

PIIA NUMMELA

CLIMATE CHANGE AND JUSTICE

EXPLORING JUSTICE DISCOURSES IN THE CLIMATE CHANGE

DEBATE IN PERU

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ABSTRACT

Concern for justice or equity is one of the fundamental issues when discussing international climate policy. The quest for justice rises from the fact that although the developed countries are largely responsible for climate change, it is the developing countries and especially poor people inside these countries who are most likely to suffer from its adverse effects. Though the principle of justice is often mentioned in the climate change debate, it is not always clearly defined.

This study draws on approaches to justice within the more general literature in International Relations. I will closely examine the concept and analyze how it is perceived in the climate change debate in Peru. Peru is an example of a developing country with low emissions on the global level but that is extremely vulnerable to climate change. The research is based on interviews that were conducted in Peru in March and April of 2009 according to the general interview guide approach. I interviewed people from different sectors working for the government, non-governmental organizations, academic and international organizations. The manner in which justice is defined happens largely through language. The method for analyzing the interviews is discourse analysis. I investigate how the perception of justice is discursively constructed in the interviews and what shapes these distinct justice concerns. Moreover, I want to examine who should do what, at whose cost and when.

The most important results of this research are the interpretations of the discourses and the perception of justice as based on these. The discourse of responsibility highlights the principle of common but differentiated responsibilities. This is seen as the most important principle when confronting climate change. The discourse of responsibility is the founding premise of the three other discourses: the discourse of national interests, the discourse of global benefits and the discourse of development.

The analysis shows that the perception of justice in the climate change debate in Peru is based on the causal responsibility approach; it is perceived in the sense of righting the wrong. The premise is the responsibility of the developed countries for having caused the problem of climate change and for having harmed the others. Consequently, they have a moral responsibility to address the situation. This is the main factor that shapes the justice concept in Peru. Interdependence is seen as central to the understanding of justice; justice is seen as a transboundary concept. The developed countries need to reduce their emissions and also pay for the harm produced in the developing countries by giving them technological and financial support. For Peru adaptation is a priority and mitigation should be voluntary for the country. Acknowledgement of Peru's right to development is important and the country needs support from the developed countries both for adaptation and mitigation.

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1. INTRODUCTION

1.1 Background

Especially now when negotiating a post-Kyoto agreement, climate change is a very relevant issue firmly in the international political agenda. Even though the negotiations on post-2012, when the commitment period of the Kyoto Protocol ends, should have ended in Copenhagen at the end of 2009, the different Parties did not reach an agreement. The negotiations continued in Mexico until December 2010 and an agreement still has not been reached. It is obvious that the international response to climate change must continue even after the Kyoto Protocol ends. Central to the negotiation is the kind of an agreement technically desired as well as the kind of agreement that the Parties will agree on. Negotiations on climate change touch all but it is difficult to reach an agreement on the many issues being discussed.

In the Kyoto Protocol, greenhouse gas emission reductions were only imposed on the developed countries, and the developing countries do not have any obligations on emission reductions. However, if developing countries do not accept emission reductions, then climate change cannot be effectively tackled. Often big and rapidly industrializing developing countries, like Brazil, China and India, are mentioned as countries that should diminish their emissions. For example, China has passed the United States as the largest single emitter¹. At the same time, developing countries demand high emission reductions for developed countries in order to decrease the global level of total emissions. Developing countries also demand technological and financial support from developed countries for adaptation and mitigation. All in all, there are important differences in perspective and demands.

In the middle of all these differences, climate change is a stark reminder that we all share one thing in common: the planet earth. The atmosphere of the planet is common for all nations and all people. The issue of global commons is defined in the World Conservation Strategy² from the year 1980 as:

"A commons is a tract of land or water owned or used jointly by the members of a community. *The global commons includes those parts of the earth's surface beyond national jurisdictions* - notably the open ocean and the living resources found there - *or held in*

¹ See for example Kaskinen et al. 2009, 3 and 11.

² World Conservation Strategy is a report on conservation prepared by the International Union for Conservation of Nature and Natural Resources (IUCN) with the cooperation, advice and financial assistance of the United Nations Environment Programme (UNEP) and the World Wildlife Fund (WWF).

common - notably the atmosphere. The only landmass that may be regarded as part of the global commons is Antarctica [...]."³

Garret Hardin is one of the theorists who have worked on the tragedy of the commons. How to use something that is shared by all? Hardin uses the example of herdsmen who share a pasture where they all are entitled to let their cattle graze. It is in the interest of each herdsman to add another and succeeding animals to his herd as the herdsman receives all the profit from the additional cow, while the damage of overgrazing is shared by all the herdsmen. Hardin sees it is the self-interest of each herder to add animals to the common area. "Therein is the tragedy. Each man is locked into a system that compels him to increase his herd without limit – in a world that is limited."⁴

This tragedy of the commons can to a certain extent also be seen within the problem of climate change since the atmosphere is a global common. The atmosphere is a shared resource since no one can own it nor can it be divided into pieces⁵. It is also a limited resource since it cannot receive an unlimited amount of greenhouse gases. As noted in the Human Development Report, the ecological 'space' available for future emissions is determined by past action⁶. Producing greenhouse gases is beneficial from the perspective of self-interest since mitigation costs are significant. Though as noted in the Stern Review these costs are manageable, while delay would be much more costly⁷. As the atmosphere cannot be owned by anybody, climate change also includes the 'free-rider problem' meaning that although one single country would not restrict its greenhouse gas emissions, it can still enjoy from the slowing down of climate change that is produced by the other countries' emission reductions⁸.

Climate change is a problem of a truly global scale, and thus no country can solve the problem on its' own. Greenhouse gases produced in one country do not respect national borders and also influence other countries. The extraordinary range of interdependencies and the interconnection between issues⁹ involved are present in the context of climate change. For Paterson, interdependence between countries is unquestionable in the case of climate change¹⁰.

³ International Union for Conservation of Nature and Natural Resources (IUCN) et al. 1980. Italics added by the writer.

⁴ Hardin 1968, 1244.

⁵ Herne 2001, 8.

⁶ UNDP 2007, 41.

⁷ Stern 2007, vii.

⁸ Herne 2001, 8.

⁹ See for example Vogler 1996, 8.

¹⁰ Paterson 1996, 189.

In International Relations theory, interdependence is mostly understood as a situation of mutual dependence between social actors. This means that actions and events “taking place in one unit of the international system affect other units of it”. Zürn notes that the literature on interdependence “rests on a concept of social actors (most often governments) being structurally affected by the behaviour of others (most often societies in other countries), but nevertheless autonomous”. Such a view of interdependence still implies a choice between multilateral and unilateral strategies. Zürn notes that actors might still opt for a unilateral approach, even if it is less effective in terms of the degree to which the actor’s intentions have been fulfilled in comparison with the option for a successful multilateral endeavour.¹¹

In International Relations, interdependence can be due to two factors. On the one hand, national societies and nation-states are dependent on other states’ activities (*state interdependence*), where Zürn sees that since the Westphalian system of states emerged states have been dependent upon each other in this sense. “On the other hand, the effects of given actions by a government may depend on societal developments that take place outside of its jurisdiction (*societal interdependence*).” As an example, Zürn argues that national environmental standards and its effectiveness may be easily undermined by increased emissions from outside the country in question. Zürn sees that societal interdependence is not something constitutive of the Westphalian state system; rather he sees it as a “(mostly unintended) side-effect of the growing interconnectedness between societies.”¹²

Vogler sees that the oil crisis revealed the degree of the mutual vulnerability of societies, and societies were seen to be increasingly interconnected at various levels. “Although common vulnerability to environmental degradation could be regarded as the ultimate form of interdependence, this aspect did not become a focus of attention.” Rather interdependence was seen in economical terms, where how to manage the “economic relations that seemed to be spinning out of control” was central. Vogler sees that in the late 1980’s “there was a clear and measurable increase in the level of public and governmental environmental concern, which was now set in the context of fears about the scale of global change”. The key for this awakened interest in environment may lie in a paradigmatic shift to an awareness of global rather than purely transboundary or local phenomena. Examples of global phenomena are the stratospheric ozone-layer depletion and climate change.¹³

¹¹ Zürn 2002, 236.

¹² Zürn 2002, 236.

¹³ Vogler 1996, 5-8.

As already noted, climate change is a potent reminder of the fact of interdependence. Developing countries have stressed the fact that ecological interdependence is asymmetrical in the case of climate change, successfully arguing that the developed countries should take the burden on most far-reaching ameliorative action and finance most of the costs.

“This is an issue of *equity* since it is fundamentally unfair to allocate the burden of combating climate change without due acknowledgement of the fact that it was rich countries i.e. early industrializers in Europe, North America and Japan which are mainly responsible for the problem.”¹⁴

1.2. Research Problem

Concern for justice or equity¹⁵ is one of the fundamental issues when discussing international climate policy. The quest for justice rises from the fact that although the developed countries are largely responsible for climate change, it is the developing countries and especially poor people inside these countries who are most likely to suffer from its adverse effects. Many see that justice will have to be a central part of the climate policy. Harris argues that in order to persuade major developing countries to limit their future emissions, issues of justice must be addressed¹⁶. Though the principle of justice or equity is often mentioned in the climate change debate, it is not always clearly defined. Paterson argues that there is no widespread agreement on what this crucial concept means. He stresses that a variety of positions can be used in order to incorporate justice or equity into an agreement.¹⁷ For Shue, it is important that there is consensus on the principle’s meaning; it should be defined concretely, not as a vague abstraction¹⁸.

In my thesis, I will closely examine the concept and analyze how it is perceived in the climate change debate in Peru. Peru is an example of a developing country with low emissions on the global level but that is extremely vulnerable to climate change. When negotiating climate change issues,

¹⁴ Williams 2005, 61-62. Italic added by the writer.

¹⁵ As Paterson notes in his text, equity in technical terms is different from (distributive) justice. However, in this thesis, these are used largely synonymously as also in Paterson’s text. See Paterson 1996, 196. Shukla also reflects on the difference of justice and equity. He starts from the classification of Rawls seeing justice as the first virtue of social institutions. Justice principles are needed to propose or evaluate alternative distributions. In this sense, justice is a distributive concept. Distribution may affect the criteria of evaluation, like welfare, indirectly or directly. In this way, “[e]quity refers to normative criteria for judging the distribution”, but it is “also defined as ‘the quality of being fair and impartial’.” Either way, equity is basic to the justice process. See Shukla 1999, 145.

¹⁶ Harris 2009, 11.

¹⁷ Paterson 2001, 119 and 1996, 184.

¹⁸ Shue 1999, 531. For more on justice and equity see chapter 3.

Peru is part of the G77+ China¹⁹- group. The study of the concept of justice in the context of climate change debate in Peru is important because of the country's vulnerability and because the issue of climate change is a topical concern globally and inside Peru. Climate change has received a lot more attention in the country since 2008. Indeed, both the European Union and Latin American and Caribbean (EU-LAC) and Asia-Pacific Economic Cooperation (APEC) summits were held in Peru in 2008 and climate change was on the agenda at both, certainly influencing growing domestic concern for climate change. During the EU-LAC summit, Peru's President Alan García also created the Ministry for Environment and climate change is now an important part of the Ministry's agenda.

My interest in Peru derives from year 2008 when I worked for 6 months as an intern in the Embassy of Finland in Peru. I participated in the EU-LAC- summit and could observe the growing interest on climate change in the country. In my thesis, I want to combine the knowledge gained during this stay in Peru and my studies in International Relations and Spanish. I have knowledge on the basics of the effects of climate change in Peru and how the politics on the issue have evolved in the country, but in my thesis I hope to deepen our understanding on the issue of climate change and especially on the concept of justice.

This study draws on approaches to justice within the more general literature in International Relations. The purpose of my research is to identify how justice is perceived in the climate change debate in Peru as based on interviews conducted in Peru in March and April of 2009. The manner in which justice is defined happens largely through language. I will investigate how the perception of justice is discursively constructed in the interviews. How is justice/equity perceived in the climate change debate in Peru? What shapes the distinct justice/equity concerns in Peru in the issue of climate change? Who should do what, at whose cost and when? This determines who should act and how. All this leads us to what kind of justice/equity is pursued with the discourses.

Interviewing is a popular method in social and behavioural sciences. It is a flexible method and especially useful when doing research on an unknown, little explored issue.²⁰ Consequently, I chose interviewing since it was not possible to obtain the same type research material in any other way. In

¹⁹ G77 is a group of developing countries that in the climate change negotiations appears together with China; from there the name G77+China. The aim of G77+China is to form a joint bargaining position in the negotiations on climate change. Williams argues that the G77+China is neither a homogenous group nor a mere illusion. The group has a coordinating role and is the main vehicle for forming joint positions. However, it is not the only Third World negotiating group. Though the countries have common interests, conflicts of interests are also present inside the G77+China. Williams identifies three lines of division that have arisen based on access to energy resources, levels of development and vulnerability to climate change. Williams 2005, 60-62.

²⁰ Hirsijärvi & Hurme 2001, 11.

Spring 2009, I spent two months in Peru and interviewed 11 persons. These interviews are my research material. The interviews are based on the general interview guide approach focusing on three themes: climate change consciousness in Peru, international negotiations on climate change, and the national strategy on climate change. I interviewed people from different sectors working for the government, non-governmental organizations, academic and international organizations. However, it is important to note that the persons interviewed only slightly presented the opinion of their organization but rather many of them expressed that the opinions presented are their own. The interview time varies from 30 minutes to an hour and half with the average length of 47 minutes. All of the interviews were recorded and transcribed. The interviews were translated from Spanish to English by the writer.

In interviews, the importance of language is central²¹. Since language is important in discourse analysis, I chose discourse analysis as the method to analyze the interviews. The object of the study is the use of language and its variations²². The central idea of discourse analysis is that the language is a central constructor and cultivator of the social reality in which we live. The reality is constructed in social interaction where language plays a central role.²³

1.3. Structure of the Thesis

My research is about the concept of justice as it occurs within the context of climate change debate and especially in Peru. For this reason, it is important to understand what climate change is, how it became part of the international political agenda and what have been the responses to it at the global level. Since I am focusing my research in Peru, it is also important to understand the most important aspects of climate change in this country. For this reason, I treat these issues first in chapter 2 and then move on to the concept of justice/equity.

At the beginning of chapter 3, I briefly discuss the nature of the relationship between the state and environmental problems and how issues of inequality in general are viewed in International Relations. Then, I analyze the different approaches to justice/equity within the more general literature in International Relations and within the climate change debate. In chapter 4, I present the methodological part of my thesis. The first part of the chapter is about research interviews and especially about the general interview guide approach. I also comment on the interviewing process

²¹ Hirsijärvi & Hurme 2001, 48-49.

²² Saaranen-Kauppinen & Puusniekka 2006 and Hirsijärvi & Hurme 2001, 188..

²³ Pietikäinen & Mäntynen 2009, 12.

of this thesis. The last part of the chapter is about discourse analysis as the method for analyzing the interviews. Chapters 3 and 4 together provide the theoretical framework for my thesis.

In chapters 5, 6, 7 and 8, I concentrate on the analysis of the interviews, focusing on how perceptions of justice are discursively constructed in the interviews. Chapter 9 presents the research results and conclusions.

2. CLIMATE CHANGE AND PERU

2.1.1. Climate Change as a Scientific Phenomenon

The scientific explanation of climate change is based on the greenhouse effect. In the greenhouse effect, the solar radiation is absorbed by the Earth and at the same time the atmosphere prevents the heat from escaping back into the space. Because of the atmosphere's greenhouse gases, the greenhouse effect functions on the Earth. As a result, the temperature on the Earth's surface is +14 degrees Celsius when without the greenhouse effect it would be -18 degrees Celsius. Thus, the greenhouse effect is a natural phenomenon that makes present-like life possible on the globe.²⁴

It is normal that the weather constantly changes. However, human actions can significantly change the Earth and its climate. In this thesis, I use the definition provided by the United Nation's Framework Convention on Climate Change (UNFCCC):

“Climate change” means a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.²⁵

According to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the “warming of the climate system is unequivocal”. The observed increase in temperatures is widespread throughout the world.²⁶ Most of the increase in temperature “since the mid-20th century is *very likely* due to the observed increase in anthropogenic greenhouse gas concentrations”²⁷. Because of human activities, global greenhouse gas emissions have grown since pre-industrial times; the increase was 70 percent between 1970 and 2004²⁸.

The most important anthropogenic greenhouse gas is carbon dioxide (CO₂). Fossil fuel use is the main reason for global increases in carbon dioxide concentrations. Land-use change provides another significant but smaller contribution to the increase. Of the total anthropogenic greenhouse gas emissions in 2004, 26 percent came from energy use, 19 percent from industry, 17 percent from

²⁴ Finnish Meteorological Institute.

²⁵ UNFCCC 1992, Article 1.2.

²⁶ IPCC 2007c, 2.

²⁷ IPCC 2007d, 10.

²⁸ IPCC 2007c, 5.

forestry including deforestation and 13 percent from both agriculture and transport.²⁹ Some of the possible impacts of climate change include glacier melting, sea level rise and increase in frequency of heat waves, extreme heat and heavy precipitation³⁰.

2.1.2. Possible Impacts of Climate Change in Peru

Peru is an example of a country that is extremely vulnerable to climate change. According to research of the Tyndall Centre, Peru is considered the world's third most vulnerable country to climate change after Honduras and Bangladesh³¹. The vulnerability of Peru is due to many factors; some of these are based on structural conditions and the others on additional factors that are directly or indirectly relational to climate change³².

One possible impact of climate change in Peru is the loss of biodiversity. Peru is one of the world's five countries that have the greatest biodiversity and variety of natural environments and climates³³. In Peru, there are 84 of all the 104 existing ecosystems and 27 of the 32 climates identified in the world³⁴. These characteristics is the sum of many factors, such as the Andes, the location between the tropic and the equator, and the presence of the cold Humboldt and the warm El Niño currents all influence the diversity in Peru. As a result of these natural conditions, Peru has a very special and unique geography that serves as habitat for a large amount of natural fauna and flora. Much of this fauna and flora is endemic, meaning that they only exist in Peru. An important part of the biodiversity is also the Amazon rainforest. Peru's part of the rainforest is the second largest after Brazil; 13 percent of the rainforest is situated in Peru. Altogether primary forests cover half of Peru's territory.³⁵ Because of all this, Peru is one the mega-biodiverse countries in the world³⁶.

