that the prediction made by the report cited in the article is true. People come to know that aliens will destroy the entire humanity in 100 years from now, in the very distant future. What would be their reaction?⁴⁰

There are many possible answers to this question. Making a parallel with individuals’ lives, let’s imagine that a person, whom we call Jack, comes to know that his life will end after 5 years. It is plausible to presume that a deep feeling of sadness and despair will overwhelm Jack and, indeed, he will feel pain because he knows that his life will end sooner than he would have normally expected. His sorrow is due to the sudden realization of all the things that he will lose the chance to experience in his life and also for the pain that his death will cause to the persons closed to him. Let’s imagine, now, that Jack discovers that his same fate will happen to every human being on Earth in 100 years from now. There are two possible reactions. On the one hand, in front of humanity’s end in the distant future we are not immediately overwhelmed by the same kind of feelings that we would experience with respect to our own death. Indeed, it is something that will happen only in the distant future, when probably we will be already dead, having attempted to live a life the most satisfying as possible. Presumably, in order to spare future generations to the fate of extinction, we will stop having children as well. Besides, the premature extinction of humanity in the vastness of the universe, presuming that there will be no afterlife in the religious sense, will end in a sort of cosmic silent, in so far as there will be no one left to care and grief about the end of humanity. Consequently, if this is the reaction to the doom of humanity, we can deduce that probably there is nothing intrinsically bad in the extinction of humanity. Indeed, there will be no one caring or suffering for the end of it and our lives will be conducted in the same way, attempting to make the most of it until the moment it is possible, living with an ongoing carpe diem-mood. However, if this scenario is true, then is reasonable to ask why we should care about fighting hunger, to avoid war or to help the populations most in need in the contemporary context. What is the point of all these actions, if humanity will end in 100 years and the very end of humanity will

⁴⁰ These imaginative scenarios have been inspired by several lectures of the course of sustainable development of Professor Marcello di Paola and the course of philosophy of Professor Shelly Kagan (<http://oyc.yale.edu/philosophy/phil-176>).

not cause pain to anybody? We believe that not everybody will feel comfortable with this conclusion and people will attempt to reject it.

Indeed, there is another possible reaction to the premature end of humanity. As in the first scenario, we can expect that the end of humanity will not cause the same feelings of sudden fear and despair that are sparked by the acknowledging of our own premature death. Nevertheless, at the same time, the acknowledgement of humanity's end will deeply affect the quality and development of our own lives. We can reasonably suppose, as Scheffler does in his work *Death and the Afterlife* (2013), that most of the activities in which people profusely spend commitment, passion and value are made having in mind the ongoing existence of a future. If that very long-term possibility is eliminated, most of our activities will lose value and will become pointless. For instance, among these activities we can mention the simplest ones as the project of having a family and to have children, but also others, such as the commitment to improve institutions, the willingness to conduct research for curing diseases or for advancing technologies, and many others more. Moreover, apart from these desires, as we have seen before, human beings care about the protection and preservation of traditions and cultures, which have been passed on them through history. If humanity will cease to exist, all this common heritage will be lost forever and there will be no record of our very existence in the first place. Thus, it is possible to imagine that the dreadful scenario of humanity's end, even if it will not immediately scare us, at the same time it will profoundly threat our distinctive capacity and willingness to create significance and relevance in our life, both individually and in our social relations. The very capacity to create significance, our valuing attitudes and capacity to care about the things we engage with will become pointless. Following this line, we can imagine, that the premature extinction of humanity will lead human beings into a situation of boredom, numbness and personal distress. The predicted disappearance of humanity will weaken people's ability to get engaged in their lives and it will generate a depressive power on people's enthusiasm and confidence (Sheffler, 2013). In this respect, Sheffler writes *"I find it plausible to suppose that such a world would be a world characterized by widespread apathy, anomie and despair; by the erosion of social institutions and social solidarity; by the deterioration of the physical environment; and by a pervasive loss of conviction about the value or point of many activities"* (Sheffler, 2013: 40). One of the striking conclusions of Sheffler's work is that the ongoing existence of humanity, which is the existence in the future of people and systems of significance and relevance, actually has a major relevance for us than our own survival and the survival of the people we care about.

The plausibility of the reaction that we have hypothesized in our scenario is reinforced by various researches in psychology. Indeed, extensive research in personality's studies and social psychology, especially regarding intergenerational behaviour, has shown how individuals, conscious of their

own inescapable death, have a personal desire to invest their capacities and efforts in something which will outlive themselves. In social psychology this desire is called generativity, which is “the desire to invest one’s substance in form of life and work that will outlive the self (Kotre, 1984), or, more specifically, as concern for and commitment to the well-being of future generations” (Wade-Benzoni and Tost, 2009: 182). This desire is generally understood as the consequence of another inner desire which stems from individuals’ awareness of their own death and which regards to feel as one has mattered in her life and to expand oneself in the future in the form of a symbolic immortality. People have a desire to invest and engage themselves in activities and projects that will leave a meaningful legacy (especially a positive legacy) in the future, so that it will work as an imaginative self-extension (Wade-Benzoni and Tost, 2009). However, this desire of self-extension and generativity is based on the very important assumption that there will be a collective posterity in the future. If that very possibility is eliminated, not only the scenario of death will become much more horrifying, but also people will lose interests in engaging in meaningful projects and commitments. Thus, if our second hypothetical reaction to human extinction is true, we can hold that individuals care about humanity, both as the collective posterity that will come in the future (on which individuals’ projects depend on) and as the collective systems of relevance and significance that people wish to preserve and protect through time.

3.3.2 A concrete example: Peru and its agricultural landscape

According to the International Panel on Climate Change and the Stern Review, Peru is one of the country, which will be more affected by global warming, despite its national contribution of 0,1% on the global CO₂ emissions⁴¹. Indeed, the Peruvian territory is particularly vulnerable to droughts, already warm temperatures and to the risk of sea level rising on its Pacific coasts. Troublesome natural events such as El Niño and severe dry seasons have constantly characterized the Peruvian environment, economy and society, but the threat posed by climate change and by its consequences in the future require an unprecedented spirit of adaptation. In particular, the most pressing and worrisome issue regards the scarcity of water supply throughout all the country. The melting of the tropical Andean glaciers in Peru has increased the danger of water scarcity, determining almost 3.3 million of Peruvians with no access to drinking water. Most importantly, the lack of water supplies has explicated its major effects on the agricultural sector, which is at the basis of Peru’s economy, representing the 62.8 percent of national supply food and a major driver for the exports (USAID, 2011). Thus, climate change represents a serious threat for Peru’s population, enhancing the vulnerability of already exposed rural communities and putting under stress governments and societies in the attempt to cope with its effects.