Another factor influencing Peru's vulnerability to climate change are water resources. Though Peru has large water resources, the resources are not evenly distributed. Ten percent of the surface is arid, and the almost desert-like coast presents water shortage³⁷. In this dry area, 60 percent of the population live and 70 percent of the national income is created. Fresh water on the coast comes

²⁹ IPCC 2007c, 5.

³⁰ IPCC 2007c, 8. More on examples of projected regional impacts see *ibid.* 11-12.

³¹ Tyndall Centre, quoted in Conam 2004.

³² Ministerio del Ambiente del Perú 2010, 117.

³³ Fundación Conservación Internacional (CI) et al. 2007, 5.

³⁴ Ministerio del Ambiente del Perú 2010, 16.

³⁵ Ministerio del Ambiente del Perú 2010, 16 and 41.

³⁶ Fundación Conservación Internacional (CI) et al. 2007, 5.

³⁷ *Ibid.* 2.

mainly from Andean glaciers but also from rain.³⁸ Of the world's tropical glaciers, 70 percent is situated in Peru but they are melting rapidly³⁹. During the last 30 years, there has been a 22 percent decrease in the water coming from the glaciers and it is now estimated that all the glaciers below 5000 metres over sea level could disappear in the next 10 years.⁴⁰ It is more than likely that they will have an influence on the coast's water supply.

Most Peruvians make their living in primary production, such as by agriculture or fishing. Eighty percent of the energy production comes from hydroelectric power.⁴¹ If the glaciers continue to melt at the same rate, there will be important problems for agriculture and energy production. Less water also increases the risk of diseases' transmission. Water conflicts would not be a new thing in Peru because there have already been conflicts on water supply between local communities and mining companies and between different regions.⁴²

As possible impacts of climate change, it has also been projected that the El Niño and La Niña weather events will get more frequent and intense. Due to weather events in the summer, there is drought in the Andean region and heavy rain and floods on the Northern coast.⁴³ If the events get more intense and frequent, this might have serious effects. For example, the damage made by the Mega-Niño in 1997 to 1998 caused a 4.5 percent loss in the gross domestic product⁴⁴.

The level of poverty⁴⁵ makes it difficult for the state, institutions and citizens to address climate change. The country's ability to get through catastrophes is not high, further complicating the issue. For example, the Mega-Niño caused important damage in Peru and the country has not yet been able to repair all the damage.⁴⁶

2.1.3. Greenhouse Gas Emissions in Peru

Peru contributes only 0.4 percent to global greenhouse gas emissions. The biggest share of greenhouse gas emissions in Peru comes from land-use change; almost half of the total emissions in

³⁸ Friend of the earth international 2007, 24.

³⁹ PNUMA 2007, 172.

⁴⁰ Ministerio del Ambiente del Perú 2010, 188.

⁴¹ Friends of the earth international 2007, 24.

⁴² Ministry for Foreign Affairs of Finland 2008.

⁴³ PNUMA & SERMARNAT 2006, 47-48.

⁴⁴ Jo 2008.

⁴⁵ It is important to note that poverty in Peru is higher in rural than urban areas. In rural areas, 60 percent of the population is poor and 21 percent extremely poor, while the situation is a lot better in the urban areas. In the urban areas, 23 percent of the population is poor and 3 percent extremely poor. Ministerio del Ambiente del Perú 2010, 42.

⁴⁶ Ministry for Foreign Affairs of Finland 2008.

2000. Energy produces 21 percent and agriculture 19 percent of the total emissions. Emissions from industry are quite small, only 7 percent of the total.⁴⁷ This can be explained by the fact that industry is still quite small in Peru.

Land-use change in Peru is principally due to illegal deforestation, which influences emissions in different ways. Cutting and burning of forests produces greenhouse gases and reduces both biodiversity and the forest's ability to bind carbon dioxide. The main factor for illegal deforestation is the burning of forests with slash and burn. Settlers move rapidly from place to place and cut and burn the trees in order to cultivate it. The people do not realize the impact of deforestation since there are no options to do things differently or any knowledge on the effects of this behaviour. It is important to notice the influence that poverty has in this sense.⁴⁸

Also the cultivation of coca plant and illicit drug production as a whole has an influence on deforestation. Cutting the trees is not the only environmental problem it creates. The coca paste is easier to transport than the leaves but in order to convert the coca leaves into paste many chemicals are needed. In this process, chemicals are introduced into nature and damaging the environment.⁴⁹ Peru is the world's second largest coca plant producer after Colombia. Of the overall production in the world, a third is produced in Peru.⁵⁰ Though most of the cultivation is illegal, it is important to note that a minor part of the production is legal. It is legal to produce coca leaves for the national coca company ENACO⁵¹. ENACO makes for example coca tea and candies from the leaves. Chewing of coca leaves is an important part of traditions in the country, alleviating the impact of high altitudes and preventing mountain sickness.

When discussing the illicit drug production problem, Peru and other producer countries argue that the western countries also have some responsibility since most of the cocaine is consumed there. Would there be any production if there were no markets for the product?

However, it seems that Peru is aware of the problem that deforestation creates. In the 14th Conference of Parties (COP14)⁵² in Poznan, Peru expressed the goal to voluntarily reduce its greenhouse gas emissions from deforestation to zero⁵³.

⁴⁷ Ministerio del Ambiente del Perú 2010, 18.

⁴⁸ See for example Ministry for Foreign Affairs of Finland 2008 and Teivainen 1999, 138-139.

⁴⁹ Ministry for Foreign Affairs of Finland 2008.

⁵⁰ United Nations Office on Drugs and Crime 2008, 9.

⁵¹ Empresa Nacional de la Coca (National Coca Company).

⁵² Conference of Parties to the United Nations Framework Convention on Climate Change. COP is the highest decision-making authority of the Convention. It meets once a year, unless the Parties decide otherwise.

⁵³ Ministerio del Ambiente del Perú 2009.

2.2. Historical Overview of the Climate Change Issue

Though the idea of climate change is not that new, it was only during the past three decades that “climate change has moved from being a minor, mostly scientific, matter in the affairs of states to being a prominent, front-burner foreign policy priority”. The scientific understanding of climate change provided the incentive for international agreements addressing climate change. “However, because the science has been intimately wrapped up with politics, climate diplomacy has often taken on a life of its own, one that is partly divorced from science.”⁵⁴

Bodansky divides the development of the climate change issue into five periods, ending with the conclusion of the Kyoto Protocol in 1997.⁵⁵ We will get back to the developments after this later on this chapter. Bodansky refers to the first period as the foundational period during which the scientific consensus on climate change emerged. Although already in 1896, the Swedish chemist Svante Arrhenius developed a theory of the effects of increasing atmospheric concentrations of carbon dioxide on global temperature⁵⁶, it took a long time before climate change emerged as a political issue. The question of climate change developed first in the scientific arena.⁵⁷

Bodansky calls the period 1985 to 1988 the agenda setting period. During this phase, climate change was transformed from a purely scientific concern into a policy issue. Besides the growth of scientific knowledge, which was important in laying the foundation for further action in public and political arenas, there were three additional factors that influenced governmental action on climate change. First, there was a small group of Western scientists who worked to get the issue of climate change on the international agenda. In addition, the end of 1980s was a period when concern about global environmental problems in general increased. Third, the heat wave and aridity in North America in summer 1988 gave a huge buzz to greenhouse warming exponents.⁵⁸

During the prenegotiation period from 1988 to 1990, governments became heavily involved in the process. Year 1988 is seen as a watershed for the emergence of the global climate change policy by many writers⁵⁹. Prior to 1988, the issue of climate change had been mainly a concern for non-governmental actors that were mostly environmentally-oriented scientists. However, in 1988, climate became an intergovernmental issue. Even when governments started having a larger role,

⁵⁴ Harris 2009, 1 and 5.

⁵⁵ Bodansky 2001, 23.

⁵⁶ More on Arrhenius see for example Vanderhein 2008, 3.

⁵⁷ Bodansky 2001, 23-26.

⁵⁸ Ibid. 23 and 26-27.

⁵⁹ See for example Vanderhein 2008, 5.

non-governmental actors still exercised considerable influence. The Intergovernmental Panel on Climate Change (IPCC) was established by the WMO and UNEP⁶⁰ and United Nations' General Assembly characterized the climate as a "common concern of mankind"⁶¹. Until 1990, climate change was of interest mainly to Western developed countries, and the basic division between Western countries had already become evident at this stage. Later on the split among developed and developing countries would also emerge. During this stage, the developing countries already argued that climate change should also be seen as a development issue instead of simply an environmental issue.⁶²

The formal intergovernmental negotiations phase led to the adoption of the United Nations Framework Convention on Climate Change. In order to adopt the framework, the negotiation process took three years before it was signed in 1992 at the UN Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil.⁶³

The last phase in Bodansky's division is the post-agreement phase. During this period, the focus was on the elaboration and implementation of the UNFCCC. The convention entered into force in March 1994 when 50 countries had ratified it. Afterwards, at the first Conference of Parties (COP1) in Berlin, it was decided to start negotiations on additional commitments and this decision eventually led to the adoption of the Kyoto Protocol in December 1997.⁶⁴

2.3. United Nations Framework Convention on Climate Change and the Protocol of Kyoto

At the global level, the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol form the base to address the challenge posed by climate change. The negotiations leading to the adoption of UNFCCC were fraught with tensions between developing and developed countries⁶⁵. Developing countries preferred adapting a framework convention as they feared that strong implementation procedures and institutions might trespass their sovereignty⁶⁶. Presently, the Convention has 195 Parties and consequently enjoys almost universal membership⁶⁷. The ultimate objective of the UNFCCC is: "stabilization of greenhouse gas concentrations in the

⁶⁰ World Meteorological Organization and United Nations Environmental Program.

⁶¹ UN General Assembly 1988, A/RES/43/53.

⁶² Bodansky 2001, 23 and 27-31.

⁶³ Ibid. 23 and 31-34.

⁶⁴ Ibid. 24 and 34-37.

⁶⁵ Harris 2009, 5.

⁶⁶ Bodansky 2001, 34.

⁶⁷ UNFCCCf.

atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”⁶⁸.

The main principles to tackle climate change were established in the UNFCCC. One of the important principles established in the Convention is the notion of ‘common but differentiated responsibility’⁶⁹. At the first Conference of Parties in 1995 in Berlin, the developed countries acknowledged their greater share of responsibility for causing climate change and thus would search for the means to address it first. Central to the Berlin Mandate was the demand by developing countries that the developed countries reduce their greenhouse gas emissions and assist the poor countries with sustainable development. Thus COP1 affirmed the idea of ‘common but differentiated responsibility’, meaning that, the developed states have a greater ‘differentiated’ obligation to address climate change although all countries have a common responsibility to do so.⁷⁰

The UNFCCC is complemented by the Kyoto Protocol. The major distinction between the Convention and the Protocol is that the Convention only encourages developed countries to reduce their emission, while the Protocol requires them to do so. Under the Protocol, the European Union and 37 developed countries (called Annex B -countries) are committed to reduce their emissions by a 5 percent average from 1990 baseline level over the five-year period 2008-2012.⁷¹ The emission caps range between countries. The legally binding reductions consist in the emission of six greenhouse gases: carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride.⁷² Developing countries are part of Non-Annex I- group and have no commitments to emission reductions.

The negotiations after 1992 were even more contentious than before. The ratification process of the Kyoto Protocol was everything but easy, and greater doubt was created after President George W. Bush withdrew all US support for it⁷³. Eventually in 2004, Russia ratified the Protocol and it entered into force in February 2005. The fact that Russia ratified the Protocol was important since it could not enter into force without the ratification by 55 countries representing 55 percent of the total

⁶⁸ UNFCCC 1992, article 2.

⁶⁹ UNFCCC 1992, article 3.

⁷⁰ Harris 2009, 6.

⁷¹ UNFCCCc.

⁷² Vanderhein 2008, 13.

⁷³ For more on US claims and reasons why not to participate in the Kyoto Protocol, see Vanderhein 2008, 15-21.

greenhouse gas emissions in the world and the withdrawal of USA had put this into danger.⁷⁴ By March 2011, 193 countries had ratified the treaty⁷⁵.

Peru ratified the UNFCCC in 1993 and the Protocol of Kyoto in 2002. Since Peru is a Non-Annex I- country, it is not obligated to reduce its emissions. The only obligation for Non-Annex I- countries is to submit national communications⁷⁶. Peru submitted its first national communication in 2001 and the second national communication in September 2010.

Mostly because of the insistence of United States, the Kyoto Protocol includes three market-based 'flexibility' mechanisms. These mechanisms allow Annex B -countries to meet a part of their reductions without reducing national emissions.⁷⁷ These Kyoto mechanisms are Emission trading (also known as 'the carbon market'), the Clean Development Mechanism (CDM) and Joint Implementation (JI). With emissions trading, countries that have emission units to spare can sell this excess capacity to other countries that are over their targets. Of course, the emission units sold must be permitted yet unused emissions. With JI, Annex B -countries can carry out joint implementation projects with other Annex B –countries⁷⁸. CDM allows Annex B –countries to invest in projects that reduce emissions in developing countries and use these emission reductions from the project as part of their own reductions.⁷⁹

Peru participates actively in the Clean Development Mechanism. The country has been ranked as the sixth most important host country of CDM -projects.⁸⁰ At the moment, Peru has 25 registered project activities⁸¹. By the end of 2010, Peru had 190 carbon projects in its portfolio. These represent a USD 11.7 million in investments. Most of the projects are from the energy sector with 147 projects all together. These will produce 25.8 million tons of carbon dioxide reductions per year if implemented. The portfolio also includes 43 projects in forestry sector of which 10 are REDD⁸² initiatives.⁸³

⁷⁴ Harris 2009, 5-8. More on problems concerning the negotiation process leading to the adoption of the Kyoto Protocol see also Bodansky 2001, 34-37 and Vanderhein 2008, 13-15.

⁷⁵ UNFCCCf.

⁷⁶ Parties of the Convention must submit national reports on the implementation of the Convention to the Conference of Parties (COP).

⁷⁷ Vanderhein 2008, 13.

⁷⁸ Usually economic transition countries.

⁷⁹ UNFCCCd.

⁸⁰ FONAMb.

⁸¹ UNFCCCe.

⁸² REDD means Reducing Emissions from Deforestation and Forest Degradation.

⁸³ FONAMb.

Even when climate change is now a prominent foreign policy priority, state responses to the problem of climate change and its impacts have not kept up with the increasing speed of climate change; “they are grossly inadequate”. The international political response to climate change has been incremental, delayed and ultimately weak when viewed relative to the degree of the problem and its projected effects on people, communities and the Earth.⁸⁴

2.4. Future of Negotiations on Climate Change

The commitment period of the Kyoto Protocol ends in 2012. Originally the Parties were supposed to get the new agreement ready in Copenhagen, Denmark in December 2009 but in the end the countries could not reach agreements. The lack of agreement was a big disappointment worldwide due to the high expectations for achieving an agreement on the future of combating climate change. The negotiations continued at the end of 2010 in Cancun, Mexico. In COP16 in Cancun, the Parties did recognize that “deep cuts in global greenhouse gas emissions are required”⁸⁵, but the important legally binding commitments to continue on reducing greenhouse gas emissions also after Kyoto were still missing.

The decision to start the negotiations under the UN process on a new climate agreement was made in Bali in COP13 in December 2007. Negotiations are held on two tracks. Following the Bali Action Plan, the new Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LC) was established as the first track. It works on the common vision for long-term action to reduce greenhouse gas emissions as well as on defining the future obligations for developed countries not included in the Protocol of Kyoto and for the developing countries. The second track had already begun before Bali in 2005. The Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol (AWG-KP) discusses future commitments for developed countries under the Kyoto Protocol as can be seen from its name. The main elements of the new agreement are mitigation, adaptation, technology and finance as agreed in the Bali Action Plan.

The acrimony between the developed countries and the developing world has been one of the visible aspects of negotiations on climate change. On the one hand, the developed countries have tried to persuade commitments from developing countries on emissions limitations, while developing countries have attempted to avoid such commitments. This conflict has plagued the

⁸⁴ Harris 2009, 1 and 15.

⁸⁵ UNFCCCb.

international negotiations on climate change.⁸⁶ However, in COP13 in Bali, developing countries agreed that they would think about taking unspecified future actions to reduce their greenhouse gas emissions. This was a significant shift from their longstanding policy of refusing to agree to any reductions whatsoever.⁸⁷ Even when this is an important shift, the negatives are still large. As Giddens notes, "[t]he splits between key players, the divergent interests and perceptions that exist between nations and blocs of nations, are all still there."⁸⁸

⁸⁶ Harris 2009, 7.

⁸⁷ Harris 2009, 8.

⁸⁸ Giddens 2009, 192.

3. JUSTICE AND EQUITY

3.1. State and Environmental Problems

From the political perspective, the world is made up of states. From an environmental perspective, the world is composed of ecosystems. The Amazonian rainforest in South America is a good example since it stretches from Peru to Brazil and Ecuador and up through the Guyana. DeSombre notes that this dissociation between political and ecological systems makes addressing environmental issues at the global level both necessary and difficult.⁸⁹ This is also because environmental problems are often distinctive in the way they ignore the borders between states. Harris sees that environmental “problems in one country affect others and problems restricted to one country require the involvement of others (e.g., financial assistance and technology) if they are to be resolved or remain local”.⁹⁰ Climate change is an example of an originally environmental problem that ignores the borders between countries. The world is a single country for global carbon accounting purposes. The atmosphere on the Earth is a common resource without borders. Greenhouse gas emissions mix freely in the atmosphere over space and time. It makes no difference for climate change from which country the greenhouse gases come since they are not segmented by country of origin.⁹¹

The fact that countries cannot tackle many environmental problems effectively on their own drives international cooperation. DeSombre also argues that all parties can benefit, at least in the aggregate, from working together to solve or prevent an environmental problem in many situations.⁹² Many actors, forces and issues acting internationally and domestically influence and affect the national environmental standards and environmental foreign policies of states. Also the states have an impact on international environmental cooperation.⁹³ “[A] multiplicity of states with their own concerns and decision-making structures and a variety of competing domestic interests” makes successful mitigation of environmental problems sometimes a difficult task. Even in situations when all countries benefit from protecting the environment, some may benefit more than other countries, “and most would benefit from taking no action at all and leaving environmental protection to others.” As DeSombre notes, this is a recipe for complete inaction. However, she sees that countries have largely learned and must learn how to avoid this.⁹⁴

⁸⁹ DeSombre 2002, 1.

⁹⁰ Harris 2009, 11.

⁹¹ UNDP 2007, 39.

⁹² DeSombre 2002, 1.

⁹³ Harris 2009, 11.

⁹⁴ DeSombre 2002, 1-2.

Also Karp and Zhao have noticed the distinctive nature of environmental problems. They argue that it is not possible to divide the good and bad consequences of an action. Karp and Zhao see the problem from the point of view of climate change and note that in terms of equity “[t]o the extent that descendants of the early emitters benefit from those emissions, i.e. to the extent that they are currently richer than average because of accidents of birth, they should also bear more of the costs of remedying the bad consequences.”⁹⁵

3.2. Inequality in International Relations

The issue of inequality was long neglected in the traditional investigations of the world order. Inequality was seen as a positive, ordering and restraining force.⁹⁶ For students of International Relations, ethical analysis was seen as a contribution only to discussions concerning individual behaviour and in which way individuals could ideally lead good lives. “Hard-headed analysis of international affairs has been thought to require a focus upon deeper structures or broader forces [...]”⁹⁷ Also Frost sees that even though “normative questions regularly arise in the day-to-day practice of international politics, the discipline of international relations has not accorded ethical theory a central place within it.”⁹⁸

The widely accepted notion of a formal kind of equality among states meant that in international society all states should be treated as equal members of it. Even when this ‘foundational equality’ underpinned support for self-determination, decolonization and access to international organizations after the Second World War, developing countries soon became disenchanted with this formal kind of foundational equality. Because of this, developing countries began since the 1960s presenting inequality in more demanding terms, “arguing their case for greater ‘distributional equality’ on the grounds of justice”. Distributional equality in international relations implies the need of transferring power and wealth from powerful, wealthy countries to the poorer ones.⁹⁹

Though inequality was put at the top of world politics’ agenda in the 1970s, the international community soon changed dramatically. Because of the debt crisis and new neo-liberalism arguments supporting wealth, transfers and redistribution vanished from the agenda of world

⁹⁵ Karp & Zhao 2009, 84.

⁹⁶ Woods 1999, 8.

⁹⁷ Shue 1995, 453.

⁹⁸ Frost 1996, 1.

⁹⁹ Woods 1999, 8-12.

politics in the 1980s. Theories of self help, which argue that poorer countries and individuals should take responsibility for their own actions and choices, replaced arguments for inequality. “Today justice-claims based on the inequality of resources among states have all but disappeared.”¹⁰⁰

At first, environmental issues were not seen as a part of global inequalities. Environmental issues began to be related to global inequality in 1987 when the Brundtland Commission’s report *Our Common Future*¹⁰¹ was published and in 1992 when the Earth Summit (UN Conference on Environment and Development) was held in Rio de Janeiro, Brazil. Since then issues concerning environment have turned up as central worries on the global agenda. Redcliff and Sage explain that the environmental concerns are linked to economic and social aspects of development “because they appear to set limits on what can be achieved by ‘development’ itself”.¹⁰² Climate change is an example of this. It is not only a global environmental problem but also presents an incomparable case of global injustice. If we are not able to adequately address the problem of climate change it will and already does exacerbate the global inequity. As Vanderhein highlights, global inequity is part and parcel of the problem of climate change itself.¹⁰³

3.3. UNFCCC and Justice/Equity

The UN Framework Convention on Climate Change states in its Article III:

“The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof.”¹⁰⁴

Even when responding to climate change is based on ‘common but differentiated responsibilities’, a key factor of justice or equity is that the effects of climate change fall disproportionately on those least able to bear them and who received almost no benefits from historical emissions.¹⁰⁵ This reflects the important task identified by Martin Khor that it is central how to “[...] assign the tasks

¹⁰⁰ Woods 1999, 14-16.

¹⁰¹ Also known as the Brundtland Report. It is a report of the United Nations World Commission on Environment and Development (WCED).

¹⁰² Redcliff & Sage 1999, 122-123.

¹⁰³ Vanderhein 2008, xiii-xiv.

¹⁰⁴ UNFCCC 1992, Article 3.1.

¹⁰⁵ UNEP 2009, 4.

between Annex I and non-Annex I in a fair manner reflecting common but differentiated responsibilities, including historical responsibility and the need for development”.¹⁰⁶

North and South speak on equity with slightly different emphasis. Müller sees that the most important concerns on equity in the climate change context in the Northern hemisphere are viewed as issues related to mitigation, especially the allocation of emission targets. In the South, the concern is primarily about the discrepancy between the responsibility for and the sharing of burdens of the impacts of climate change. Many developing countries feel that the efforts so far have focused on mitigation and not on adaptation, which is important especially for the vulnerable countries. Müller sees that in order to achieve an effective response to climate change, it is vital to listen and take note also of the real concerns of developing countries.¹⁰⁷

Participants and observers in international climate negotiations far and wide recognize concerns for justice or equity as a central element in order to achieve effective responses to climate change.¹⁰⁸ This is because even when climate change is a global problem, it also comprises enormous differences between nations.¹⁰⁹ Generally speaking, climate change and its potential impacts may result in even greater international inequalities. It is possible that present international structures will not be sufficient to alleviate this situation.¹¹⁰ Issues of international justice are not only important in their own right but also present obstacles to the generation of effective responses to the problem of climate change. To find a solution to issues of international justice is presently a necessary condition for successful action to tackle climate change.¹¹¹

Even when the principle of justice or equity is seen as crucial, there is no widespread agreement on its meaning.¹¹² Paterson notes that some writers use the term equity apparently considering that its definition is not problematic as if it had commonly-understood implications and meanings. However, many different positions are feasible when imagining how equity could be considered in an agreement.¹¹³ As Shue writes, we need to have a consensus on what this principle means if we hope for cooperation that is equitable. “[W]e need to define equity, not as a vague abstraction, but concretely and specifically in the context of both development of the economy in poor states and

¹⁰⁶ Khor 2009, 5.

¹⁰⁷ Müller 2002, 39-40.

¹⁰⁸ Paterson 2001, 119. See also Paterson 1996, 181.

¹⁰⁹ Grubb 1995, 463.

¹¹⁰ Luterbacher & Sprinz 2001, 7.

¹¹¹ Shue 1992, quoted in Holden 1996, 152.

¹¹² Paterson 2001, 119.

¹¹³ Paterson 1996, 184.

preservation of the environment everywhere.”¹¹⁴ Haukkala sees that “equity is a concept that needs to be defined over and over again as the circumstances change”. What really matters for him is how the definition of equity’s practical meaning is understood in each situation.¹¹⁵

3.4. Principles of Justice

There are many viewpoints on what an agreement based on justice or equity would look like. However, as Paterson notes this literature on the whole does not get involved with the more general literature that has emerged on the issue of justice. Much of the literature on climate change begins with already formed conceptions of justice or equity and then proceeds with a technical discussion on the implementation, reflecting the policy-oriented concern of most of the discussion on the climate change.¹¹⁶ Paterson has sought to fill this gap through his research¹¹⁷ by analyzing the different approaches present within the more general literature on justice in International Relations. He identifies six approaches to justice and investigates how these can be seen in the climate change debate.

A prevalent way to think about justice is based on rights. In the climate change debate, justice as based on rights frames the issue as the right to a stable climate.¹¹⁸ As Paterson notes, the language of rights has not been greatly invoked in the climate change debate. There are good reasons why thinking about rights does not provide a strong grounding for action on the issue. To explain, Paterson draws two important reasons from O’Neill’s discussion on the subject. Firstly rights are often unsuccessful in specifying those who hold correlative obligations. Since no obligation-holders have been specified, rights may not be realized. A second reason is that rights are notoriously hard to ground.¹¹⁹

Paterson derives the remaining five approaches from Brown’s¹²⁰ discussion on international justice. The second approach, built on responsibility or causality, conceptualizes justice as righting the wrong. In short, the ones who are causing a problem or harming others have a moral responsibility to address the situation. This argument has immediate echoes with the debate on climate change. Indeed, when talking about justice and climate change, many actors base their reasoning on the

¹¹⁴ Shue 1999, 531.

¹¹⁵ Haukkala 2001, 22.

¹¹⁶ Paterson 1996, 181-182.

¹¹⁷ Paterson 2001, 119-126 and Paterson 1996, 181-195.

¹¹⁸ Paterson 2001, 120.

¹¹⁹ O’Neill 1991, quoted in Paterson 1996, 188.

¹²⁰ Brown 1992, 155-188.

historical responsibility of developed countries whose actions caused the problem of climate change.¹²¹ This approach to justice is present in the Kyoto Protocol because only developed countries have the obligation to reduce emissions.

An objection to the responsibility position is the communitarian argument. The communitarian point of view criticizes arguments suggesting that justice can surpass community boundaries as implausible since ethical ideas are rooted in specific communities. Even when this argument is plausible in other issue areas, Paterson argues that it is unconvincing when talking about climate change because the interdependence between countries is undeniable, both in how dependent each country is on the actions of others for its welfare (the degree of interdependence) and how this constitutes each country's relationship to climate change (the meaning of interdependence).¹²²

O'Neill presents an objection to the approach based on responsibility. She sees that while in principle causing a problem does bestow obligations to resolve the situation, it is often practically impossible to track the lines of causality with any clarity. A particular problem is to assign obligations to people who must pay for harm caused by their ancestors.¹²³ O'Neill discusses this problem with respect to the West's historical responsibility for colonialism. Paterson argues that it also applies to climate change, although he notes that the causal lines might be clearer in relation to climate change¹²⁴.

Many other writers have also written on the problem of tracing responsibility. Shue notes that some use it as a counterargument for equity as based on unequal burdens in the defence that "people can not be held responsible [...] for harmful effects that they could not have foreseen". This kind of objection is based on confusion between responsibility and punishment. It is not fair to discipline someone for producing impacts that could not have been avoided, but it is common to hold people responsible for effects that were unavoidable and unforeseen.¹²⁵ Harris and Yu write quite similarly in their article "*Climate change in Chinese foreign policy*", where they argue that it is no longer sufficient for China to keep blaming the rich countries for causing climate change. While the rich countries produced much of the greenhouse gases until about the 1980s, the rich countries were not aware at the time that they were causing climate change. This is not the same for China in the present, and I think this could also hold true for many other developing countries, especially the

¹²¹ Paterson 1996, 189.

¹²² Paterson 1996, 188-189

¹²³ O'Neill 1991, quoted in Paterson 1996, 189.

¹²⁴ Paterson 1996, 189.

¹²⁵ Shue 1999, 535-536.

rapidly industrializing ones. Since the beginning of China's massive economic expansion, China has been aware of its effects on the global atmosphere. Harris and Yu therefore argue that China has a responsibility to act "at least within its means", although this does not imply a reduction in the rich countries' much greater responsibility.¹²⁶

The third approach is a utilitarian position as exemplified by Singer. He sees that "if it is in our power to prevent something bad from happening, without thereby sacrificing anything of comparable moral importance, we ought, morally, to do it".¹²⁷ This means that the people should act to maximize the overall human welfare, which most often will involve resource transferring from rich to poor.¹²⁸ Singer's approach to justice concerns extremes of affluence and poverty, especially with respect to famine.

Singer's approach has problems that cannot be ignored. Firstly, its focus is on individual action. Paterson notes that the location of utility is always on individuals. Rather than placing the obligation on social and political institutions, Singer places it at the level of the individual. Therefore, it is not obvious in which way political institutions should react as it would be more difficult than for individuals in practical terms to identify the actions which would have the most beneficial effect. Additionally, states will arguably be more compromised by competing obligations than individuals.¹²⁹

Singer's approach is not only problematic at the national level but also at the global level. Paterson argues it might even be impossible to apply it globally when seen in the context of climate change. Climate change is so complex that it is inconceivable to identify what actions might improve overall welfare, but most importantly climate change questions the meaning of human welfare. "Do we value material goods and economic growth over risks to do with climate change impacts [...]?"¹³⁰

A Kantian position is the fourth approach to justice as developed by O'Neill with respect to international justice. Obligations derive in part from the Kantian categorical imperative itself: justice requires that we act on universally applicable principles. O'Neill also argues that a precondition of human beings acting as rational and moral agents is threatened, and thus in a Kantian system we are obliged to act in order that all humans may become rational and moral

¹²⁶ Harris & Yu 2009, 64.

¹²⁷ Singer 1972, quoted in Brown 1992, 166.

¹²⁸ Paterson 2001, 120.

¹²⁹ Paterson 1996, 190.

¹³⁰ Paterson 1996, 190.

agents. In the context of climate change, a universal principle could be such as not endangering the global climate system. Paterson sees this approach as being difficult to implement. Even when it might be possible to generate a universal principle, such as not endangering the global climate system, it is not that easy to define the actions required for these principles.¹³¹

Another universal principle could be that nobody should intentionally deteriorate the environment in which other people live. This principle could provide the basis for making the case that states should reduce their emissions if they have polluted disproportionately and that unequal efforts by states can be justified. This could also justify transfers from North to South by making them fulfil the obligation to act in order that others may become moral and rational agents with respect to climate change.¹³²

The fifth approach is a Rawlsian position. Rawls defined a difference principle such that “social and economic inequalities are to be arranged so that they are [...] to the greatest benefit of the least advantaged”¹³³. For Rawls, a precondition for participation in the original position¹³⁴ is membership in a particular society, which he defines as a “co-operative venture for mutual advantage”¹³⁵. Beitz’s original critique of Rawls is based on this definition of society because he suggests that the world as a whole should be seen as such a ‘cooperative venture’ due to the interdependence between countries. Later on, even when Beitz indicates that this argument is difficult to support, he continued to maintain that the difference principle should be applied at the global level “on the more ethically plausible grounds that [...] membership of a particular society is morally arbitrary”.¹³⁶ Paterson indicates that climate change could be used to illustrate this justification because it is entirely a matter of chance if one is vulnerable to climate change, and this makes it even more obvious that it is morally arbitrary where one lives.¹³⁷

Out of the different approaches to justice in climate change, Paterson argues that the Rawls/Beitz position probably generates the most straightforward route to identify practical arguments as responses to climate change. The responses “are just to the extent that they improve the position of the worst off”. It expressly suggests that the distributional effects of social institutions should

¹³¹ Paterson 2001, 120 and Paterson 1996, 190-191.

¹³² Paterson 1996, 191.

¹³³ Rawls 1971, 302.

¹³⁴ Brown defines Rawls’ original position as somewhat similar to classical contract theorists’ ‘state of nature’. Brown 1992, 172.

¹³⁵ Rawls 1971, 4.

¹³⁶ Beitz 1979, quoted in Paterson 1996, 191-192.

¹³⁷ Paterson 1996, 192.

benefit the worst off though this does not mean it is the most satisfactory principle of distributive justice.¹³⁸

Additionally, the Rawlsian approach also generates some problems of which Paterson highlights two. First is Shue's notion that "Rawls provides no basic conditions below which people should not be allowed to fall: The Rawlsian difference principle can be fulfilled while people continue to drown but with less and less water over their heads".¹³⁹ Secondly, as Brown notes, Beitz's modified position is unstable. Beitz still hangs on Rawls' difference principle but rejects his notion of mutual advantage, which is the basis of Rawls' society. "This would seem to be an unstable position since the point of the difference position is that it represents a just distribution of the benefits of mutual co-operation."¹⁴⁰ Paterson suggests that this illustrates that Rawls' position is fundamentally utilitarian at a basic level, and thus suffers from some of the limitations of utilitarianism¹⁴¹.

Finally, the approach to justice developed by Brian Barry starts with a critique of the Rawls' notion of 'justice as fairness'. Barry characterizes the distribution of the products of cooperation as 'justice as reciprocity'. The main problem with 'justice as reciprocity' for him is that it fails to provide arguments for applying concern for justice in situations where justice may be most needed, such as where the weakest have no influence. Instead of 'justice as reciprocity', Barry argues for a notion of 'justice as impartiality': "the role of moral philosophy is not to systematize self-interest but to promote a willingness to submit to reasoned judgment".¹⁴² Brown points out that Barry's approach has the advantage of not contradicting the pain which acting on these principles could cause in rich countries, but proceeds from the suggestion that if rich countries agree with reasoned judgment, they could not justify the level of existing inequality across the world.¹⁴³

As for climate change, the notion of justice as reciprocity might get further in justifying North-South transfers than generally recognized in international relations. But as noted by Barry, it does not provide reasons for the most needy, and thus in the context of climate change the poorest, smallest, and many times the most vulnerable, "who may be most deserving of considerations of justice", are left out. Thus it would only help the rapidly industrializing or large developing countries.¹⁴⁴

¹³⁸ Paterson 1996, 192 and Paterson 2001, 121.

¹³⁹ Shue, quoted in Paterson 1996, 192.

¹⁴⁰ Brown 1992, 177.

¹⁴¹ Paterson 1996, 192.

¹⁴² Brown 1992, 180-181.

¹⁴³ Paterson 1996, 193.

¹⁴⁴ Ibid. 193.

Paterson sees Barry's position as the most fruitful route to start discussions of justice in climate change debate since it could be applied by implying that justice requires that countries should start by asking what is reasonable to expect of each other instead of acting on self-interest.¹⁴⁵

3.5. Justice Approaches in the Climate Change Debate

As already mentioned, there are many ways to think about justice in general and also within the context of climate change. Since it is not possible to discuss all these viewpoints, I will focus on a list of positions given by Grubb et al. in *Sharing the Burden*. Paterson sees this as the most comprehensive list of different perspectives on the issue¹⁴⁶. At the end of this chapter, I will also draw on the work of Shue.

First of the seven perspectives given is the 'polluter pays' rationales based either on historically accumulated contributions to climate change or current emissions. The second approach is an equal entitlements position in which all persons have an equal right to use the atmospheric commons. Thirdly, there is a 'willingness-to-pay' justification derived from welfare economics and after this a 'comparable' burden argument meaning that each participant should bear a comparable burden based on their condition. The fifth approach is the simple idea that the distributional implications of an agreement should be taken into consideration¹⁴⁷. Number six is the preservation of the status quo approach. In this conservative position, it is seen that the present emitters have created some common law right to use the atmosphere as they at the moment do. Last on the list is a 'reasonable' emissions approach; countries simply have a right to 'reasonable' emissions which enable them to meet basic needs.¹⁴⁸

Figure 1 below summarizes the positions presented in Sections 3.4. and 3.5.1. There is no clear one-to-one correspondence between the two sets of literature, except maybe in the cases of the Rawlsian approach and the causal responsibility. However, the figure shows some of the ways in which different approaches in the climate change debate can be grounded.¹⁴⁹

¹⁴⁵ Paterson 1996, 193.