⁴¹ See <http://www.perusupportgroup.org.uk/peru-climate-change.html> (accessed on September 20, 2015)

However, the effects of global warming, in particular with respect to the Peruvian agricultural landscapes, do not result merely in economic losses and worsening of people's livelihoods. Indeed, the weakening and endangering of the agricultural sector reveal another aspect, which is connected to the historical, traditional and cultural background of Peru's population and communities. In fact, agro-ecosystems and agricultural landscape are cultural elements to the extent that they are a product of a long history of efforts and plans; they are experienced and contextualized by communities and they are often the result of native and indigenous designs, thus holding a unique distinctiveness. Many past generations have contributed to the formation of particular agricultural landscapes, investing in them their indigenous and traditional technology. Notably, these landscapes are part of the community-life of many rural and native small societies, which have centered their development and activities there. Thus, agro-ecosystems are not just a product of individuals' interaction with the natural environment, but they represent the practical, cultural and aesthetic outcome of rural communities (Ericson, 2003). For this reason, people consider agricultural landscapes both as their means of sustenance and as the background of relevance and significance where their life unfold. Thus, it is reasonable to expect that the deterioration or the destruction of such background would deeply affect the quality of people's lives, undermining their capacity to fulfill projects and create relevance. Climate change threatens these elements, also putting in danger their ongoing existence in the future. As with regard to the example of Peru, it is possible to recognize similar patterns also when considering the endangered community of Inuit in the Arctic region or the developing communities in small islands of the Pacific. It is in this respect that we hold that humanity as an imagined transgenerational community of systems of significance and relevance can represent a better object of concern for individuals, as people depend and, consequently, care about this background framework.

3.4 Conclusion

Owing to this, we hold that the concept of humanity meets the conceptual and emotional flaws of future generations, in particular attempting to reduce the psychological and emotional detachment, the level of indeterminateness, and the temporal distance. The emotional strength of our working definition of humanity lies in the intimate relation of dependence and, thus, connection between individuals and humanity. Through the two examples, we have seen how individuals' flourishing and development depend on both the current and future existence of humanity, conceived as a collective posterity of people and systems of significance and relevance. This relation of dependence can have powerful consequences on intergenerational relations as it can limit self-interest motives and individualism. If before future generations were seen merely as beneficiary of present sacrifices and costs, through the disclosure of this dependent relation with humanity, it is possible to imagine how past, present and future people are actually interconnected and

interdependent. Furthermore, if with the concept of future generations, people were intuitively drawn to think merely about the distant future, triggering free-riding reactions and emotional detachment, with humanity people are invited to consider a community, which is also part of their current realities and experiences. Humanity as an imagined transgenerational community of systems of significance and relevance refers to something that people can relate with in their everyday life and that can be easily identified. For instance, traditions, cultures and communities of belonging are elements with which individuals engage and activate processes of social identification. When taking into consideration the whole humanity and its fate with regard to climate change, individuals are invited to think about something that affects all of them as a community, concerning their common history and memory and their future fate. For this reason, we believe that the concept or social representation of humanity may represent an object of concern that has a major emotional and psychological appeal on individuals' mind in comparison to the one of future generations. Humanity can be a valuable alternative as the normative and cognitive dimensions of the concept are matched also by an affective one, which is connected to individuals' nature and aspirations in life. Owing to this, in the next chapter we will precisely address our research question, thus attempting to demonstrate our second hypothesis.

Chapter 4

Analysis part-2

In this chapter we will continue our analysis, attempting to verify our second hypothesis. At this point of our study, we need to address directly our research question and attempt to illustrate how to motivate individuals to adopt pro-environmental behaviors. We suppose that a possible way to motivate individuals to care about the well-being of people in the distant future is the development of intergenerational virtues, which may help individuals to expand their emotional bonds and to adopt a long-term perspective and pro-environmental behaviors. We hold that these intergenerational virtues, namely loyalty, gratitude, beneficence, mindfulness and curiosity, are more prone to develop with respect to the concept of humanity as an imaginative transgenerational community, than with the one of future generations.

During the Second World War, several countries in order to sustain their war economies and expenditure asked their people to reduce their consume of petrol and electricity. The response was surprising, all people were well disposed and ready to make small sacrifices in their everyday lives for a greater good, represented by their home country, and in order to win the war (Klein, 2015). With respect to our research, if people were well disposed to make sacrifices for their community against a common threat, would it be possible to transfer these dispositions within a greater community and against a global quandary such as the one of global warming? We think that within humanity, as an imagined transgenerational community of systems of significance and relevance, it is possible to motivate individuals to act against climate change through the development of specific intergenerational virtues that are very similar to the kind of civic virtues that ensure unity and solidarity within a nation. However, the evident difference and difficulty of our case are that the community of humanity is greater in dimensions and with no specific temporal boundaries. This imagined transgenerational community has no spatial-temporal boundaries and all of its members are joint together through the sharing of determinate distinctive characteristics, namely the capacity and constant desire to create systems of significance and relevance in their lives. As we have seen, the community represents the background for the unfolding of the present lives of its members, and its continuation in the future represents a condition for the ensuring of the quality of the lives conducted in the present. Thus, both the past, the present and the future of humanity as a community are interconnected with each other.

4.1 Intergenerational virtues

Before illustrating the intergenerational virtues that can foster individuals' motivation to adopt pro-environmental behaviors, we need to provide a definition of virtues. By virtue we refer to a

psychological disposition and a character trait which is deeply entangled with its possessor. More specifically, a virtue is a complex mindset, which involves emotions, values, choices, desires, attitudes, perceptions, sensibilities and interests. Thus, a virtue is a multi-faceted disposition aimed at reaching a determinate purpose, often involving an inner struggle among contrary desires (Hursthouse, 2015). As a subcategory of virtues, civic virtues are those particular dispositions, which are connected to the individual's life in a society and which are considered to be important for the well-being of a community (Crittendend and Levine, 2015). For this reason, as civic virtues are necessary to keep a community together, ensuring its prosperity and flourishing, at the same time we deem that intergenerational virtues would operate in the same way but with regard to a transgenerational community and context.

For the scope of our research, we wish to illustrate five types of virtues that, if applied in the intergenerational context, would be helpful to motivate individuals to care about the well-being of future people. These five intergenerational virtues are aimed at strengthening the sense of belonging and attachment, together with the flourishing of the transgenerational community represented by humanity. For each intergenerational virtue, we will attempt to explain their relevance for the individuals' motivation problem and to what extent they can subsist within the transgenerational community under investigation.

4.1.1 Loyalty

Among the various virtues that enhance the membership within a community, loyalty is probably one of the most influential. The special and primary role of loyalty is due to the fact that it is one of the virtues at the basis of almost every relation, assuring conformity, sense of belonging and strong attachment⁴². Indeed, loyalty is a psychological and sentimental disposition, which makes one person willing to persist in an intrinsically valuable association or community, to which that person has pledged her commitment as a matter to her identity (Kleinig, 2015). We can experience loyalty toward our family, to a friend, to a group and to our country, but also to ideas, principles and ideologies. Through this definition we can underline two important aspects: firstly, the fact that we can have various objects of loyalty and, secondly, that the object of loyalty needs to be connected to the individual's identity, to the extent that we can be loyal to something we can identify with. It is the very element of social identification, which makes loyalty a considerable strong disposition within a group and an important virtue.

⁴² Nevertheless, it is important to stress that the understanding of loyalty as a virtue is to a certain extent problematic. Indeed, whilst some scholars would argue that loyalty is always virtuous, on the other hand, other philosophers argue that the virtuous nature of loyalty depends on the object of this sentimental disposition. For instance, if loyalty is devoted to despicable projects and commitments, then some may argue that loyalty cannot be considered anymore as a virtue (Kleinig, 2015).

Thus, we wish to stress the role of loyalty as a virtue because it is a type of disposition, which can stem powerful pro-group behaviors. Loyalty can be a trigger but also a multiplier of the collectivist motivations within a community. Indeed, the identification to the group and the sentimental attachment to it, both elements that compose loyalty, can motivate individuals to act in favor of the community, also with no need of direct interaction and of cooperation in return. Besides, sometimes loyalty can even encourage people to put the welfare of the group before their self-interest and concern (Zdaniuk and Levine, 2000). In addition to this, other studies suggest that loyalty can bring benefits not only to the community toward which it is directed, but also to the person itself who is being loyal. Loyalty enhances the sense of belonging to a group that in turns provides psychological security and safety to the individual, while the identification with a group strengthens the perception of personal identity and self-esteem (Drukman, 1994). For instance, people tend to associate their identity and personal proud to the one of their group and if the group gains a good reputation or a special reward then also the members of that group consider that positive feedback to be theirs⁴³. We can recognize this mechanism also with respect to the loyalty toward a nation, where citizens increase their self-perception and identity as individuals through national identification, linking their personal ego to the one of the nation. Moreover, individuals are emotionally involved with their nation and they are goal-oriented toward the well-being and prosperity of their home country. (Drukman, 1994).

Due to the importance of loyalty within a community and for the development of pro-group behaviors, moving into the intergenerational context, we think that loyalty can be a likewise influential intergenerational virtue with the purpose of encouraging pro-environmental behaviors for the well-being of humanity as a community. Indeed, if individuals will feel a loyal attachment to the transgenerational community of humanity, it is reasonable to expect from them a motivation to act in favor of future people. To better understand this idea, it is possible to compare the in-group loyalty toward humanity to the sense of attachment and affiliation that individuals feel toward their nation. Like previously said, the difference with the community of humanity is represented by the undeniable magnitude of this community and the almost inexistence of temporal boundaries. Moreover, while it is possible to ask people to make considerable sacrifices for their nations, sometimes even to die for it, it is important to remember that the sacrifices asked for humanity's well-being against the threat of climate change are much more humble. There is no global government of humanity's community that will ask its members to die for it, as countries in

⁴³ A simpler exemplar case can be the one regarding a football team. When a team wins a match, then also the fans refer to that win as *their* victory. As one might expect, with a group also the opposite is true: if the reputation of a group is undermined, then also the one of the people belonging to it is affected as well.

war demand to their soldiers. The quandary of global warming requires individuals to adopt sustainable practices in their everyday lives, accompanied by an active political participation in order to urge governments to take actions and adopt mitigation policies.

Although loyalty tends to spring within natural or conventional associations, such as family, friendship and nations, at the same time, we also know that any association can assume an intrinsic value for people. In particular, loyalty can be expected toward the type of association that proves itself to be crucial for human flourishing. For instance, friendship, families and social communities are types of associational bonds that possess a self-realizing significance and that are at the basis of individuals' social lives, necessary for their flourishing (Kleinig, 2015). In this regard, we hold that humanity as a transgenerational community can serve this purpose. Firstly, humanity as a community, together with its continuation and history, matter to the individuals and especially for their flourishing and development. Indeed, our choice to focus on the concept of humanity instead of the one of future generations had its justification in the fact that it is possible to recognize in individuals a general concern toward the continuation of humanity in the future and the preservation of its collective systems of significance and relevance, as both of these elements are important for the life's quality of individuals. We have attempted to illustrate how the quality of present lives depend on the future existence of humanity and thus the human flourishing and development is possible only under the framework of humanity's ongoing existence. As Sheffler writes "*Humanity itself as an ongoing, historical project provides the implicit frame of reference of most of our judgements about what matters. [...] We need humanity to have a future if many of our own individual purposes are to matter to us now*" (Sheffler, 2013: 60). Secondly, individuals can also identify themselves with the transgenerational community of humanity to the extent that all of its members share the same moral identity and distinctive characteristics. Moreover, this moral similarity among the members of humanity's community creates a form of identity-based trust, which in turn can allow the development of cooperation and further loyalty with no need of direct personal interaction (Wade-Benzoni and Tost, 2009: 174-175). Indeed, it has been observed that when individuals highly identify with a group, at the same time they are more likely to trust the other members to promote and protect their same interests, project and values (Wade –Benzoni and Tost, 2009).