¹⁴⁶ Paterson 1996, 185 and Paterson 2001, 120.

¹⁴⁷ Paterson notes that this position draws explicitly on Rawls (*A Theory of Justice* 1973). Paterson 2001, 120.

¹⁴⁸ Grubb et al. 1992 in Mintzer (ed.); quoted in Paterson 1996, 185 and Paterson 2001, 120.

¹⁴⁹ Paterson 1996, 194.

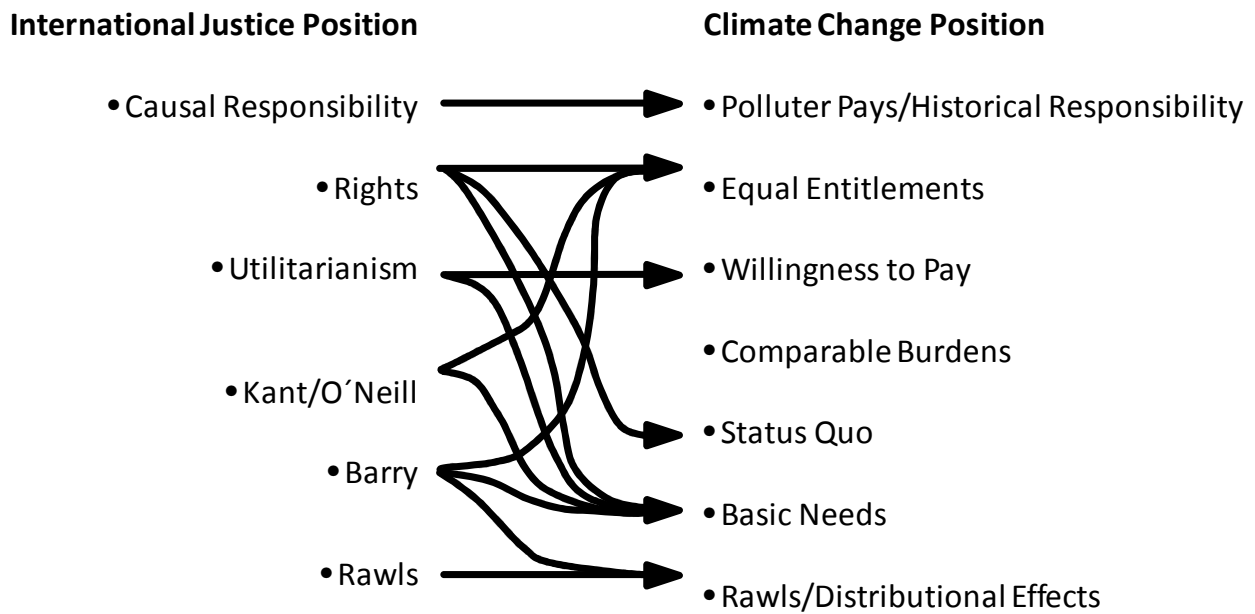


Figure 1. Adapted from Paterson 1996, 194.

Paterson sees the basic needs position as the most plausible of the ones given on this reading. The position seems able to be justified through Kantian, Barry’s, utilitarian and rights-based approaches.¹⁵⁰ Shue has also adopted the basic needs approach and sees justice as inherently part of the discussion on climate change. For him, rational bargaining would not fulfil the requirements of justice. One of the reasons given by Shue is based on the basic needs position. He sees that the interests of poor nations are vital, survival interests. Justice “does not permit that poor nations be told to sell their blankets in order that rich nations may keep their jewellery”.¹⁵¹

In his later works, Shue divided the question of justice in four points as it arises in relation to climate change. The questions are:

1. What is a fair allocation of the costs of preventing the global warming that is still avoidable?
2. What is a fair allocation of the costs of coping with the social consequences of the global warming that will not in fact be avoided?
3. What background allocation of wealth would allow international bargaining (about issues, like 1 and 2) to be a fair process?

¹⁵⁰ Paterson 1996, 195.

¹⁵¹ Shue 1992, 394-397 in Hurrell & Kingsbury (eds.), quoted in Paterson 1996, 182-183.

4. What is a fair allocation of emissions of greenhouse gases (over the long-term and during the transition to the long-term allocation)?¹⁵²

3.6. Different Conceptions of Justice/Equity

Paterson highlights that it is important to distinguish between two different conceptions of justice: retributive and distributive justice. Retributive justice means that those causing a problem have the responsibility to recompense it. Even when this is largely undisputed as an ethical principle in general, its application to climate change is complicated by the empirical debates concerning responsibility for causing climate change as discussed previously. At the same time, retributive justice underlies many proposals that have emerged in climate change negotiations, for example the ‘differentiation’ of commitments. On the other hand, approaches of distributive justice entail distributing costs (or benefits) among interdependent parties, and most of the previously mentioned approaches to justice address this issue.¹⁵³

In addition to the previously mentioned approaches to justice, intragenerational and intergenerational justice/equity approaches are also important. The already cited Article III of the UNFCCC reflects two dimensions of equity: firstly the dimension of fairness between generations and secondly fairness between countries, more commonly referred to as intergenerational and intragenerational justice/equity. Grubb indicates that the recognition of intergenerational equity in practice does little more than support what most countries have by now acknowledged as obvious: humans need to do much more to reverse their growing interference with the global ecosystems and atmosphere. However, Grubb does note that intergenerational equity is a complex and important economic and philosophical issue.¹⁵⁴ Paterson argues that intergenerational justice is normatively important because future generations will experience many of the presumable effects of climate change to a larger degree than present generations. As a result, many authors argue that current generations have major obligations to future generations.¹⁵⁵

So far the discussion on equity has mainly focused on intragenerational justice/equity, i.e., justice within a generation.¹⁵⁶ Grubb conceptualizes this as the international dimension of equity. Intragenerational equity gives rise to the important international political issues of when, how and

¹⁵² Shue 1993, 51.

¹⁵³ Paterson 2001, 121.

¹⁵⁴ Grubb 1999, 464.

¹⁵⁵ Paterson 2001, 121-122.

¹⁵⁶ Ibid. 121.

who should act within countries, thus raising problems centrally related to the nature and ethical basis of international political and economic relationships.¹⁵⁷ Compared to intergenerational equity, more attention is paid to intragenerational equity in the negotiations on climate change. Paterson sees this is mainly because questions of justice within the existing generations “clearly affect bargains states can make and the power relations between them”.¹⁵⁸

The global nature of climate change challenges conventional assumptions about state sovereignty and the geographically limited nature of principles of justice.

“By the nature of individual greenhouse gas emissions, the conventional assumptions regarding moral and legal responsibility are complicated by the complex causal chain and aggregative nature of climate-related harm, again challenging the conventions of applied ethics and political theory.”

Climate change defies prevailing egalitarian theories of justice due to their definite rejection of cosmopolitan justice and their inability to articulate a defensible account of intergenerational justice because of its unique international and intergenerational redistributive effects.¹⁵⁹

¹⁵⁷ Grubb 1999, 464-465.

¹⁵⁸ Paterson 2001, 122.

¹⁵⁹ Vanderhein 2008, xiv-xv.

4. THE METHODOLOGICAL TOOLS

In this chapter, I present the methodological bases of my thesis. First I will introduce research interviewing and especially the general interview guide approach¹⁶⁰. Since the material for my research was collected by interviewing, I will also go through the process of doing interviews. In the last part of this chapter, I will concentrate on discourse analysis as the method to analyze the interviews.

4.1. The General Interview Guide Approach

Interviewing is one of the basic forms for acquisition of information. In social and behavioural sciences, interviewing in its different forms is one of the most used methods. Interviewing is a very flexible method and fits with many different types of researches.¹⁶¹ I chose interviewing since it is useful when doing research on a little explored, unknown issue. Interviewing makes it possible to situate the respondents' speech in a wider context. It is also a useful method when it is known beforehand that the issue treated produces complex answers leading in many directions, as is the case when researching an issue like climate change and more concretely the concept of justice. It is an issue that most certainly will lead in many directions and that is a little explored issue from the perspective of Peru and Peruvians. Since I was unable to find any previous research addressing justice, climate change and Peru, interviewing emerged as the best manner to obtain this kind of research material.

The idea of an interview is simple: when you want to know what somebody thinks about something, the most efficient and simple way is to directly ask that person about the issue/s treated¹⁶². "Interviewing provides access to people's ideas, thoughts, and memories in their own words rather than in the words of the researcher."¹⁶³ In an interview one is in a direct verbal interaction with the respondent and this gives to the interviewer the opportunity to guide the acquisition of information during the interview¹⁶⁴. During the recent years, mainly thanks to feminist research, interviews are now conducted in a more conversation-like way rather than a strict question-answer manner.¹⁶⁵

¹⁶⁰ I call the method for gathering the research material the "general interview guide approach" as used by Patton. In this part I also refer to the method of Hirsijärvi and Hurme who call their method "theme interview" (a direct translation from Finnish). However, since Hirsijärvi and Hurme (2001, 48) accept that the method used by Patton is the same type as theirs; consequently, I use the English term of general interview guide approach to refer to this type of interviewing.

¹⁶¹ Hirsijärvi & Hurme 2001, 11.

¹⁶² Eskola & Vastamäki 2007, 24.

¹⁶³ Jacoby 2006, 161.

¹⁶⁴ Hirsijärvi & Hurme 2001, 11.

¹⁶⁵ Eskola & Vastamäki 2007, 24-25.

A research interview can be made from many different starting points and in different ways, creating multiple types of interview. The main differences can be seen in the level of structuring; i.e., how fixed are the questions and to what extent the interviewer structures the situation. The repertoire of names for interviews is mixed and one could say that partly confusing. Researchers use different names for methods that are similar or vice versa use the same name for methods that are totally different. Hirsijärvi and Hurme indicate that the structured, standard interview form constitutes its own category and the other interview types have their own category.¹⁶⁶ Eskola and Suoranta specify that in structured interview the order of the questions and the actual questions are the same for all the interviewed and also the options for answering are easily classified.¹⁶⁷ Patton argues that there are three basic approaches for open-ended interviews, where their differences are the extent to which interview questions are standardized and determined before the interview is performed. The standardized open-ended interview consists of a set of questions carefully arranged and worded beforehand. The intention is to take each respondent through the same sequence and the same questions with the same words. However, the options for answering are not prepared. In the general interview guide approach, a set of issues are outlined to be explored with each respondent before the interviews are held. All relevant topics are covered with each respondent. In contrast, the informal conversational interview, which is also called unstructured interview, relies totally on the spontaneous generation of questions and even themes in the natural flow of interaction; this interview is often used in fieldwork.¹⁶⁸

In this research, I used the general interview guide approach, which consists in a conversation where the aim of the researcher is in interaction to find out what the person interviewed thinks on the topics relevant for the research in question¹⁶⁹. Hirsijärvi and Hurme specify that the general interview guide approach is a semi-structured method, meaning that some aspects of the interview are nailed down but not all the aspects.¹⁷⁰

In the general interview guide approach, the topics of the interview, which are already decided before hand, are essential. The interview guide lists the issues or questions that are to be handled during the interview. An interview guide is prepared to make sure that the same basic lines of inquiry are pursued with each respondent. Interview guides can be more or less detailed depending on the extent to which it is important to ask questions in the same order to all the persons

¹⁶⁶ Hirsijärvi & Hurme 2001, 11 and 43.

¹⁶⁷ Eskola & Suoranta 2001.

¹⁶⁸ Patton 2002, 342.

¹⁶⁹ Eskola & Vastamäki 2007, 24-25.

¹⁷⁰ Hirsijärvi & Hurme 2001, 48.

interviewed and the extent to which the interviewer is able to specify relevant topics beforehand.¹⁷¹ Also the extent of one topic may vary as compared with the other topics. The questions inside one topic can vary according to the respondent and the situation; the interviewer can specify questions according to the respondent's answers. All this frees the interview from the interviewer's point of view and elicits the respondents' voice. The general interview guide takes into account that the interpretations and meanings that people give to things are central and that these meanings are born in interaction.¹⁷² The guide keeps the interaction focused while it allows individual experiences and perspectives to emerge¹⁷³. In the next sections, more on the topics selected for my interview guide and on the process of interviewing.

4.2.1 The Interview Guide

Eskola and Vastamäki indicate that a good interview is based on creative thinking, previous knowledge, and previous research on the topic and theoretical literature. It is essential to keep the research questions in mind since they tie everything together and justify asking different questions.¹⁷⁴

I chose consciousness of climate change in Peru as my first topic¹⁷⁵ in the interviews. I felt it was an easy subject to start with as there is no correct answer to consciousness on the issue of climate change in Peru and consequently everybody can have an opinion on it. It is also an interesting theme because climate change got more attention during year 2008 than ever before in the country. Though climate change had more presence in the agenda, it is not obvious that the consciousness on the issue would be high or even moderate in the country. Additionally, after discussing this topic, it should be easier to move on to the next ones.

My second topic was the international negotiations on climate change. I used this topic to get closer to the issues of interest as well as to examine more closely the theoretical concept of justice in the climate change debate. The third topic was Peru's national strategy on climate change. This topic I chose in order to get more information on Peru's own actions and how the respondents perceived the situation of adapting to and mitigating climate change in Peru. Even though I had numbered the

¹⁷¹ Patton 2002, 343-344.

¹⁷² Hirsijärvi & Hurme 2001, 48.

¹⁷³ Patton 2002, 344.

¹⁷⁴ Eskola & Vastamäki 2007, 34.

¹⁷⁵ See Annex 1; Interview questions.

topics, I did not necessarily address them in this order but instead the order was dependent on the respondents' answers.

I did not make any preliminary interviews in order to validate my interview guide. However, I felt the interview guide was well-designed and as the interviews advanced I learned how to make some of the questions better and more understandable. Under each topic, I had more concrete and detailed questions that were meant to work as the interview's structure and to deepen the conversation. Eskola and Vastamäki recommend not to make detailed questions as it might make it difficult to have a natural conversation¹⁷⁶. However, as Jokela notes it might be necessary to have under each topic some more concrete questions especially when starting the interviews¹⁷⁷.

Additionally, I felt more secure having concrete questions, especially in the first interviews, since I had no previous experience of doing research by interviewing. However, after the first interviews, I did not need the questions as much because I felt more confident once the interviews started. Also since some of the more concrete questions within one topic were treated during the previous topics, it was not necessary to ask them again. This is also one of the basic ideas of the interview guide: the interview advances principally according to the respondent's answers. As the interviewer, my main objective was to make sure all the topics were handled during all the interviews.

4.2.2. Interviewing

The interviews were held in Lima, Peru in March and April 2009. Choosing the respondents was a mixture of discretionary¹⁷⁸ and snowball¹⁷⁹ sampling. After having arrived in Peru, I contacted the Embassy of Finland in Lima to make an appointment with the Ambassador and the development cooperation assistant. In the interview with them, I obtained contacts to Peru's Ministry for Environment and to a few non-governmental organizations working on the climate change issue in Peru. I also had a meeting with a non-governmental organization called LABOR Asociación Civil¹⁸⁰, which works on many issues, including climate change. I had previously met one person from the organization in a climate change conference in Finland and asked if they could help me with getting contacts for doing the interviews. When in Peru, they gave me a list of persons working in the area of climate change in Peru.

¹⁷⁶ Eskola & Vastamäki 2007, 35.

¹⁷⁷ Jokela 1994, 21.

¹⁷⁸ See Eskola & Suoranta 2001, 18.

¹⁷⁹ See Hirsijärvi & Hurme 2001, 59-60.

¹⁸⁰ See LABOR.

With this initial list together with the Embassy contacts (altogether approximately 20 persons), I started contacting the persons. First, I sent an e-mail to everyone on the list. I introduced myself, commented my previous experience in Peru, briefly explained the subject and aim of my research, and asked if it would be possible to interview the person in question. After the initial contact, I then called the persons either because they had asked me to do that in answering my e-mail or because I had not received an answer. In the telephone contact, I indicated the aim of the interview and the themes to be handled in it. In the end, I did not contact all the persons on the initial list since I did not see them as the most appropriate for my research.

I have interviewed 11¹⁸¹ persons for this research. I interviewed 10 of the respondents in their work place and one was made in a cafeteria. With some of the participants, I did not hold the interview the first time when we met because they wanted to know more of my research before accepting to be interviewed. I answered their questions and then we agreed on a new time for the interview. In the beginning of the interview, I again introduced myself, explained the subject of my research and told why I was interested in interviewing the respondent in question. I recorded all the interviews with a digital recorder after having asked for permission from the respondent. On average, the interviews lasted approximately 47 minutes with the shortest being 30 minutes and the longest 1 hour and 33 minutes¹⁸².

My objective was to have respondents from different sectors of the society, but when holding the interviews I noticed that it was not easy to categorize the respondents in one box (e.g., working only for the government or a non-governmental organization). For example, some of the persons I interviewed work both in a non-governmental organization and in a university; another person is a member of the IPCC, works as a consultant on the climate change issue for the Ministry of Foreign Affairs of Peru and is a university professor. However, it is important to note that the persons interviewed presented their own opinion and not necessarily that of the organization where they work. In Annex 2, I indicated each respondent's occupation as indicated and also their previous experience on the issue.

Of the respondents, six were male and five female. I asked the age group of the respondents as of between 20-29, 30-39, 40-49 and so on. The respondents' age groups varied from 20-29 to 60-69,

¹⁸¹ Altogether I interviewed 13 persons but decided to use only 11 for the research as the two left out had many interruptions and I felt this could falsify the results. Also I felt that the 11 already selected were enough for a representative sample.

¹⁸² See Annex 2; List of respondents.

although neither the sex nor the age was a primary factor when selecting the respondents, rather their work and experience on issues concerning climate change in Peru was of greater importance. My interest was to interview people with a wide range of positions with respect to climate change.

After the interview, I asked the respondent if there was another person he/she thought worthwhile of interviewing because of that person's experience on the issue of climate change in Peru. After the first interviews, I noticed that many were suggesting the same names and only a few new names appeared. According to Hirsijärvi and Hurme, this guarantees that the interviewer has interviewed all the respondents salient for the research¹⁸³. The only setback that bothered me was that I could not contact one person that many of the participants recommended for me to interview. Except for this, the respondents interviewed expressed clear knowledge of climate change as well as a diversity of opinions, and consequently I am confident they are an eligible sample for my research.