Owing to this, we deem that not only it is possible to develop the intergenerational virtue of loyalty toward humanity as a community, but also that loyalty can be a valuable disposition in order to motivate individuals to adopt pro-environmental behaviors. As one might expect, the degree of loyalty demanded to humanity is not meant to exceed the one toward the nation states or families, but its aim is merely to soften the individualism and self- interest of individuals in the

intergenerational context, thus avoiding the problem of inter-temporal free-riding and encouraging pro-environmental behaviors.

4.1.2 Benevolence and Gratitude

Another set of intergenerational virtues that we deem useful to enhance individuals' motivation are the ones of benevolence and gratitude. The virtue of benevolence is a specific disposition to act to benefit other people and which comprehends other diverse dispositions such as generosity, love and goodwill (Beauchamp, 2013). Hume, for example, considered the virtue of benevolence as one fundamental moral principle characterizing human nature, which he conceived indeed as a mixture of benevolence and self-love or egoism (Morselli, 2008). On the other hand, the virtue of gratitude is a stable disposition or emotional mechanism to reciprocate altruism, thus to respond in a beneficiary way to a benefactor (Manela, 2015). In positive psychology, the virtue of gratitude can generate a positive spiral, enhancing civic engagement and personal well-being at the same time. Indeed, it is based on positive emotions, which in turn can influence people to build and strengthen their social bonds, while improving themselves as persons (Haidt, 2003). The virtue of benevolence and gratitude are connected to each other to the extent that gratitude is a response to a beneficiary action and, at the same time, it is a motivator of positive moral behavior as it would encourage further beneficiary actions (Haidt, 2003). Indeed, some philosophers regard gratitude and beneficence as factors of relationship enhancement, and in certain cases it may happen that relationships and associations start because there has been a reciprocation to a beneficiary action in the first place (Swinburne, 1989: 65). Owing to this, we wish to consider both these two virtues as they are important dispositions able to trigger pro-social behaviors within a community or association.

Thus, considering the intergenerational context, both benevolence and gratitude as intergenerational virtues can be influential in motivating individuals to adopt pro-environmental behaviors. The disposition of benevolence in intergenerational relations within the community of humanity might help people to express a beneficial attitude toward future people and thus to motivate them to engage in more altruistic behaviors. More difficult to explain is the role of gratitude in the intergenerational sphere, as there is no direct reciprocation between non-contemporary people and, most importantly, future people are not able to benefit present ones. However, in this regard, we hold that there are two forms of gratitude: one directed toward the past generations, and another one toward the future, based more on the confidence that people in the future will welcome and respect what has been passed to them than on an actual action of reciprocation. Indeed, individuals attempt to honor and respect what they have received from past generations and we see in this reciprocation a form of gratitude, aimed at strengthening traditions,

preserving memory and providing a meaningful context for the present. On the other hand, we think that gratitude can also be experienced with respect to people in the future, as there is a wide confidence, or perhaps more a wish, that future people, in virtue of their moral similarity with present ones, will welcome, respect and fulfill present projects and aspirations. In other words, this disposition of *preventive* gratitude is generally based on the confidence that all individuals will preserve and protect what they value. Thus, both benevolence and gratitude can work as mutual enforcing dispositions, helping individuals to develop a motivation to not only preserve, for instance to preserve the natural environment and ecosystems against the damages caused by climate change, but also to adopt actions and solutions to benefit future people, confident of the fact that they will do the same.

More specifically, we hold that the virtue of benevolence and gratitude can subsist within the community of humanity once again because of the relationship of dependence between present people and people in the future. As we have seen, the dependent relationship characterizing intergenerational relations can represent a limit of people's individualism and egoism (Sheffler, 2013) and this very vulnerability with respect to the future can encourage people to care about the future existence of humanity. Researches in psychology have discovered that the dependent relation between present and future generations can actually change the psychology of decision makers, so to invite them to be more focused on the interests of others (Wade-Benzoni and Tost, 2009: 178). Notably, the transgenerational virtue of benevolence can provide individuals with a disposition aimed at caring about the interests of others in the future, adopting determinate actions in their favor. Furthermore, an interesting aspect is that intergenerational benevolence, as we have seen for loyalty, can bring not only benefits to the group, but also to very persons who have this disposition. Indeed, other researches in moral psychology have shown how intergenerational benevolence or altruism can help individuals to cope with the ghastly awareness of their own death. Previously we have illustrated that by engaging in altruistic intergenerational behaviors, individuals make a connection to something that will continue after their death, leaving a legacy that will work of a symbolic form of immortality (Wade-Benzoni, 2006: 266). Hence, intergenerational benevolence will increase also individuals' well-being, offering a reassuring perspective against the thought of one's death and, thus, fulfilling the intimate and unconscious desire of self-extension in the future.

However, the troublesome aspect of benevolence as a virtue lies in the difficulty to set the limits and the scope of the beneficiary actions. When we have explored the various theories of intergenerational justice, we have encountered this difficulty, especially with respect to the utilitarian theory. Indeed, according to utilitarianism, the beneficiary principle risked to become too

over-demanding and, in this regard, the suggestion made by Rawls to set a threshold after which the beneficiary actions are not compulsory was an attempt to soften the demandingness of the actions required. Furthermore, we believe that, apart from the dependent nature of the relationship between present and future people, benevolence and gratitude can subsist also in virtue of the shared dispositions of all individuals to care about the things they value and thus to protect them. It is this very shared characteristic that facilitate the creation of an identity-based trust, that in turn allows intergenerational cooperation.

4.1.3 Mindfulness and Curiosity

The second set of intergenerational virtues that we judge helpful to solve the motivational problem are mindfulness and curiosity. More specifically, while loyalty, benevolence and gratitude are specific types of civic virtues that directly trigger pro-group behaviors, mindfulness and curiosity are different forms of virtues that first contribute to enhance the human flourishing, while triggering pro-social and beneficiary behaviors as a consequent result.

Mindfulness can be defined in two ways: on the one hand, mindfulness is the regulation of attention so that it is focused on what is happening in the immediate experience; on the other hand, mindfulness can be conceived as the adoption of a particular disposition toward present experiences, a psychological orientation that is characterized by openness and curiosity (Bishop, 2004: 232). It is in the second connotation that mindfulness can be considered as a virtue and it can help individuals to improve the awareness and consciousness of their experiences. Especially with respect to the issue of climate change, the virtue of mindfulness can help individuals to understand and evaluate the consequences of their actions, adopting a long-term perspective (Jamieson, 2007). For instance, mindfulness can be a disposition that helps to be aware of the personal ecological footprint, while encouraging offsetting actions, such as the simplest one of reducing the consumption of meat, but also the adoption of a more conscious voting behavior in order to support policies devoted to sustainability and intergenerational justice. The thought-provoking aspect concerning mindfulness is that this virtue starts as a disposition aimed at enhancing the individual's awareness and conscious engagement with the present, but then it becomes a reason to actually care about determinate issues. For example, if people become more aware of the consequences of their actions for the environment and if they know what the possible solutions for global warming are, it is reasonable to expect that individuals will develop a caring attitude and a positive disposition toward the matter, attempting to improve themselves and their behaviors. In the intergenerational context, mindfulness about the well-being of humanity can help individuals to have a more caring disposition toward people in the future, thus enhancing the previously mentioned dispositions of loyalty, benevolence and gratitude. However, it is also true

that, especially with regard to climate change, even when people know about their personal contribution in causing global warming, it is not always possible to see a consequent increase in caring attitudes. More specifically, the passage from a more mindfulness to a major caring disposition is not always an automatic mechanism; at least it is not possible to observe it equally among all people. It is reasonable to expect that young people will be more inclined to change their dispositions, while it would be harder for adults and older people to change their *forma mentis* and attitudes toward the matter.

On the other hand, curiosity as a virtue can be defined as the disposition to know more about determinate things in the world (Baumgarten, 2001). Indeed, curiosity is connected to mindfulness as both they represent psychological and emotional responses that can foster the motivation to care about certain issues and then to act in accordance with this caring attitude. The importance of curiosity as a virtue, especially as an intergenerational one, lies in its capacity to trigger a special concern and care for others. The philosopher Baumgarten (2001) argues that it is the fecundity of this disposition, which gives curiosity a high moral significance. According to him, there is a close connection between curiosity and the capacity to care and to be concerned about something, especially in a relationship, but also with respect to larger groups and associations. Curiosity poses the individual in a position of special engagement with the surrounding world and the desire to know more about something makes one person particularly connected with it. In turn, this connection will generate a caring disposition and, indeed, it is not a case that the term “indifference” is used as an opposite of both the interest in a person and the action of caring in a relationship.

While mindfulness as a disposition is the result of a personal psychological and often spiritual training, with respect to curiosity, this virtue can subsist as a result of individuals’ desire to find and create meaning in their lives. Curiosity contributes to this search for meaning and thus it helps individuals to live well and to flourish (Baumgarten, 2001). Indeed, through curiosity, individuals adopt an active engagement with the world and when they find a valuable object of interest, they often invest in it passion, commitment and dedication. In this respect, it seems worthy to mention the work of philosopher Susan Wolf⁴⁴ and her attempt to illustrate the category of meaningfulness as a distinctive element of a good life. In her book *Meaning in Life and Why it Matters* (2012), Wolf describes what does it mean to have a meaningful life⁴⁵ and she holds that there is meaning in life

⁴⁴ Susan Wolf is the Edna J. Koury Professor of Philosophy at the University of North Carolina, Chapel Hill. Her interests of research range widely over value theory, moral psychology and normative ethics. For more information see: <http://philosophy.unc.edu/people/susan-wolf/>

⁴⁵ Through her work, Susan Wolf clearly explains that she does not aim to investigate what is the meaning *of* life. Indeed, she argues that if the question regarding the meaning of life should be answered by attempting to find the

when individuals engage in something or projects⁴⁶ of worth in a positive way. In other words, “meaning in life arises when subjective attraction meets objective attractiveness” (Wolf, 2012: 26). In order to find meaning in their lives, individuals should engage themselves actively in things that they love and feel passionate about, but, at the same time, the object of love needs to be objectively valuable and worthy. Following Wolf’s thought, individuals’ curiosity can represent the subjective attractiveness toward a determinate project and if that project proves itself to be valuable, than individuals have found a form of meaning in their lives. It is in this respect, that we can consider curiosity to be a moral virtue.

In the intergenerational context, the virtue of curiosity can be useful for the motivation problem to the extent that it will invite people to be interested in the well-being of humanity in the future with an open and positive disposition. More specifically, we believe that the development of a curiosity toward the fate of humanity might lead to two consequences: on the one hand, the curiosity might surge the development of a deeper caring disposition and, thus, to be more informed and committed to promote sustainable solutions. On the other hand, individuals can conceive the protection of humanity against global warming’s consequences as a purpose that could provide meaning in their lives. In other words, starting from the assumption that humanity’s well-being matters for individuals, if people possess an active engagement and open disposition toward this object, we can assume that humanity’s protection can be a project worthy of being pursued and capable of providing meaning in people’s lives. In this case, the adoption of pro-environmental behaviors for the sake of humanity will not represent anymore a burden or a sacrifice but a way to fulfill themselves.

Thus, with regard to the transgenerational community of humanity, we hold that loyalty, benevolence, gratitude, mindfulness and curiosity can be influential elements and motivational triggers in order to encourage people to adopt pro-environmental behaviors and to care about future people’s well-being. We believe that the strength of our argument lies both on the emotional and psychological appeal of the humanity’s community itself and on the nature of the chosen virtues. Indeed, what we deem important regarding the described intergenerational virtues is that in each of them it is possible to recognize aspects that benefit also the individuals well-being and which are connected to what individuals intimately care about. Embracing the *internal reason thesis*

purpose of life, then according to the standard philosophical view the answer should be found in the existence of God. Wolf argues that it is not possible to provide a positive answer to the question of meaning of life without involving a religious metaphysics. Nevertheless, she holds that the understanding of meaningfulness in life deserves philosophical attention and that a positive view regarding the possibility of meaning in life can be compatible with an agnostic or negative view concerning the meaning of life (Wolf, 2014: 91-92).