All the respondents gave their permission to use their interviews in my thesis. One of respondents wanted to see the parts of the interview to be used before giving the permission. The respondent in question changed some parts of the interview to make it clearer, but the overall content was the same even after the changes.

4.3. Reflections on Interviewing

In an interview, the interviewer is at the same time both investigating and participating. The interviewer is part of the situation but normally it is expected that the interviewer minimizes his/hers own participation. This means that the interviewer should be neutral, not argue, not show one's own opinion or be astonished by the answers. Hirsijärvi and Hurme see these as good guidelines but also remark that the interviewer in practice in the general interview guide approach has to be able to be flexible even on these principles.¹⁸⁴ In my interviews I noticed it was sometimes difficult to try to be neutral and not to show I agreed with the opinions of the respondents or that I thought differently on some of the issues. Converse and Schuman also note that it is difficult to remain neutral when the respondent says something that strengthens your own ideas and you would rather jump up with joy because you just got back your faith in humanity¹⁸⁵.

¹⁸³ Hirsijärvi & Hurme 2001, 60.

¹⁸⁴ Hirsijärvi & Hurme 2001, 97.

¹⁸⁵ Converse & Schuman 1974, 7, quoted in Hirsijärvi & Hurme 2001, 97.

The aim of the interviewer is to find out how the meanings of some topic or situation are understood by the respondent. My aim was to determine how the respondents conceptualize the topics treated in my research. At the same time, one has to remember that new and shared meanings are also created in an interview even though the interviewer tries to not influence the respondent's answers. The respondent's answers always reflect the way of asking as well as the previous questions and answers.¹⁸⁶ With different questions, the interviewer may lead the way to issues interesting to the interviewer. However, sometimes during my interviews, I felt that the respondents understood the questions in a different way than I had intended. The advantage of the general interview guide approach is that the interviewer may ask specific questions to verify what the respondent means or to go deeper when an interesting yet unconsidered issue arises. Nevertheless, I felt that it was difficult at times to maintain the line between not influencing the respondent's answers while also showing I was interested in the answers.

One of the problems associated with interview research is that it is seen to include many sources of error. Errors are caused both by the interviewer and the respondent. For example, the reliability of an interview may be weakened due to the respondent's propensity to give socially acceptable answers.¹⁸⁷ However, in my research I did not see this as a significant problem. Some of the respondents were for example very critical of the actions made by the state concerning climate change and showed this without any hesitation. Also in the analysis, the researcher has to take into account that the research material is context-based and for this generalizing should not be exaggerated. Crucial is whether the interviewer is able to interpret the answers in the light of cultural meanings.¹⁸⁸

Cultural differences can be one problem when interviewing. The cultural differences in interviewing is a topic that has been especially treated in anthropology. The primary purpose of anthropologists has been to produce information on foreign people and cultures, and consequently cultural differences between the researcher and the respondent have been almost self-evident. The aim of interview research is to reproduce the respondent's speech for research material of the topic of interest. The starting point is that an interview can only succeed if the interviewer and the respondent understand each other.¹⁸⁹ Patton notices that cross-cultural inquiries add levels of

¹⁸⁶ Hirsijärvi & Hurme 2001, 49.

¹⁸⁷ Hirsijärvi & Hurme 2001, 35.

¹⁸⁸ Hirsijärvi & Hurme 2001, 59-60.

¹⁸⁹ Rastas 2005, 78-79.

complexity to the interactions of an interview that are already complex, considerably increasing the possibility of misunderstandings.¹⁹⁰

Reflecting on the position of the interviewer and the respondent is typical to feminist research. I, the interviewer, am a young female university student from a northern country; the respondents were both female and male professionals aged between 20 and 69 years from a country that is characterized as a southern developing country. However, in feminist research, laying out a mantra like being white, female, young etcetera is not sufficient to make the position of the interviewer acknowledged and trouble-free. The interviewer must think on who is speaking and to whom.¹⁹¹ As Cohn writes; "[t]here was an "I" who asked the questions, and inevitably, who I am shaped not only what I noticed and was able to hear, but also what people would say *to me* and *in front of me*."¹⁹²

In my interviews, I felt that the fact that I was a student was sometimes a help and sometimes an obstacle for my research. Because of my age and occupation, I was not perceived as an authority. Sometimes I felt that the respondents talked freely in front of me as I was "only" a student. On the other hand, at times I felt that being "only" student was an obstacle as I was not seen as someone important. Not being someone important could be seen especially in the beginning of my interviewing process when contacting people and getting a permission to interview them. In the snowball sampling, the contacts obtained from the Embassy of Finland and the NGO Labor were helpful; it was easier to contact people when I could mention somebody had recommended me the person in question.

Cultural differences were also present in my interviews, although the cultural differences or the fact that I did the interviews in Spanish did not present a problem for interviewing. I have lived in different Spanish speaking¹⁹³ countries for more than three years and speak Spanish fluently. Additionally, I lived 9 months in Lima, Peru when doing an internship in the Embassy of Finland and also when conducting my research in Peru. This previous experience from Peru and knowledge on the issue of climate change and its impacts in Peru helped me. I already knew the basics on the issue of climate change and I felt this was useful when making the interview guide and also helped during the interviews as I could already show some expertise on the issue and the country itself. However, there were times when during the interviews, I had to rethink my position and how the respondents saw me. At the end of one of the first interviews, after having asked if I could cite the

¹⁹⁰ Patton 2002, 391.

¹⁹¹ Salmela 2004.

¹⁹² Cohn 2006, 96-97. See also Cohn 2006, 96-101.

¹⁹³ I have lived in Spain, Argentina, Peru and Chile.

respondent in my research, the person indicated that this did not make much difference since my thesis would be in Finnish and in a distant country. This response made me feel insecure on the importance of my research and if it had been a good decision to conduct the interviews. In the interviews after this one, I felt it was important before starting the actual interview to highlight my own experience and knowledge on the issue and Peru and why I felt it was important to research this topic.

Since I, the interviewer, am a Northern country citizen and the respondents are from a Southern country, it is also important to reflect on the influence of this relation on the interviews. Developing countries often criticize that the emissions of developed countries are mostly luxury emissions, while theirs are subsistence emissions. Obviously, the way I see the problem of climate change is influenced by the society to which I belong. This society is different from the society to which the respondents belong. However, my previous experience in Peru was a help also in this sense. It was easier to understand the respondents' positions with a certain degree of understanding of their society. At times, I felt that I was seen as a 'representative' of the North and this obviously had some influence on the answers. All in all, I feel that this North-South divide was not seen as a bad thing. Many of the respondents explicitly mentioned that they thought it was great that I was interested in doing research on Peru and climate change from a developing country's perspective.

Cultural differences are a subject to be held in mind throughout the research. At minimum, taking into account the cultural meanings means constant wariness on how to interpret the research material. In the interview situation, it is important to remember that every encounter contains the possibility to understand the other. Rastas reminds us that this requires awareness on the potential differences but also a willingness to impugn the assumption of differences and their meaning.¹⁹⁴

4.4. Why Discourse Analysis?

One way of classifying interviewing is to say it is communication between two persons that is based on the use of language. The importance of language is central in an interview.¹⁹⁵ Material collected with interviews goes well together with discourse analysis; language is also important in discourse analysis. In discourse analysis, the starting point accordant with social constructivism is to approach the material linguistically. In brief, the object of the study is the use of language. In this kind of

¹⁹⁴ Rastas 2005, 102.

¹⁹⁵ Hirsijärvi & Hurme 2001, 48-49.

linguistic methods, social reality is relativistic. Relativism sees the speeches and texts as certain versions of the reality, not as reflections of the reality. The research material is seen as offering different viewpoints and versions that are constructed in social interaction and practices.¹⁹⁶

Dryzek in his book *"The Politics of the Earth"* argues that analyzing discourses is an excellent method when doing research on environmental issues. He argues that environmental issues cannot be categorized into well-defined boxes but instead are interconnected in all kinds of ways and are multidimensional. In short, they are complex and a perfect example of a complex environmental issue is climate change. The complexity refers to the variety and number of interactions and elements in the environment of a decision system. "When human decision systems [...] confront environmental problems, they are confronted with two orders of complexity." With this, Dryzek means that on the one hand the ecosystems are complex and our knowledge of them is limited but also that human social systems are complex. Since environmental problems by definition are found at the intersection of human social systems and ecosystems, one should expect them to be doubly complex. "The more complex a situation, the larger is the number of plausible perspectives upon it [...]"¹⁹⁷

Dryzek indicates that language matters: the way we discuss, construct, interpret, and analyze environmental problems has all kinds of consequences. Thus, discourse is important and conditions the way we address, interpret, and define for example environmental issues. People can understand environmental affairs in very different manners, especially their interconnections, "providing plenty of grist for political dispute". Sometimes specific constructions can be exposed as entirely misguided but more often it is hard to prove these constructions are right or wrong in any simple way.¹⁹⁸

4.5.1. Discourse Analysis

According to Jennifer Milliken, studies involving discourse analysis have been an active area in International Relations during the recent years. Discourse analysis has been done by postmodernists, poststructuralists as well as some feminists and social constructivists. They all share a common theoretical commitment on how social and textual processes are intrinsically connected. However, Milliken notes that there is no common understanding on what are the best

¹⁹⁶ Saaranen-Kauppinen & Puusniekka 2006.

¹⁹⁷ Dryzek 1997, 7-8.

¹⁹⁸ Dryzek 1997, 9-10.

ways to study discourse.¹⁹⁹ Discourse analysis allows for different methodological applications and focuses for the study²⁰⁰. For this reason discourse analysis is better to be seen as a wide theoretical and methodological framework than as a concrete method²⁰¹. There is no ready-made pattern indicating how to analyze the research material but rather the researcher has to make his/her own method inside discourse analysis considering what is important for the particular research in question.

In interviews, the use of language is variable and sometimes even contradictory. Discourse analysis is interested in these variations.²⁰² The central idea of discourse analysis is that the reality is constructed in social interaction in which the language has a central role. Consequently, it is necessary to study the central constructor and cultivator of our reality: the language.²⁰³ Jokinen, Juhila and Suoninen also see the language as a factor constructing the reality. The idea of constructivism is closely connected to the structuring of language as socially shared systems of signification or discourses. The elements are mutually constitutive yet different from each other.²⁰⁴ The constructivist systems of signification also include the idea of non-reflective meaning; in short, language or the use of language is not seen as merely an image of the reality.²⁰⁵

In discourse analysis, the use of language and acts are interconnected; both are actions that change, rebuild and maintain the social reality in which we live²⁰⁶. When using language we construct, that is to say, give meaning to the objects we speak or write about²⁰⁷. In discourse analysis, the use of language is also seen as action; conversations, phrases and words are acts²⁰⁸. Use of language is understood as social action, doings with which things are done and social reality is constructed²⁰⁹.

Pietikäinen and Mäntynen speak of micro- and macrolevels to make clear the interconnecting nature of language and the society surrounding it. They use microlevel to refer to the use of language and macrolevel to the society and history surrounding it. In discourse analysis, the research combines this microlevel use of language with the macrolevel of the situation and the society in a wider meaning. The use of language is seen as part of a wider continuum of time and situation and is

¹⁹⁹ Milliken 1999, 225-226.

²⁰⁰ Jokinen et al. 1993, 17.

²⁰¹ See for example Hirsijärvi & Hurme 2001, 155 or Ilmonen 2007, 126.

²⁰² Hirsijärvi & Hurme 2001, 51.

²⁰³ Pietikäinen & Mäntynen 2009, 12.

²⁰⁴ Jokinen et al. 1993, 19.

²⁰⁵ Jokinen et al. 1993, 20.

²⁰⁶ Suoninen 1999, 19.

²⁰⁷ Jokinen et al. 1993, 18.

²⁰⁸ Juhila & Suoninen 1999, 238.

²⁰⁹ Jokinen et al. 1993, 10.

proportional to this.²¹⁰ In discourse analysis, the researcher puzzles how the subjects using language make things understandable²¹¹. The researcher dissects the organization and variation of language to know more not just about the language but about the society and culture. The structure of language is not the focus of research but rather what things are done and how they are done with language.²¹²

In discourse analysis, the context of action is also taken into account. The action analyzed is studied in a certain place and time in which the interpretation is pursued in proportion. Time and place establish a context for action. Time and place also create certain boundaries for action and actors, here for the respondents, inside which to act.²¹³

4.5.2. The Concept of Discourse

The wideness of the framework of discourse analysis is well observed in the use of the concept of discourse. Pietikäinen and Mäntynen see it as a dynamic and ambiguous term²¹⁴. Jokinen, Juhila and Suoninen define discourses as “*fairly complete systems of signification that are made up of social practices and at the same time construct the social reality*”²¹⁵. Burr indicates that the concept of discourse is used to refer to different meanings, representations, metaphors and all that together produces a certain type of interpretation of a phenomenon. Of much interest is that many different interpretations can be made of a single phenomenon.²¹⁶ Pietikäinen and Mäntynen conceptualize discourses portraying and giving meaning to a certain event or thing in a fairly stable and inwardly coherent manner from a certain point of view. As the same event or subject matter can be studied from different standpoints and made up in different manners, so there can be different discourses. Discourses have their linguistic form but obtain their driving power from the social side; discourses are social action and practices.²¹⁷

The discourses do not emerge randomly from people’s heads but instead are partially formed from different social practices. One discourse does not build the reality alone but instead is defined in relation to other, optional ways of speaking. Discourses are aggregates formed by complete systems

²¹⁰ Pietikäinen & Mäntynen, 19-20.

²¹¹ Jokinen et al. 1993, 10.

²¹² Pietikäinen & Mäntynen 2009, 13 and 18.

²¹³ Jokinen et al. 1993, 30-34.

²¹⁴ Pietikäinen & Mäntynen 2009, 22. More on the concept of discourse and its different uses see *ibid.*, 22-28.

²¹⁵ Jokinen et al. 1993, 27.

²¹⁶ Burr 2003, 64.

²¹⁷ Pietikäinen & Mäntynen 2009, 50-51. For Pietikäinen and Mäntynen, discourse (in singular) represents the deeper and wider theoretical starting point and view of language as social action. Discourses (in plural) represent theoretical and analytical concepts with which to study the structuring of significations.

of signification present in the material. Complete systems of signification refer to the way that the pieces of information describing the reality are related to each other so that they form a certain picture of the reality. The aggregate forms a discourse and this is the product of the researcher's work. Discourse analysis is not about interpreting the discourses as such but rather about talking through the way the discourses are actualized in different social practices.²¹⁸

Depending on the context, the same word, phrase or claim can be interpreted in many different ways. One can speak in many different ways, that is to say, with many different discourses about the same thing.²¹⁹ The researcher is not interested in the actors but mainly in the texts.²²⁰ The object of research is the ways in which the actors describe and explain the phenomena.

4.6. Identifying Hegemonic Discourses

Significations are produced, that is to say, the world is given signification differently in different situations because language is seen as a flexible resource that can be used in different manners in different times and situations. The focus of interest is not which of the different versions is the most truthful but rather discourse analysis is interested in the weight of different versions.²²¹ There are many discourses; they are parallel or competing, and they structure the world, its processes and relations in different ways. Some discourses can become more hegemonic than the others. Central is then the fight of articulation between different discourses;²²² discourse analysis studies which significations are hegemonic, marginal or absent and why so.²²³

Hegemonic discourses are about the relationships between different discourses where some systems of signification have a stronger position. These can become 'truths' shared in common and held as self-evident, 'truths' that silence optional 'truths'.²²⁴ For Milliken "discourses make intelligible some ways of being in, and acting towards, the world, and of operationalizing a particular 'regime of truth' while excluding other possible modes of identity and action." Throughout, discourses are understood to work to enable and to define, and also to exclude and to silence endorsing a certain common sense, but making other modes of judging and categorizing meaningless, inadequate, impracticable, or otherwise disqualified. This directs us towards studying hegemonic or dominating

²¹⁸ Jokinen et al. 1993, 19-28.

²¹⁹ Saaranen-Kauppinen & Puusniekka 2006.

²²⁰ Suoninen 1993, 60.

²²¹ Pietikäinen & Mäntynen 2009, 13.

²²² Jokinen et al. 1993, 29.

²²³ Pietikäinen & Mäntynen 2009, 13.

²²⁴ Jokinen et al. 1993, 29.

discourses, and their structuring of meaning as connected to implementing practices and ways of making these legitimate and intelligible.²²⁵

Before identifying hegemonic discourses, one has to outline the different discourses in the research material. In other words, the purpose is to see how many diverse discourses can be found in the material, for example, what kind of justice discourses I can find in my research material. The analysis proceeds from parts to aggregates, from meanings to systems of signification, that is to say, discourses.²²⁶ But how to identify strong discourses that have reached a hegemonic position? One possibility is to study the quantitative repetition of a discourse. The more often and in more contexts parts of a certain discourse are repeated, the more hegemonic a discourse might be. On the other hand, the more non-alternate and self-evident a discourse appears, the stronger it is, even if it does not quantitatively dominate in the material. In cases of a lot of repetition, greater repetition could, for example, legitimate its use.²²⁷

Use of different discourses and their entrenchment generally also have wider social effects. Thus, besides analyzing the material, the research can also produce conclusions on a wider meaning in the society. Sometimes it is important to enter into the ideological effects, and then criticize different discourses and practices that legitimate different relations of submission. At the same time, it is important to note that this does not mean that hegemonic discourses only have negative consequences. Ideological effects might not be present in the material analyzed but rather they could be described as results of speculative reasoning based on the material. This is about thinking on the possibilities; considering what kind of things a certain discourse can be justifying.²²⁸

4.7. Analyzing the Research Material

The accuracy of transcribing the interviews depends on the research questions and on the methods used in the research²²⁹. Pietikäinen and Mäntynen indicate that there are different practices to transcribe spoken material. One possibility is a conversation analytic approach that is a very exact way of transcribing the interviews so that the transcribing also reflects the tones of speech and how the interaction is built. However, when the researcher is more interested in the discursive practices

²²⁵ Milliken 1999, 229-230.

²²⁶ Jokinen & Juhila 1993, 76 and 80.

²²⁷ Jokinen & Juhila 1993, 76-77 and 80-81.

²²⁸ Jokinen & Juhila 1993, 96-97.