⁴⁶ In using the word “projects”, Wolf stresses that she wishes to use this term in a very broad sense, referring to not only goal-oriented activities, but also other kind of ongoing tasks and forms of involvement as well (Wolf, 2014: 95).

of Bernard Williams, we hold that individuals' motivation to act has to be linked with what individuals care about and to their inner necessities (Chappell, 2015). Owing to this, we have decided to concentrate on these determinate virtues because they do not solely aim to set pro-social behaviors within a community, but they also accommodate the inner necessities and often unconscious desires of individuals. Loyalty provides psychological security and safety, by enhancing self-esteem and self-perception; benevolence and gratitude meet the desire of self-extension and of symbolic immortality through the creation of a connection with future people; mindfulness and especially curiosity help individuals to engage in their lives in a positive and active way, contributing to the search for meaning in life. To a certain extent, these virtues exploit the individuals' motivation to achieve personal flourishing and fulfillment in life, triggering at the same time pro-social behaviors and dispositions. For this reason, we think that the development of these intergenerational virtues, which are prudentially and morally good, can be more efficacious than the external imposition or enforcement of determinate actions. In the intergenerational context, the intergenerational virtues, because based on the people's concern for the fate of humanity and for their own well-being, can be able to motivate pro-environmental behaviors and caring attitudes toward the distant future.

4.2 Practices for intergenerational virtues

Having described the nature and role of these virtues within the transgenerational community of humanity, at this point of our research we will attempt to present a general panoramic of the various ways through which practically instill intergenerational dispositions into individuals, stressing their strengths and interesting aspects. By no means the practices illustrated represent the most suitable instruments and, indeed, due to the limited scope of our research, we will leave space to further research and exploration for the design of more specific suggestions and possible means.

Keeping the parallel with the civic virtues within the community of the nation, a possible way to instill intergenerational virtues in individuals is through education. For instance, civic education is an instrument to modify and influence people's beliefs, capabilities, actions and commitments in ways that are relevant for the membership in a community. This type of education is often a lifelong process and it involves a large number of institutions, such as the family, schools, governments, religion and mass media. Sometimes, if effective, civic education is also able to exceed the influence and power that social classes and ideologies exercise on individuals. Indeed, it has been often conceived as a way to improve the quality of democracy within a country, having character education and democratic participation as its central focus (Crittenden and Levine, 2015). Nevertheless, there are some practical difficulties regarding civic education. For instance, there are some practical problems in so far as it is not always easy to determine how to develop durable

behaviors and habits according to different ages and social and cultural backgrounds. Besides, other debates concern the choice of the values to be taught and the risk of setting a morality of compliancy, which would undermine rather than benefit the democratic essence of a society.

Thus, as civic education, despite its practical and normative difficulties, acts as a way to instill determinate behaviors useful for the life in a society, in the same way education can help individuals to adopt a cosmopolitan sensibility and awareness, setting the condition for the spring of intergenerational dispositions. With respect to the quandary of climate change and the distant future, an education based in particular on awareness and reflection can make the difference. The improvement of people's awareness regarding climate change, its dynamics and effects in the future can represent a first starting point to contrast climate change denial and indifference toward the matter. Several scholars hold that the element of reflection can be developed through discussion and it is needed in order to understand the problem of global warming as something that concerns the present needs, necessities and actions (Gifford, 2011). Indeed, one of the constraining element of the concept of future generations regards the fact that people are drawn to think of climate change as something that will regard merely the future, thus favoring social discounting and intertemporal free-riding. If with the concept of humanity, we wish to refer to a community that embraces past, present and future individuals, education can help to frame the issue as a here-and-now oriented matter, addressing local and present impacts. Education can help to increase individuals' knowledge and awareness regarding the impact of moral and political decisions on all of humanity, thus attempting to extend people's sympathies (Crittenden and Levine, 2015). In addition to this, education can also contribute to frame climate change with empowering messages stressing the benefit of pro-environmental behaviors for humanity's well-being, but also for personal flourishing and fulfillment (Gifford, 2011). Most importantly, in the same way as civic education, the type of proposed education does not aim to be a mere paternalistic indoctrination, but it will also aim to stimulate critical thinking.

Furthermore, another possible mechanism that we wish to underline in relation to the role of education is the power of good examples on people's lives and perspectives. Indeed, people are particularly receptive to be inspired and to attempt to imitate examples of good deeds and altruistic actions (Homiak, 2015). For instance, acts of charity, kindness, self-sacrifice and loyalty often trigger into individuals the desire to better themselves, following the moral examples observed, and to adopt pro-social behaviors. This type of desire is described by Haidt as *elevation*, which is a status triggered after the awe for seeing people that "blur the upper boundary between humans and God" (Haidt, 2011:864). Thus, in order to instill intergenerational virtues, education might exploit this tendency already present in individuals' psychology, by showing and illustrating examples of

motivating experiences and behaviors that might inspire individuals to act for the benefit of humanity's well-being⁴⁷.

Furthermore, apart from the role of education, other quite ambitious researches have suggested the possibility of moral enhancement through biomedical and genetic means (Persson and Savulescu, 2008). Indeed, while some argue that people can be motivated to act through education and normative beliefs, thus through effective reasoning process, others deem the role of moral emotions and dispositions as more influencing (Douglas, 2008). Notably, because of the presence of various global quandaries that severely challenge people's bounded psychology and morality, some scholars hold that it is necessary to respond to them with a moral enhancement, able to instill cosmopolitan views and moral sympathetic capacities through medical treatment. At the basis of this suggestion, there is the idea that individuals' moral dispositions are not a mere product of culture, but they are mainly based on people's biology, in particular the disposition of altruism and of a sense of fairness, thus allowing the possibility of biomedical and genetic treatment. In this regard, relevant findings illustrate how, for instance, oxytocin⁴⁸ can help to promote trust, while SSRIs⁴⁹ can increase cooperation and reduce aggression. Furthermore, other findings attempt to find correlation between some personality types and determinate immoral or moral behavior, suggesting a possible intervention also in this respect (Persson and Savulescu, 2008: 168).

Therefore, according to these researches, it would be theoretically possible to enhance determinate dispositions into individuals through biomedical interventions. However, there are several difficulties and objections. The first constrain regards the state of the research concerning this type of medical intervention, as further investigation is needed in order to know with a certain degree of certainty how moral enhancement will work according to different individuals. Besides, there are several objections which regard the possibility that moral enhancement might compromise authenticity or the very personal identity of an individual. Others argue that moral enhancement is not desirable because it would be a way of cheating social relations and outcomes, whilst some

⁴⁷ In this regard, it is possible to find various examples. For instance, for the World Humanitarian Day, the United Nations decided to promote and surge humanitarian actions through the sharing of a considerable number of inspiring stories of people who have experienced a humanitarian crisis, managing to face and to help other as well.

⁴⁸ Oxytocin is a hormone and a brain neurotransmitter. It is made in the brain in the hypothalamus and it is secreted by the pituitary gland at the base of the brain. The main role of this hormone regards two important female reproductive functions, namely breastfeeding and childbirth. Nevertheless, apart from that, oxytocin plays a determinant role also in emotional, social and cognitive behaviours. More specifically, it helps to trigger pro-social behaviours, contributing to enhance trust, psychological stability and relaxation. For more info, see: <http://www.medicalnewstoday.com/articles/275795.php> (accessed on August 30, 2015).

⁴⁹ Selective serotonin reuptake inhibitors (SSRIs) are a particular prescriptions mainly used for anti-depression medication. Indeed, they increase the level of serotonin in the brain, which has an important and positive impact on mood, emotions and sleep. See: [http://www.nhs.uk/conditions/SSRIs-\(selective-serotonin-reuptake-inhibitors\)/Pages/Introduction.aspx](http://www.nhs.uk/conditions/SSRIs-(selective-serotonin-reuptake-inhibitors)/Pages/Introduction.aspx) (accessed on August 30, 2015).

scholars fear the possibility that unbridled biomedical interventions will put into question human nature itself (Juengst and Moseley, 2015).

4.3 Conclusion

Through this chapter, we have attempted to demonstrate our second hypothesis, thus concluding our analysis. After illustrating the concept of humanity as a transgenerational community, we have presented the five intergenerational virtues that we deemed necessary in order to solve the individuals' motivational problem, namely loyalty, gratitude and benevolence, mindfulness and curiosity. We hold that these intergenerational dispositions can motivate individuals to adopt pro-environmental behaviors for humanity's well-being, while, at the same time, contributing to people's personal fulfillment and flourishing. It is in this very characteristic that lies the attractiveness of these dispositions as they are connected to what individuals intimately care about. However, more difficult is the task to individuate the ways to practical instill these intergenerational dispositions into individuals. We have attempted to illustrate the role of education in a similar way to the role of civic education, but also the one of moral enhancement through biomedical treatment, which represents a new area of research in both moral philosophy and psychology. With respect to this task, further research and investigation will be needed.

Conclusion

The aim of this research has been to investigate the individuals' moral motivation problem in the context of intergenerational relations and climate change's effects in the distant future. Notably, throughout our study we have attempted to answer the following research question: how can individuals be motivated to adopt pro-environmental behaviours in order to protect the interests and needs of future people? Answering this question required us to embrace a multidisciplinary approach, making reference to various theories and perspectives from political theory, philosophy and psychology. More specifically, focusing on the role of emotions and social representations as independent variables, we have conducted a qualitative analysis, attempting to verify two hypothesis. On the one hand, we held that *future generations* as object of people's concern present several problems, both on the conceptual and motivational level, resulting in being a major limit for individuals' actions against climate change. On the other hand, considering this shortcoming, and due to the necessity of a long-term perspective and the adoption of pro-environmental behaviours, we advanced that a possible way to motivate individuals to act could be the instilling of intergenerational virtues, which are more likely to subsist with respect to the concept of humanity than with the one of future generations.

In the first chapter, we have provided a general and critical overview of the relevant literature regarding intergenerational relations, attempting to stress the main debates and challenges on three levels of analysis: the institutional, theoretical and individual level. This chapter has been useful in order to illustrate gaps in the literature, even though, at the same time, it is possible to notice several limitations, as our exploration is by no means exhaustive and there are still areas and debates in need of further research. Thus, our decision to focus mainly on the individuals' motivation problem has been justified on the fact that small attention has been dedicated to this matter, but also on our belief that the individual can be a powerful change trigger at both the interpersonal and national level, offering a valuable alternative to green authoritarianism and to the gridlocked international community. Indeed, climate change's solutions need not only binding international agreements and effective government intervention, but also the participation of well-informed and active individuals, positively motivated to set a systematic change and to act for future people's well-being.

Following this line, before moving on the analysis's part, we have dedicated the second chapter to the illustration of our theoretical foundations and assumptions. Hereby we wish to recall our two main assumptions. First, we shared Bernard Williams' view that all reasons to action are internal to the individual and that individuals cannot have any motivation to act, which at the same time has no link with what individuals deeply care about (Chappell, 2015). Secondly, we deem that what

matters morally is individuals' well-being. For this reason, the goodness of an action will be assessed according to its capacity to promote and protect human life's quality and this will be against both spatial and temporal discounting (Crips, 2014). Instead, regarding the theories utilized in this study, we decided to make reference, first, to the *two system theory* of Professor Daniel Kahneman (2012), which has allowed us to discover how the emotional and intuitive part of our brain often prevails over the rational part, characterized by control and conscious deliberation. Consequently, in order to study how individuals' cognitive processes work also through social interactions, we decided to make reference to the social representation theory of Serge Moscovi (1961), realizing how people form socially constructed representations in order to make unfamiliar objects and concepts part of their common sense understanding. With respect to complicated quandaries such as the one of climate change, this theory helped us to recognize how concepts and frames actually matter for people's understanding and actions. Moreover, in both the two theories, the role of emotions emerged, as an influencing factor that helps rationality to make sense of the world, directing our attention and providing motivation for our actions. In this regard, we have referred to the social intuitionist model of Jonathan Haidt, according to which people formulate moral judgements through the experience of "gut feelings" that lead them to conclude if something is right or wrong, while the moral reasoning happens in a second moment as an ex-post process. This theory has been useful in order to appreciate the role played by moral emotions in determining individuals' moral actions and thoughts.

Moving forward, having stated our theoretical foundations, we decided to devote the third and fourth chapter to the part of analysis, verifying respectively the first and second hypothesis. Thus, in the third chapter we started our analysis by applying the theories illustrated in the theoretical framework, attempting to utilize our independent variables, moral emotions and social representations, in order to study the individuals' motivation problem. Firstly, we have attempted to stress what has gone wrong so far, as people have many reasons to care about climate change's future consequences and no excuses for not taking action. Through our analysis, we discovered that global warming and its effects in the distant future often fail to trigger powerful moral emotions, such as shame and guilt, and that, at the same time, the very object of concern, future generations, lacks important emotional triggering features. Indeed, we essayed to demonstrate how the concept of future generations presents several problems, on the institutional, theoretical and, most importantly, on the individual level. The conceptual and psychological limitations triggered by future generations represent a major limit for individuals' motivation. For instance, the faceless and indeterminateness characterizing future generations make them a difficult object of concern, toward which people cannot relate both cognitively and emotionally. For this reason, making reference to the social representation theory, we underlined the necessity to find a different concept

able to be more reliable on an emotional and psychological basis, and thus more in accordance with the cognitive and normative view on the matter. With this purpose in mind, we suggested that a possible valuable alternative could be *humanity*, conceived as an imagined transgenerational community of systems of relevance and significance, which embraces past, present and future individuals. In order to strengthen our argument, we attempted to illustrate to what extent we can recognize in people a general concern and care for humanity's fate and well-being.