²²⁹ Tiittula & Ruusuvoori 2005, 16.

instead of the interaction, a less detailed way of transcribing is enough. This way the transcribing mainly reflects the content of speech or conversation.²³⁰

I have personally translated all the interviews. In transcribing the interviews, I used the second possibility mentioned by Pietikäinen and Mäntynen because I was more interested in the content of the interviews and how the respondents see the topics treated. Consequently, it was enough to write down the respondents' answers since I did not make notes on the differences in tones. In the interview citations, I did not include repetition or my own comments, like mm, aah or yes, spoken to show that I am listening to what the respondent is saying. Repetitions were not included when it did not affect the meaning of the sentence.

Hirsijärvi and Hurme note that normally it is not necessary to analyze all the material one has collected; indeed, it might even be impossible to use all the material.²³¹ The interviews I did resulted in 168 pages²³² that contained many interesting topics. However, I could not include everything in this thesis and had to leave some interesting topics out since they were not directly connected with the primary topic of my interest, the concept of justice. I started the analysis by organizing the material into topics. This means that in the analysis one examines features rising from the material that are common to various respondents. These may be based on the topics of the interview guide and it is expected that at least the initial topics emerge. In addition to the initial topics, other topics normally come up and these are many times even more interesting than the initial ones.²³³

I organized the material according to the initial topics of climate change consciousness in Peru, the national strategy and international negotiations on climate change. From there, the topics of responsibility, national interests, global benefits and development emerged and I organized the material according to these. Choosing and highlighting certain topics from the speech of the respondents meant excluding others. However, these were the topics I felt important for my research.

In analyzing the interviews, my objective is to see how the perception(s) on justice is built in the research material by using the tools of discourse analysis. The research is based on the questions as presented at the introduction of this thesis. How is justice/equity perceived in the climate change

²³⁰ Pietikäinen & Mäntynen 2009, 161-162.

²³¹ Hirsijärvi & Hurme 2001, 135.

²³² Using the font Times New Roman 12 and line spacing 1.5.

²³³ Hirsijärvi & Hurme 2001, 173.

debate in Peru? What shapes the distinct justice/equity concerns in Peru in the issue of climate change? Who should do what, at whose cost and when? This determines who should act and how, and all this leads us to what kind of justice/equity is pursued with the discourses.

Climate change is a natural phenomenon but the discourses identified will show what kind of implications the respondents see that it causes in social structures and reality. The research questions will help identify different discourses in the interviews and through this I will be able to interpret how justice is perceived in Peru and also what possible influence this has for the future of the global climate policy.

5. DISCOURSE OF RESPONSIBILITY

The first point of analysis was to identify the discourse(s) on justice/equity. Central was to see how justice/equity is perceived in the research material. The quest for justice as for climate change rises from the problem itself as there is an asymmetry between the emissions of greenhouse gases and the adverse impacts of climate change. As Shukla notes “a greater burden of impacts is distributed to poorer nations by natural processes, while most anthropogenic greenhouse gas emissions arise from economic activities in affluent nations.” The justice concerns in the context of climate change are complex as the problem is truly global and has a long-term character. Also the already mentioned asymmetry of emissions and their impacts both temporally and spatially add to this complexity.²³⁴

In most of the interviews I conducted, the principle of common but differentiated responsibilities was mentioned. As already noted in chapter 3.3., this principle is present in the article III of the UN Framework Convention on Climate Change as it states that

“[t]he parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their *common but differentiated responsibilities* and respective capabilities.”²³⁵

I have named this way of speaking “the discourse of responsibility”. The discourse of responsibility reflects how to take justice/equity into account in the climate change issue. This discourse highlights the injustice between the causes and effects of climate change and who should be the ones to take the burden on.

Calvo, an academic, member of the Intergovernmental Panel on Climate Change (IPCC) and consultant to the Ministry of Foreign Affairs of Peru, sees that the most important principle for Peru is the one of common but differentiated responsibilities. He sees that it is impossible that the developed countries who during the last two centuries benefitted from the emissions, like Luxemburg or United Kingdom, or industrialized early, like Germany and France, now say that the responsibility is of all. He sees that they used their first gains to build their development. Consequently, the proposals must achieve the highest equity possible.²³⁶

The point of departure of the discourse of responsibility is the emphasis on the origin of the problem of climate change. The different levels of responsibility for having emitted greenhouse

²³⁴ Shukla 1999, 145-146. More on the concept of justice see chapter 3.

²³⁵ UNFCCC 1992, Article 3.1. Italics added by the writer.

²³⁶ Interview Calvo 2009.

gases are brought into light, especially stressing the historical responsibility. The discourse highlights the greater responsibility of the developed countries for having caused climate change. Since the developed countries benefitted from the emissions of greenhouse gases, indeed their development is based on these emissions, it would not be fair if the responsibility would now be of all countries. The responsibilities for having caused climate change are different and this has to be taken into account. Justice/equity is seen in the sense of righting the wrong²³⁷.

There are large variations in global greenhouse gas emissions from different countries. Though all countries register to some extent global emissions, some increase far more heavily than other countries. Historically the developed world holds responsibility for a large part of the greenhouse gas emissions. The historic emissions matter on two counts;

“first, [...] cumulative past emissions drive today’s climate change. Second, the envelope for absorbing future emissions is a residual function of past emissions. In effect, the ecological ‘space’ available for future emissions is determined by past action.”²³⁸

Between years 1850 to 2000, the biggest emitters were the United States, the European countries²³⁹ and Russia. These countries account for a large part, about 65 percent, of total cumulative emissions during this time period.²⁴⁰ When looking at present shares of global emissions the developed countries often point to the rising share that some emerging countries, like China and India, are producing. As of 2004, the five biggest emitters, the United States, China, the Russian Federation, India and Japan, accounted for over 50 percent of the global carbon dioxide emissions.²⁴¹ In 2006, China passed the United States as the single biggest emitter. Though the consumption of people in China is now higher, a third of the total emissions in the country comes from manufacturing products for export; products that are mainly consumed in western countries.²⁴² When talking on global greenhouse gas emissions, it is also important to take into account the emissions per capita. In 2004, the United States emitted 20 tonnes of carbon dioxide per capita and was the biggest emitter as China produced 3.8 tonnes and India 1.2 tonnes of carbon dioxide per capita.²⁴³ All this shows how the developed countries historically and also at the moment are responsible for a large part of the greenhouse gas emissions. However, the emissions of many developing countries are getting bigger.

²³⁷ See chapter 3.4.

²³⁸ UNDP 2007, 41.

²³⁹ This refers to the 25 member states of the European Union.

²⁴⁰ Baumert et al. 2005, quoted in Kaskinen et al. 2009, 10-11.

²⁴¹ The United States and China were each responsible for 20 percent and Russian Federation, India and Japan each for 5 percent of the global carbon dioxide emissions.

²⁴² Kaskinen et al. 2009, 3 and 11.

²⁴³ UNDP 2007, 43.

In the discourse of responsibility, it is expected that the developed countries, based on their greater historical responsibility, lead the way and take a bigger burden combating climate change. The asymmetry of greenhouse gas emissions and their impacts spatially is stressed. Guinand, an academic and the former coordinator of the environment and sustainable development program of the Andean Community, underlines that the developed countries have to reduce their emissions:

“[I]f the developed countries really do not make an effort to reduce their emissions there is no way, no way that the thing would get better even if the other countries would do whatever. And this is a bit unfair in the end. [T]he efforts that a small country makes, that is making all the efforts, sacrifices, conservation and everything does not make any sense if a developed country, this, insists on following, let’s say, to increment the problem of climate change.”²⁴⁴

Ames, the Climate Change Officer at Oxfam and an academic, reminds that the developed countries are principally responsible for 82 percent of all the global emissions and the developing countries only for 18 percent. As a result, she suggests that the ones who are not responsible for this contamination should demand in block that the rest of the countries define quickly how to reduce the emissions. Ames also adds:

“Because it does not help at all that we would be adapting, that we would be doing everything that is possible, well, in assuming these impacts if finally the causes of the problem will not be efficiently controlled.”²⁴⁵

To further highlight this, Guinand also references the principle of common but differentiated responsibilities. She reminds that the ones who most have emitted are the ones who probably have been less affected and will be less affected by climate change. Even if Peru would make a big effort at mitigation, some of the effects of climate change can already be seen:

“[T]here are some effects that we are already living, that we are already sensing and that obviously [...] will produce more effects in countries like Peru and Peru is an extremely vulnerable country.”²⁴⁶

²⁴⁴ Interview Guinand 2009. “[S]i los países desarrollados realmente no hacen un esfuerzo por disminuir sus emisiones no hay forma, no hay forma de que por más que los otros países hagan lo que hagan la cosa mejore. Y es un poco injusto al final. [L]os esfuerzos que haga un país pequeño que está haciendo todos los esfuerzos, sacrificios, conservación y todo no tiene ningún sentido si un país desarrollado que, este, insiste en seguir, digamos, incrementando el problema del cambio climático.”

²⁴⁵ Interview Ames 2009. “Porque de nada sirve que vayamos adaptándonos, que vayamos haciendo todo lo posible para, bueno, asumir esos impactos si finalmente las causas del problema no se van a controlar eficientemente.”

²⁴⁶ Interview Guinand 2009. “[H]ay algunos efectos que ya lo estamos viviendo, que ya lo estamos sintiendo y que obviamente [...] van a tener más efectos en países como Perú. Y Perú siendo un país muy vulnerable.”

In the discourse of responsibility, it is seen that the developed countries need to reduce their emissions in order to control the causes of climate change. It is also seen that without emission reductions in the developed countries, the problem of climate change will not get better even when other countries would do efforts to combat climate change. The discourse also indicates that, for example, in Peru some effects of climate change can already be seen. The degree and meaning of interdependence is seen as crucial in the discourse of responsibility. As Paterson²⁴⁷ noted interdependence between countries is undeniable in the case of climate change. In the discourse of responsibility, both sides of interdependence are brought into light; the dependence of each country on the actions of others for its welfare and how this dependence constitutes each country's relationship to climate change. Contrary to the demands of many developed countries (that without emission reductions in the developing countries climate change cannot be sufficiently mitigated), the discourse of responsibility argues that without emission reductions in the developed countries the problem will get worse; that is the dependence on the actions of the developed countries. It is also brought into light that even when mitigation is performed, some of the adverse impacts of climate change are already seen in countries like Peru; that is the dependence constitutes the relationship of Peru to climate change.

Even though the discourse of responsibility demands that the developed countries take the lead and a bigger burden on mitigating climate change, the developing countries are also seen to be ready to do something on mitigation. Durand, head of the climate change unit at the Ministry of Environment, sees that the principle of common but differentiated responsibilities is something that falls for its' own weight:

“It is evident that the countries, this, that emit the most and have emitted the most historically have a bigger responsibility for reducing the emissions than the countries that have emitted less and emit less. However, we are ready to contribute to the emission reductions but there has to be equity in the amount of reductions in the developed countries, in the countries that are less developed.”²⁴⁸

Alvarez, coordinator at the unit of climate change at the Ministry of Environment, highlights that the most important of the principles for Peru is the respect for common but differentiated responsibilities. In the next phrase, he clarifies that the developed countries need to be the ones to respect this principle. However, Alvarez does not put all the responsibility for action on the

²⁴⁷ See chapter 3.4.

²⁴⁸ Interview Durand 2009. “Es evidente que los países, este, que más emiten y más han emitido históricamente tienen mayor responsabilidad para reducción de emisiones que los países que menos han emitido y que menos emiten. Sin embargo, estamos dispuestos a contribuir a la reducción de emisiones. Pero tiene que haber una equidad en la cantidad de reducciones en los países desarrollados, los países menos desarrollados.”

developed countries shoulders but instead recognizes that the developing countries also need to do something on mitigation. He sees it more prospective that both, the developing and developed countries, move ahead at the magnitude of the responsibility corresponding to each one. But as a difference to the reductions of the developed countries, he highlights that the reductions of developing countries are not binding since they do not have any obligations at the moment to reduce their emissions. He sees that the developing countries will put all their forces to do what they can as for reducing the emissions.²⁴⁹

Similarly, Ames holds that developing countries should do their share of the commitment but this does not mean that they would accept that the developed countries do not reduce emissions. The developed countries must lead the way as they have greater responsibility to reduce the emissions.²⁵⁰

In the discourse of responsibility, it can be observed that mitigation of climate change is mainly responsibility of the developed countries. The greater responsibility of the developed countries is seen from the point of view of historical emissions. It is made to seem a linear consequence: the developed countries' "greater responsibility" means that they need to be the ones to reduce the emissions. However, it is also recognized that the developing countries "should do their share". As already noted, O'Neill presented an objection to the approach based on responsibility. She sees that it is often practically impossible to track the lines of causality with any clarity. Especially problematic is to place obligations on people for harm produced by their ancestors.²⁵¹ However, in the discourse of responsibility, the lines of causality are seen as obvious and it is not seen to be problematic to place obligations on developed countries and their population for harm produced by their ancestors.

Guinand continues that at some point the developing countries must also start to reduce their emissions, even when it is the developed countries at the moment that need to reduce the emissions and fulfil their commitments. However, she understands that the problem of climate change is already so serious that to get to an agreement, consensus of all parties is needed. Even when she recognizes this, Guinand stresses that the emissions of developing countries are derisory when compared to the emissions of the United States. She sees that an effort on part of the United States to reduce its emissions would solve a big part of the problem. Guinand also mentions that the

²⁴⁹ Interview Alvarez 2009.

²⁵⁰ Interview Ames 2009.

²⁵¹ O'Neill 1991, quoted in Paterson 1996, 189. See chapter 3.4.

United States was slow to recognize climate change as a problem and thus it would be an unfair message if all the countries would now be in equal conditions for mitigation.²⁵²

The undermining factor why developing countries also need to do something on emission reductions is the global nature of the problem of climate change; “consensus is needed”. However, in the discourse of responsibility, it is seen that for this common commitment, equity has to be taken into account when determining the amount of emissions that countries have to reduce. Treating the developing and developed countries as equal would be “an unfair message”. The United States is mentioned as an example and the large amount of emissions that the United States produces is stressed. Summarizing, it is seen that justice/equity should be present in the amount of emission reductions.

Even when the negotiations in Cancun did not achieve an agreement on what will happen after 2012 when the commitment period of the Kyoto Protocol ends, the Cancun Agreements did set that the increase in global average temperature should be maintained below 2 degrees Celsius²⁵³. The Intergovernmental Panel on Climate Change has asserted that the Annex I- countries need to reduce their emissions 25 to 40 percent by 2020 using the year 1990 as baseline and 80 to 95 percent below 1990 levels by 2050 in order to stabilize the greenhouse gas concentration at a level that has 50 percent possibilities of averting the warming of climate below 2 degrees Celsius. The Non-Annex I- countries in Latin America, East Asia, Centrally-Planned Asia and Middle East and all regions forming Non-Annex I would need to make a substantial deviation from the baseline by 2020 and 2050, respectively²⁵⁴. Taking into account emission reduction targets worldwide, the European Union has determined that greenhouse gas emissions should be cut in half by the same year²⁵⁵. According to these estimates, it is obvious that emissions need to be reduced and these reductions need to be large. Also reductions of some sort from developing countries are needed. As Shukla notes “[t]he primary justice issue in the present climate negotiations pertains to the distribution of emission entitlements.”²⁵⁶ This can be seen also in the discourse of responsibility as already noted before.

The discourse of responsibility holds that the ones responsible for a great part of the global emissions should lead the way in confronting climate change. Besides that these countries should

²⁵² Interview Guinand 2009.

²⁵³ UNFCCCb.

²⁵⁴ IPCC 2007b, 776 and IPCC 2007a, 826.

²⁵⁵ Korppoo and Luta 2009.

²⁵⁶ Shukla 1999, 146.

make the largest greenhouse gas emission reductions, they should also provide funding and technology for the developing countries.

Ames holds that it is equally important that the ones responsible for climate change should also provide compensation and remit funds for the people who have been and are suffering from the impacts of climate change.²⁵⁷

Torres, an academic and climate change specialist in a non-governmental organization, sees that countries have to assume the responsibility for having caused the climate change. For him, it is obvious that someone has to pay for the damage caused and that the ones on the southern side of the world are not the ones responsible. For him, equity is present in who will take the responsibility and who will pay for what has happened.²⁵⁸

Iturregui, adviser on climate and energy security at the Embassy of Great Britain in Peru, feels that the countries should centralize how to finance the deal as this will be the central part of the new agreement. She sees that the developed countries should assume their share of responsibility for the origin of the problem of climate change and accordingly provide technological and financial resources for developing countries. Equity has to be seen in the financing of the agreement:

“So this, well, is to me a concrete way that the diverse degrees of responsibility will be expressed in different degrees of financing contributions.”²⁵⁹

The discourse of responsibility sees that equity is also present in that the developed countries, due to their larger responsibility for having caused climate change, need to help the developing countries giving them financial and technological resources. This is one way the developed countries can assume their responsibility for having caused the problem and a way they can compensate for the harm produced. Hakkarainen et al. see that climate financing for developing countries should be seen as an indemnity that the developed countries pay in exchange for having accelerated climate change. However, they note that putting a price on adverse impacts produced by climate change is challenging.²⁶⁰ The indemnity approach is also present in the discourse as presented.

²⁵⁷ Interview Ames 2009.

²⁵⁸ Interview Torres 2009.

²⁵⁹ Interview Iturregui 2009. “Entonces este, bueno, es lo que a mí me parece una manera concreta de que las diversas grados de responsabilidad se van a expresar con diversos grados de contribuciones de financiamiento.”

²⁶⁰ Hakkarainen et al. 2010, 5.

Issues of financing are important in the negotiations on climate change and the significance is constantly growing. How developing countries can adapt to climate change and with whose money they start mitigating are important questions that need to be resolved in the coming years.²⁶¹ The Stern Review estimates that if countries do not act to mitigate climate change at least 5 percent of global gross domestic product (GDP) will be lost annually now and forever taking into account the overall costs and risks of climate change. However, if a wider range of impacts and risks is taken into account, these estimates could mount to 20 percent or more of gross domestic product. In contrast to this, the Review estimates that the costs of acting; “reducing greenhouse gas emissions to avoid the worst impacts of climate change”, can be limited to about 1 percent of global gross domestic product annually. As the Review states: “[t]he costs of stabilising the climate are significant but manageable; delay would be dangerous and much more costly.”²⁶²

As for the needs of financing only in the developing countries, the World Bank has estimated that they will need an annual financing of approximately 70 to 100 billion dollars²⁶³ for adaptation and 140 to 170 billion dollars for mitigation until year 2050²⁶⁴. As a point of reference, Hakkarainen et al. use the financing of development cooperation of the OECD²⁶⁵-countries in 2009 that was about 120 billion dollars²⁶⁶. However, as Kaskinen et al. note it is difficult to estimate the costs needed for adaptation due to the great diversity of the measures used for adapting to climate change across the world²⁶⁷. As for the costs of climate change in Peru, the Andean Community has estimated that until the year 2025 climate change would mean a loss of 10 000 million dollars per year. This would mean a 4.4 percent loss of gross domestic product. Though these are only estimates, the Andean Community notes that equally the amount is high; it would be almost the same as the amount spent in health and education in 2004, which was 4.3 percent of gross domestic product.²⁶⁸

In COP15 in Copenhagen, the Parties agreed tentatively that the developed countries will finance combating climate change in the developing countries both in the short- and long-term. This promise was confirmed in Cancun in COP16. The climate finance was promised to be ‘new and additional’ but the meaning of this is not clear. The developing countries and non-governmental organizations see that the climate finance and development cooperation commitments should be met

²⁶¹ Kaskinen et al. 2009, 25.

²⁶² Stern 2007, vi-vii.

²⁶³ The World Bank Group 2010, 3.

²⁶⁴ The World Bank Group 2010, 259, quoted in Hakkarainen et al. 2010, 5.

²⁶⁵ Organization for Economic Cooperation and Development.

²⁶⁶ OECD 2010; quoted in Hakkarainen et al. 2010, 5.

²⁶⁷ Kaskinen et al. 2009, 26.

²⁶⁸ CAN 2008, 22-23.

separately.²⁶⁹ It is seen that if the overall funding does not grow and the object changes, then the growing climate finance will replace most of financing previously assigned to development cooperation. The support would also be distributed differently than before. For example, support for the water sector would grow, while at the same time support for education, health and trade would diminish. It is also seen that developed countries' temptation to carry out climate programs in more advanced developing countries, like China, would increase due to the greater possibilities of huge emissions reductions. Consequently, support for poorer countries would decrease.²⁷⁰

The discourse of responsibility mainly presents a clear difference between the developed and developing countries. Peru and the other developing countries are seen as one group when compared to the developed countries. However, a differentiation within the developing countries group is also present, especially with respect to emission reductions. The developing countries are divided into two groups. The developed countries still have to take the lead and a bigger burden on mitigation. As for the developing countries, the emerging countries inside this group are seen to be on a different level than the rest of developing countries. Here justice/equity is present in different levels of responsibility for mitigation.

For Iturregui, equity also has to do with differentiation at the level of emission reductions. The ones that most have to reduce are the ones who most emit, and these are the developed countries. Secondly, there should be an intermediate level for the emerging countries; like China, India or Brazil, that are in an accelerated process of development and emissions. Finally, there are the countries, including Peru, which have low levels of emissions. However, this does not mean that these countries could keep on doing the things like the others have done. Instead a strategy should be defined so that these countries can also reduce the emissions but taking into account the corresponding levels and periods of transition.

“[I] think that equity has to do with a differentiation and with a corresponding participation with the characteristics of every country [...]. A collective commitment but also differentiated, right?”²⁷¹

Garcia, a specialist in energy and carbon emissions at FONAM²⁷², sees that between developing countries there are different levels and the question is if the developing countries should reduce

²⁶⁹ Hakkarainen et al. 2010, 6.

²⁷⁰ Wilks 2010, 3; quoted in Hakkarainen et al. 2010, 6.

²⁷¹ Interview Iturregui 2009. “[C]reo que allí la equidad tiene que ver con una diferenciación y con una participación correspondiente con las características de cada país [...] Un compromiso colectivo pero también diferenciada, ¿no?”

their emissions and if this is greater for other countries than Peru. He mentions examples such as China, India and Brazil. Garcia indicates that the emission reductions should be estimated considering both present and historical emissions. There should be flexibility with respect to the amount of reductions taking into account the country's level of development. He mentions that the ones who most have emitted have not done this during the past ten years but instead since the beginning of the industrial era, and consequently it is a sum of a process during which the ones that most have contributed have developed. Therefore Garcia sees that countries like China or India should also have a right to develop since they are only recently industrializing and this should be taken into account in the commitments to emission reductions.²⁷³

Williams notes that one of the divisions inside the G77+China-group in the negotiations on climate change is based on the levels of development²⁷⁴. This conflict of interest can for some degree be also seen in the discourse of responsibility. In the discourse, the division inside the developing countries group corresponds to different levels of emission reductions. The emerging countries are seen to be more obliged to emission reductions than the other developing countries because of the emerging countries' growing greenhouse gas emissions and accelerated process of development. The other developing countries are seen to produce low levels of emissions. However, the emerging countries should still have a lower commitment than the developed countries to emission reductions since the emerging countries are only recently industrializing. The right to development of the emerging countries is also mentioned.

In the discourse of responsibility, Peru is qualified as a developing country that only produces 0.4 percent of the global greenhouse gas emissions. Consequently, it has less responsibility for having caused the problem of climate change than the ones who have generated most part of global greenhouse gas emissions. The priority for the country is adaptation. Thus, the country should not have legally binding emission reductions.

“The priority for Peru has to be: 1) adaptation, 2) adaptation, 3) adaptation. Later we address 4, 5 and 6.”²⁷⁵

²⁷² FONAM (Fondo Nacional del Ambiente, the National Environment Fund) is a private institution created by the Congress of Peru in 1997. It is non-profit and promotes private and public investments in environment projects in Peru; for example it promotes the Peruvian Clean Development Projects.

²⁷³ Interview Garcia 2009.

²⁷⁴ Williams 2005, 62.

²⁷⁵ Interview Giesecke 2009. “La prioridad de Perú debe ser: 1) adaptación, 2) adaptación y 3) adaptación. Después vienen 4, 5 y 6.”

“The theme of adaptation is fundamental. I think it cannot be left out of negotiations and that the adaptation has to be done. [I]n all that exists on the theme from now on, the concept of adaptation has to be included for the people, for the poor people, the people that receive this assistance necessarily need to adapt to different conditions that are not the same anymore and that the only thing that will be stable is that these [the conditions] will continue to change.”²⁷⁶

In the discourse of responsibility, adaptation is seen as an absolute priority for the country. It is stressed that adaptation is fundamental since the climatic conditions to which people are accustomed are changing. The climate is no longer stable. Only the changing conditions are stable.

Garcia indicates that since Peru does not significantly contribute, it should not have a commitment to reduce its’ emissions in the next years or at least during the next period of commitments.²⁷⁷

Calvo on his part highlights the small portion of global emissions that Peru produces:

“We are less than half of one percent of the global emissions. Better said, if Peru would not exist the atmosphere does not even realize this.”²⁷⁸

Also Durand makes this clear by saying that adaptation has always been the priority for Peru because the country’s own emissions are small at the global scale.

“We have considered ourselves a country that does not emit much and because of this we have been more dedicated to adaptation. We are suffering, we are very vulnerable to many direct and very objective impacts of the climate change.”²⁷⁹

By making it clear that Peru’s own emissions are very small, why adaptation is a priority for the country is justified in the discourse. Because of its small greenhouse gas emissions, Peru is not responsible for the problem of climate change and thus should not have emission reduction commitments. To make this even more justified, that Peru is already suffering from the effects of climate change and is very vulnerable is mentioned. In this way, there should not be any doubts why adaptation is a priority. Here the process of simplification is used in order to strengthen the discourse. Simplification in discourse analysis often means the naturalization of practices and

²⁷⁶ Interview Giesecke 2009. “El tema de la adaptación creo que es fundamental. Creo que no se puede dejar de negociar y que la adaptación tiene que hacerse. [E]n todo lo que exista del tema en adelante tiene que tener el concepto de adaptación para la gente, la gente pobre, la gente que recibe este asistencia necesariamente necesitan adaptarse a otras condiciones que no son la mismo y que lo único que va a ser estable es que van a seguir cambiando.”

²⁷⁷ Interview Garcia 2009.

²⁷⁸ Interview Calvo 2009. “Somos menos de la mitad del uno por ciento de las emisiones globales. O sea, si Perú no existiera la atmosfera ni se entera.”

²⁷⁹ Interview Durand 2009. “Nos hemos considerado un país que no emite mucho y por lo tanto nos hemos dedicado más a la adaptación. Estamos sufriendo, somos muy vulnerables a muchos de los impactos directos y muy objetivos del cambio climático.”

information. Pieces of information or practices start to look like obvious. Jokinen and Juhila see that naturalization is the strongest when the meanings are combined with nature in some sense. This way it is made to look like the nature produces the social order and not the people.²⁸⁰ Because of small emissions and vulnerability to climate change adaptation is a clear priority for Peru, the atmosphere would not even realize if Peru did not exist. Mitigation is not mentioned, making it obvious that this is not important for Peru. It is not Peru's responsibility.

The discourse of responsibility is the hegemonic discourse identified in the research material. Hegemonic discourse means that some system of signification has a stronger position than the other discourses identified²⁸¹. As Milliken notes throughout, discourses are understood to work to enable and to define as well as to exclude and to silence endorsing a certain common sense, but making other modes of judging and categorizing meaningless, inadequate, impracticable, or otherwise disqualified. This directs us towards studying hegemonic or dominating discourses, and their structuring of meaning as connected to implementing practices and ways of making these legitimate and intelligible.²⁸² Jokinen and Juhila sustain that one way of identifying a hegemonic discourse is by studying the quantitative repetition of a discourse.²⁸³ The discourse of responsibility was quantitatively present and could be identified in most of the interviews.

In this research it can also be seen that the other discourses make the discourse of responsibility the hegemonic discourse. This can be seen in the way the discourses are intertwined and in the ways that pieces of other systems of signification are pulled to support certain discourse(s).²⁸⁴ Here the other discourses: the discourse of national interests, the discourse of global benefits and the discourse of development are based on the discourse of responsibility. Especially the argument that the developed countries are mostly responsible for having caused climate change and for this they should lead the way in combating climate change is present in all the other discourses.

²⁸⁰ Jokinen & Juhila 1993, 91.

²⁸¹ Jokinen et al. 1993, 29.

²⁸² Milliken 1999, 229-230.

²⁸³ Jokinen & Juhila 1993, 80. For more on hegemonic discourses see chapter 4.6.

²⁸⁴ Jokinen & Juhila 1993, 95.

6. DISCOURSE OF NATIONAL INTERESTS

The discourse of responsibility is the undermining element in the next discourses: the discourse of national interests and the discourse of global benefits. As already mentioned in discourses, the elements are made of each other and are different from each other. There are many discourses and these are defined in relation to other optional ways of speaking instead of building the reality alone. The discourses can also be competing or parallel, and thus structure the world in different ways.²⁸⁵ The discourses of national interests and global benefits are intrinsically related to each other and confront each other in the context of a broader theme: how to respond to climate change. Both of these discourses are built upon the discourse of responsibility and they complement it. The discourses start from the same premise: the developed countries should lead the way in confronting the problem of climate change due to their greater responsibility in its creation. More on these discourses in the following chapters.

Shukla sees that in the negotiations on climate change the countries have cooperative needs in order to minimize the global burden climate change produces. Additionally, the Parties also have competing needs as to minimize their own share of the burden.²⁸⁶ As seen in the discourse of responsibility, adaptation is seen as a priority for Peru since it has a different responsibility than the developed countries for having caused the problem of climate change. Adaptation is a priority especially since Peru is vulnerable to the adverse impacts of climate change and the greenhouse gas emissions in the country are small. As for mitigation, the country should not have legally binding emission reductions. It can be seen that national interests are the driving force behind these and I refer to this way of speaking as “the discourse of national interests”. The discourse of national interests is present in the adaptation and mitigation debates in Peru.

In the discourse of national interests, adaptation is seen a priority for Peru for many reasons. Alvarez sees that the priority is adaptation since Peru is extremely vulnerable to climate change. He brings into light the variety of ecosystems and climates that can be found in the country. Due to this diversity, adaptation planning and strategies cannot be national policies from Lima as these would not be applicable in the whole country.²⁸⁷

Loss of biodiversity is one of the possible adverse effects of climate change in Peru. The country is rich in biodiversity, natural environments and climates. Twenty-seven of the 32 climates identified

²⁸⁵ See chapters 4.5.1., 4.5.2. and 4.6.

²⁸⁶ Shukla 1999, 148.

²⁸⁷ Interview Alvarez 2009.

and 84 of the 104 ecosystems that exist in the world are in Peru²⁸⁸. Additionally, Peru has the largest variety of butterfly species in the world with altogether 3532 species of butterflies been found in the country. Of all the orchids in the world, a tenth is found in Peru, that is, more than 3200 species are from this southern country.²⁸⁹ This variety makes it more challenging for Peru to adapt to climate change as the areas in the country are different and the same model of adaptation cannot be used in all areas.

In the discourse of national interests, the problems produced by climate change are associated with an increase in the human suffering. The human security perspective is highlighted. Paris notes that though definitions on the concept of human security vary, “most formulations emphasize the welfare of ordinary people”²⁹⁰. The notions of vulnerability, risk and resilience are central to the human security²⁹¹.

All these notions can be found in the discourse of national interests. In the discourse, the already existing problem in the developing countries is brought into light: the poverty. Poor people are the ones in risk because of climate change. Ames highlights how there are extremely poor people in Peru, as in Africa or Asia, who have to confront climate change – a phenomenon they did not generate.

“And they should not be in risk but they are at risk and they do this at the socio-economical situations in which they are. So this puts these populations in an unfair situation, right? It is a question of inequality.”²⁹²

Torres sees that climate change in Peru is very vocalized in the poor rural areas due to their high vulnerability. For this, Peru can be found in the ranking of countries that will be the most impacted by climate change.

“But not because [...] here climate change will be more strong. No. But because we already are more vulnerable, right?”²⁹³

²⁸⁸ Ministerio del Ambiente del Perú 2010, 16.

²⁸⁹ Fundación Conservación Internacional (CI) et al. 2007, 5.

²⁹⁰ Paris 2001, 87.

²⁹¹ Barnett 2001, 130.

²⁹² Interview Ames 2009. “Y ellos no deberían tener estar en riesgo pero se encuentran en riesgo y lo hacen en condiciones socio-económicas en la que están. Entonces eso pone estas poblaciones en una situación de injusta, ¿no? Es una cuestión de inequidad.

²⁹³ Interview Torres 2009. “Pero no porque [...] aquí se va a ser el cambio climático más fuerte. No. Sino que ya por sí nosotros somos vulnerables, ¿no?”

Also the extra problems that a changing climate brings to poor local populations in Peru are stressed. Galmez sees that adaptation is the priority for Peru and within adaptation especially how the population and high Andean zones will adapt taking into account the vulnerability of the country and the risk of natural disasters. She adds:

“Taking into account also the productive activities and activities of subsistence that they have that are in close relationship with the nature, right? So you have high Andean populations that are affected by the reduction of forest cover that practically life of firewood. You have Andean communities in the south of the country living of alpacas. They are communities of alpacas and they are affected by the frost. So the alpacas die, they run out of income. So basically it is about trying to seek some alternatives. [...] So it is these things, trying to see the forms that they can adapt but without modifying so much the patterns and habits of living. That is a big challenge, right?”²⁹⁴

The unequal possibilities of influence are brought into light in the discourse. The respondents highlight the influence of the impacts of climate change especially on the poor people that are dependent on the climate. The two notions of human security, vulnerability and risks, are highly present in the discourse. Poor people are seen to be vulnerable because of their socio-economical situations. Climate change puts them in risk even though they have not generated the phenomenon of climate change. This is seen as a question of inequality. The suffering of the population and the effect of climate change as threatening the survival of the people are stressed. The resilience of the populations is also brought into light. Climate change might influence the productive activities of people that live in close relationship with the nature and this has an effect in their income. To help these populations adaptation is needed but respecting their habits and patterns of life.

Calvo accentuates the problem of restricted resources that Peru has:

“I think that, let’s say, the state with the actual levels of revenue has sufficient problems to solve the everyday problems instead of be thinking on a climate change of various decades or to go beyond the consequences it suffers today. [W]ith the levels of resources that the state has, it is not possible, and I am talking of everything; financial, technical, human, it is not possible to project or have a vision of future. So urgent is, always has been the worst enemy of importance [...]”²⁹⁵

²⁹⁴ Interview Galmez 2009. “Considerando también las actividades de subsistencia y productivas que tienen que están en estrecha relación con la naturaleza, ¿no cierto? Entonces tienes poblaciones alto-andinas que se ven afectadas por la reducción del extensión de bosques que viven de la leña prácticamente. Tienes comunidades alto-andinas en el sur del país que viven de las alpacas. Son comunidades alpaqueras y que se ven afectadas por las heladas. Entonces se mueren las alpacas, se quedan sin ingresos. Entonces básicamente es tratar de buscar algunas alternativas. [...] Entonces son esas cosas tratar de ver las formas de que ellos se pueden adaptar pero sin modificar tanto los patrones y las costumbres de vivir. Eso es un gran reto, ¿no?”

²⁹⁵ Interview Calvo 2009. “Yo creo que, digamos, que el estado con sus niveles de ingresos actuales tiene bastantes problemas para resolver la cotidianidad como para estar pensando en un cambio climático en varias décadas o en ir más

The discourse of national interests brings into light that Peru already without climate change has many problems it needs to resolve. Because people are dependent on climate and the levels of poverty, Peru is extremely vulnerable to climate change. In the discourse, it is highlighted that Peru has limited resources and it is not possible to think in the long-term. Peru has more urgent problems that need to be resolved before future problems. An example is the poverty levels that could rise because of the adverse impacts of climate change unless optional ways of income are invented. In Peru, most of the people make their living in agriculture and other primary production and poverty levels are high in rural areas. In rural areas, 60 percent of the population is poor and 21 percent extremely poor, while the situation is a lot better in the urban areas. The situation is better in the urban areas where 23 percent of the population is poor and 3 percent extremely poor.²⁹⁶ It is expected that the ones who are responsible for producing most of the greenhouse gases act before it is Peru's turn. Peru is a developing country and has more urgent problems to be solved before restricting its' emissions.

The internal systems of signification of a discourse are generally quite stable and clear, although the relationships always include the possibility of disharmony²⁹⁷. In the discourse of national interests, disharmony is also present. In the discourse, a critical view of state actions is observed. Garcia notes that what still is missing in Peru is to include climate change at the national level as a medium- and long term policy.