Finally, in the fourth chapter, having demonstrated the suitability of the concept of humanity, we showed how a possible way to solve the motivation problem of individuals could be the development of intergenerational virtues that are more likely to subsist with respect to the transgenerational community of humanity than with respect to future generations. Indeed, we deemed that the development of these types of dispositions, namely loyalty, beneficence, gratitude, mindfulness and curiosity, within the community of humanity would be able to motivate individuals to undertake actions and decisions for the well-being of people in the distant future. Therefore, for each of these intergenerational virtues we illustrated on what basis they can subsist in the humanity's community and, thus, to what extent they can motivate individuals to adopt pro-environmental behaviours. Consequently, we stressed that the strength of these virtues lies in their capacity to be connected to what individuals care about and to their inner necessities, triggering pro-social behaviours in second place. For instance, loyalty responds to the individuals' desire to be part of a social community and to the need of belonging to something larger than themselves. At the same time, loyalty, if instilled, motivates individuals to care about their community, making them ready to make also sacrifices for the good of the community. Another example can be the intergenerational virtue of curiosity, which helps people to find a meaning in their lives, but also it helps them to develop caring dispositions toward the object of their curiosity, which in our case can be the fate of humanity. Furthermore, through the illustration of these intergenerational virtues, we have also attempted to keep a parallel with the role of civic virtues in a society or country. As civic virtues work within a society in order to ensure the sense of belonging to it and safety, to the same extent we believe that intergenerational virtues can work in a transgenerational community, such as the one of humanity. As one might expect, the difference between the two cases is that the transgenerational community object of our investigation is much bigger, with no clear boundaries and stretching indefinitely through time. However, it is also true that the sacrifices required are also more modest, as, for example, there will be no request to die for the community of humanity, but other types of demands, such as consuming less gas and meat or water. To conclude, in the last part of the fourth chapter we showed a panoramic of the possible ways to instil these types of intergenerational virtues, highlighting both their strengths and shortcomings.

Thus, at the end of our work, we cannot exempt ourselves from pointing several limitations that have emerged in our research. We believe that one of the strongest objection regards the very concept of humanity. Although, we have attempted to demonstrate that humanity can work better than future generations, at the same time, we acknowledge the objection moved by several scholars that the concept of humanity might be too abstract and essentialist in order to be a proper object of care. The philosopher and professor Brinbacher (2009) has argued that it is common to devote actions and projects for the sake of humanity, but this reveals itself to be an easy commitment to make in theoretical and abstract ways, but much more difficult to feel and to put into practices. In response to this objection, we wish to stress that the aim of our working definition of humanity was actually to avoid any essentialist or abstract community and to attempt, instead, to embrace a background of significance and relevance with which people daily relate, depend on and create meaningful connections and projects. The example of Peru and its agricultural landscapes was made, indeed, with the purpose of showing a concrete example of people's attachment to what we deem as part of humanity's community. Moreover, the strength of the concept of humanity in comparison to the one of future generations is represented by its being a transgenerational community, which includes past, present and also future people. The temporal and cognitive distance triggered by the concept of future generations can be highly reduced when reasoning in terms of humanity. Owing to this, even though we acknowledge the limitations belonging to the concept of humanity, at the same time we hold that it can help to substantially meet the emotional and conceptual gap present when thinking about future generations alone.

Following this line, some scholars have proposed different suggestions in order to encourage pro-environmental behaviours. For instance, instead of the concept of humanity, some have advanced the one of ecological citizenship, whose theory aims at promoting life-style changes based on a radical rethinking of individuals' relationship with the environment. According to this, the ecological citizenship entails a new idea of individual responsibility, where the personal obligations depend on individuals' ecological footprint (Jagers et al, 2004). Moreover, other studies have attempted to investigate the relationship between religion and sustainability and, thus, how religious belief can help individuals to adopt pro-environmental behaviours for the benefit of future people. We acknowledge the fact that the concept of humanity is not the only mean aimed at solving the motivation problem, but, at the same time, we hold that the particularity of this concept lies in its capacity to involve the emotional dimension of people's action and to be connected the very important aspects of the human condition, such as the desire to create significance in life.

Furthermore, another limitation of our work regards the difficulty of actually instilling intergenerational virtues into individuals. In our research we have attempted to illustrate possible ways to do so, but they can be vulnerable to several objections. For instance, the suggestion of

using education to develop determinate dispositions runs the risk to be judged paternalistic and there are no clear directives in order to know how and what things should be taught. On the other hand, the practice of moral enhancement through biomedical means is still at its embryonic stage and there is no common agreement among scholars whether this type of practices would be desirable or not, despite its intriguing nature. For this reason in particular, we believe that the second hypothesis is only partially verified, as the development of these very virtues presents some shortcomings, although we have attempted to demonstrate how a different concept is needed and how intergenerational virtues with regard to humanity can motivate individuals. Further research and investigation is surely needed in this area.

Nevertheless, despite the limitations and shortcomings, we believe in the contribution of this study in suggesting a possible way to motivate individuals, while filling a relevant gap in the literature and stressing the role of emotions and social representations in shaping people's attitudes and motivation. Through our findings, we wish to encourage further research and investigation. Indeed, experimental and more practical studies in psychology may help to base our results on more reliable data, disclosing more motivating elicitors. Moreover, the study of the moral motivation problem can support and can be aligned with other open debates in this field, such as the ones regarding which obligations and how much should individuals sacrifice for the future, contributing to the creation of an entangling and vivid area of research. To conclude, as previously mentioned, we think that individuals' action can make a difference in the process of mitigation and adaptation regarding climate change. Most importantly, it can trigger a systematic change that sparks from everyday practices and it transforms itself in new political decisions and agreements. Thus, the understanding of individuals' motivation to act is of vital importance.

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