“Better said, the principal stumbling block is not climate change that it is not only taken into account but also that the, for example energetic²⁹⁸ or national, planning or administration is not done in long-term as it should be done.”²⁹⁹

Ames also sees the lack of long-term policies as a problem:

“In the country we do not have policies. In any case in the practice we do not have policies of state that point the medium- and long-term. What primes and what normally is given are policies of government. And the policies of government last every five years. So what a government did and defined, after comes another

allá de las consecuencias que sufre hoy. [C]on los niveles de recursos que tiene el estado no es posible y estoy hablando de todo; financieros, técnicos, humanos, no es posible proyectarse o tener una visión de futuro. Entonces urgente es, siempre ha sido el peor enemigo de importante [...].”

²⁹⁶ See chapter 2.1.2.

²⁹⁷ Jokinen & Juhila 1993, 102.

²⁹⁸ It is worth noting that the Ministry of Energy and Mines approved in the end of November 2010 a national energy plan until year 2040. This long-term plan includes the principal lines on energy issues for the next 29 years. For a detailed plan a company will be hired to define the energetic necessities of the country. See Ministerio de Energía y Minas and El Comercio.

²⁹⁹ Interview Garcia 2009. ” O sea, el principal escollo no es el cambio climático que no lo toman en cuenta solamente sino que la planificación, por ejemplo energética o nacional, no se hace a largo plazo como debería.”

government and in reality or it ignores everything and, or wants to present something newer. So this is a problem.”³⁰⁰

In the discourse of national interests, climate change is seen as a problem that should be taken into account as a theme of medium- and long-term. The problem of government policies is brought into light as these many times only last the period of the government in question. Continuity in policies is lacking. Disharmony inside the discourse is present in that even when the discourse indicates that Peru has more immediate problems than climate change preventing consideration of future problems due to limited resources, the discourse also criticizes the State for not developing long-term policies. It is seen that the country should think about long-term policies in order to better address climate change in Peru.

When talking about mitigation in the discourse of national interests it is common to refer to it as an opportunity for Peru. As the greenhouse gas emissions of Peru are small it should not have obligatory emission reductions. As already noted in the discourse of responsibility it is seen that the country should do something in order to reduce its’ emissions.

“So mitigation is not our priority. Without doubt if there are projects that are beneficial for the country why not to do them? But as for this theme the priority is adaptation.”³⁰¹

“There are doubtless opportunities, for example in the cases related to the inefficiency in emissions or in the cases that are related to reforestation, where schemes that would be beneficial for resolving a local problem and helping a global problem could be found. These are punctual cases and they have to be taken advantage of.”³⁰²

The discourse of national interests highlights that the emission reductions in Peru should be done on voluntary basis and in areas that are beneficial for the country. Although mitigation is not a priority for the country, the opportunities it offers should be taken advantage of. Emission reductions are seen as especially beneficial in the energy and forest sectors. Garcia sees that Peru should not

³⁰⁰ Interview Ames 2009. “En el país no tenemos políticas. En todo caso, en la práctica no tenemos políticas de estado que apunten al mediano y largo plazo. Lo que prima y lo que normalmente se da son políticas de gobierno. Y las políticas de gobierno duran cada cinco años. Entonces lo que un gobierno hizo y definía después viene otro gobierno y en realidad o simplemente desconoce todo y, o quiere plantear algo más nuevo. Entonces ese es un problema.”

³⁰¹ Interview Durand 2009. “Entonces la prioridad nuestra no es la mitigación. Indudablemente si hay proyectos beneficiosos para el país porque no hacerlos. Pero la prioridad en cuanto este tema está en la adaptación.”

³⁰² Interview Calvo 2009. “Hay oportunidades indudables de por ejemplo en los casos de ineficiencia que están relacionados con las emisiones o en los casos como los que están relacionados con la reforestación que se podrían encontrar esquemas que sean mutuamente beneficiosos resolver un problema local y ayudar al problema global. Esos son casos puntuales y hay que aprovecharlos.”

neglect mitigation, although adaptation is a priority for Peru. He sees that the country should promote policies of clean and renewable energies and forest conservation.

“As a co-advantage for the fact of highlighting, tackling the issue of climate change mitigation.”³⁰³

Iturregui sees that reducing its’ emissions would be a good decision for Peru as the country could be more competitive if it becomes more efficient in energy use. She also sees that controlling drastically the deforestation in the country would bring many benefits with it. However, Iturregui reminds that even though this would be an opportunity for the country, it would also mean a cost. For this, the country must seek a point of balance. Iturregui thinks that the country must perform economic studies of the effects of climate change in order to identify the most convenient solutions for the country as a whole.³⁰⁴

Alvarez also sees mitigation as an opportunity to develop for Peru. One example for him is that Peru could orient its present growth in a clean and sustainable way. “So for us, this is a great opportunity.”³⁰⁵ He compares the emissions of Peru to other countries that have emission reduction commitments:

“The difference is that for example in the case of Denmark or New Zealand emitting the same that gives me five times more in GDP [gross domestic product] than in Peru. So in other words, this, we are inefficient in how we emit. So we can recover this inefficiency and this is an opportunity for us.”³⁰⁶

In the discourse of national interests, mitigating climate change, a global problem, is seen in the light of simultaneously solving local problems. Of the greenhouse gas emissions in Peru, the largest share, half of total, comes from land-use change and this mainly has to do with illegal deforestation. Emissions in the energy sector are 20 percent of the total emissions.³⁰⁷ As a means of helping to tackle a global problem, it is seen that mitigation should be done in these areas of energy and forests. The inefficiency of using energy in the country is highlighted. For this, mitigation is seen as an opportunity since it could make Peru more competitive and more efficient in energy use. However, in the discourse of national interests, the interviewees also highlight that mitigation has

³⁰³ Interview Garcia 2009. “Como un co beneficio por el hecho de destacar, atacar el tema de mitigación del cambio climático.”

³⁰⁴ Interview Iturregui 2009.

³⁰⁵ Interview Alvarez 2009. “Entonces para nosotros esa es una gran oportunidad.”

³⁰⁶ Interview Alvarez 2009. “La diferencia que por ejemplo en el caso de Dinamarca y Nueva Zelanda emitiendo lo mismo que me dan 5 veces más en PBI que el Perú. Entonces dicho de otra manera, este, somos ineficientes en la manera de emitir. Entonces ese ineficiencia la podemos recuperar y eso es una oportunidad para nosotros.”

³⁰⁷ For more on the emissions of Peru see chapter 2.3.1.

costs associated and thus Peru should seek a balance between helping solve a global problem and seeing what is “most convenient for the country”.

As already seen, the question of energy resources is especially highlighted in the discourse of national interests as part of action on mitigation. The use of new, clean energy resources are seen as one of the solutions in mitigating emissions in the energy sector. Garcia points out that mitigation is important for Peru. He especially sees the importance of promoting clean energies:

“Promoting clean energies is also something quite [important] for us not only for the topic of climate change but for diversifying our energy resources for a strategic theme, right?”³⁰⁸

Garcia reminds that Peru is growing a lot in energy demand, and for this the country should first increase the energy resources it has and then make energy planning “in a strategic manner”³⁰⁹. Peru should not focus just on one way of producing energy, like hydroelectric power, as this would be a risk in the case that in 20 years there will be less water resources than there are now.

“So the fact that you can diversify energy resources is a strategy to manage the risk that something happens to, right? These also have a lot to do with climate change. One for the problems, for the risks but also for the opportunity that for example promoting more renewable energy can mean at the time of diversifying the energy sources in Peru.”³¹⁰

Of the energy produced in Peru, almost 80 percent comes from hydroelectric power. In the dry season, a large part of this water comes from the glaciers. However, there has been a 22 percent decrease during the last 30 years in water coming from glaciers and it is now estimated that all the glaciers below 5000 metres over the sea level could disappear in the next 10 years³¹¹. The Mantaro River, running through the central region in Peru, is likely to be most affected by this decrease in water from the glaciers. The river “feeds a hydroelectric plant that supplies 40 percent of Peru’s power, including energy for 70 percent of the country’s industries”³¹². It is obvious that the country is dependent on glacier water. Probably partly because of this, it is stressed in the discourse of national interests that Peru should focus on energy as for mitigation. Solutions based on clean

³⁰⁸ Interview Garcia 2009. “Que se promuevan energías limpias también es algo bastante [importante] para nosotros por un tema no solo de cambio climático sino por diversificar nuestras fuentes de energía por un tema de estratégico, ¿no?”

³⁰⁹ Interview Garcia 2009. “de una manera estratégica”.

³¹⁰ Interview Garcia 2009. “Entonces el hecho que puedas diversificar las fuentes de energía es una estrategia para administrar el riesgo de que algo pase con, ¿no? Tienen mucho que ver también con cambio climático. Uno por los problemas, por los riesgos pero también por la oportunidad que por ejemplo promover más energía renovable puede significar a la hora de diversificar las fuentes de energía en Perú.”

³¹¹ Ministerio del Ambiente del Perú 2010, 118.

³¹² friends of the earth international 2007, 24. See also Chapter 2.1.2.

energies are seen as a factor improving the country's energy safety and also as part of mitigation. Additionally, diversification of energy resources would be an opportunity as well as a strategic decision for Peru. In the discourse of national interests, energy is seen as a possible threat to the country and guaranteeing the energy security is beneficial to the country. The diversification of energy resources is seen as a decision that the country should make not only for mitigation but most importantly for strategic reasons.

As already seen in the previous parts of the discourse of national interests, even though the decision to mitigate would be to solve the global problem, it should be done in areas important for Peru. This is also seen in the discussion on the Clean Development Mechanism (CDM). Durand accentuates the importance of the Clean Development Mechanism for Peru:

“Peru does believe that some of the mechanisms of the Kyoto Protocol are useful for the country like the CDM is. The CDM, we believe, is a mechanism that should continue, should persist.”³¹³

Durand highlights that even when the developed countries do not consider this mechanism to be very significant, the Clean Development Mechanism actually benefits many countries and helps create incentives for changing, for example, the energy matrix. As a result, Peru is interested that the mechanism is maintained and favours as much as possible the developing countries. He especially sees that it benefits smaller countries, such as Peru, Costa Rica, Colombia, Venezuela and Chile.³¹⁴

Calvo reminds that Peru is the 6th country that has most projects in the CDM-mechanism. He sustains that Peru is taking advantage of the mechanisms and thus is taking advantage of the existing opportunities.³¹⁵ Garcia also sees that the Clean Development Mechanism is important for mitigation and should be maintained but improved.

“[B]ecause it really is a source of additional investment for our countries. So it is something quite necessary. It promotes new technologies. Rather than it must exist, it must exist, only that we must see how to make it more effective, right?”³¹⁶

³¹³ Interview Durand 2009. “Perú sí cree que algunos de los mecanismos del Protocolo de Kioto son útiles para el país como es el MDL. El MDL creemos es un mecanismo que debe seguir, debe persistir.”

³¹⁴ Interview Durand 2009.

³¹⁵ Interview Calvo 2009.

³¹⁶ Interview Garcia 2009. “[P]orque es de verdad una fuente de inversión adicional para nuestros países. Entonces es algo bastante necesario. Se promueve nuevas tecnologías. Más bien de que debe existir, debe existir, solo que debemos ver la manera de que sea más efectivo, ¿no?”

In the discourse of national interests, the Clean Development Mechanism is seen beneficial to Peru and for this it should continue. The mechanism provides incentives for changes and gives additional investment to the countries. It is also brought into light how Peru is one of the countries that most takes advantage of the mechanism. However, it is seen in the discourse that the mechanism should be made more effective.

The Clean Development Mechanism (CDM)³¹⁷ is one of the flexible mechanisms of the Kyoto Protocol. The purpose of the CDM is to lower the costs of mitigating climate change as it supplements the reductions made in the developed countries. Additionally, the mechanism is also meant to promote sustainable development in the host countries; that is the developing countries. In a CDM-project, an emission reduction target is defined in the developing country that is the host country of the project. First, the emissions' baseline of the target needs to be determined and then the amount of emissions that can be reduced are calculated. A developed country or a company in a developed country finances the project and then uses the reduced emissions as part of its own emission reduction targets.³¹⁸ Initially, the mechanism took off slowly as few countries wanted to act prior to ratification of the Kyoto Protocol³¹⁹. By February 2011, 2826 projects had been registered and of these China was a host country in 44 percent and India in 22 percent of all the projects³²⁰. This is seen as one of the problems of CDM since the geographical distribution of projects is limited. For example, of all the registered projects, only 2 percent are in Africa³²¹. The mechanism has also received criticism because marginal projects dominate and these are qualitatively more one-sided than originally conceptualized³²².

³¹⁷ See also Chapter 2.3.1.

³¹⁸ Kaskinen et al. 2009, 26.

³¹⁹ Giddens 2009, 190.

³²⁰ UNFCCC.

³²¹ UNFCCC.

³²² Kaskinen et al. 2009, 27 and Giddens 2009, 190.

7. DISCOURSE OF GLOBAL BENEFITS

In the discourse of responsibility, it is seen that since the emissions of Peru are small, the country does not have much influence on the atmosphere. Contrary to this in “the discourse of global benefits”, the uniqueness of Peru is highlighted. Cooperative needs are brought into light and the national interests are left in the background. Though the emissions of the country are small and from this point of view it is not a big player in the negotiations, in the discourse of global benefits the special conditions in Peru and the importance of the country for the entire planet are highlighted. The discourse of global benefits is mostly used for justifying why developed countries should give technological and financial help to Peru.

Madalengoitia, an expert in environment, climate change and sustainable development, stresses that the developed countries should see that in countries like Peru, Ecuador, Colombia or Brazil, there are potential contributions to strategies of adaptation and mitigation at regional and global levels. Madalengoitia highlights that though Peru is one of the most vulnerable countries to the effects of climate change, at the same time there exists a great potentiality in the country. She brings into light the potentiality there is as for knowledge and experience in alternatives for adaptation and mitigation.

"In the Andean region the climatic variability has always been a constant since decades. As a consequence the pre-Hispanic civilizations were highly accustomed to the climatic variation and developed important knowledge and technologies in order to adapt to this achieving a very harmonic relation with the nature. These knowledge and technologies are valid today and constitute an important contribution for the processes of adaptation to the climate change of today, though this climate change is distinct from the previous ones because it now corresponds to the anthropogenic intervention; of the human beings and the modern technologies."³²³

The discourse of global benefits stresses the natural and cultural diversity that exists in Peru. Even though Peru is extremely vulnerable to climate change, it is also a country with a great potential. In this discourse, the variation of climate present in Peru is brought into light. The pre-Hispanic civilizations were accustomed to the climatic variability and developed knowledge and technologies to adapt to this variation. These civilizations lived harmonically with nature and had low levels of emissions. In the discourse, these technologies and knowledge are also seen to be valid today and

³²³ Interview Madalengoitia 2009. “En la región andina, siempre la variabilidad climática ha sido una constante desde siglos. Las civilizaciones prehispánicas, en consecuencia, estuvieron muy acostumbradas a la variación climática y desarrollaron importantes conocimientos y tecnologías para adaptarse a ella, logrando una relación muy armónica con la naturaleza. Estos conocimientos y tecnologías están vigentes en la actualidad y constituyen un importante aporte para los procesos de adaptación al cambio climático actual, a pesar de su diferencia con los anteriores porque ahora responde a la intervención antropogénica; del ser humano y las tecnologías modernas.”

should be seen as useful alternatives for adaptation and mitigation. However, it is noted that the climate change is now different from the past climatic variation, reminding that this climate change is produced by anthropogenic intervention.

Shukla sees that “[s]ome of the local ecological consciousness fostered within indigenous traditions plays a big role if well integrated within climate policy.” He notes that this ecoconsciousness, which in the end means establishing a harmonious existence between nature and local society, is common throughout the planet diverging from place to place. However, ecoconsciousness “is being diminished by the intrusion of contemporary industrialized development patterns within local community”. Shukla highlights that local ecological consciousness can be the basis of an alternative path for developing countries on the way to a sustainable future.³²⁴

In Peru, work has been done on investigating the knowledge and practices of the pre-Hispanic cultures and the possible use of this knowledge for adapting to climate change. For example, the association IDSA-ANTARKI³²⁵ has been working on the contribution of the pre-Hispanic cultures for the use of water in agriculture in the Cusco region. In the pre-Hispanic era, agriculture was based on the rational use of resources like water, soil and climate. The social, environmental and economical conditions were taken into account when using appropriate technologies. For example, Incas designed systems of irrigation and agricultural andenes. In the Cusco region, like in other parts of Peru, there are numerous pre-Hispanic andenes or terraces. Most of these were used for agriculture, although some were used for worship, rituals and religion. The agricultural andenes and the functioning of these was based in two fundamental aspects: modification of the environment as to the microclimate and the control and management of rainwater. The andenes were designed so that the rainwater was retained and used for irrigation. The andenes were taken good care of as these were the most productive soils of the Inca Empire; the andenes formed the base of the food safety of the population. However, most of the pre-Hispanic systems, like the andenes, were not used after the arrival of the Spanish conquerors due to the gradual depopulation and the introduction of new systems that did not permit the continuity of the old systems. Finally, after centuries of oblivion, conservation, restoration and maintenance were begun in the 1980's.³²⁶

In the Cusco region, water is one of the vulnerabilities in front of climate change. The problems derive from the melting glaciers, lack of irrigation infrastructure and organizational weakness for

³²⁴ Shukla 1999,143.

³²⁵ Institute of Investigations for the Sustainable Development of the Andean Agroecosystems Antarki (Instituto de Investigaciones para el Desarrollo Sustentable de los Agroecosistemas Andinos Antarki).

³²⁶ Ortega Dueñas 2009, 242-272.

the management and rational use of water. Faced with these problems, the recovery, conservation and rational use of pre-Inca and Inca irrigation canals and andenes for agriculture could be an alternative for adaptation to climate change. Also classifying and using the traditional knowledge of local people could contribute to adaptation.³²⁷

Madalengoitia sees that the pre-Hispanic technologies are appealing options, and their use together with modern technology now form interesting sources for adaptation. This offers an important potential as alternatives of adaptation for Peru as well as other countries. In addition to adaptation, this knowledge is also useful for mitigation since traditional societies in Peru are societies that produce low levels of emissions.

"[T]his presents a great opportunity for the World but also for our countries in particular to take advantage of these experiences to redesign a strategy of sustainable development that visualizes a society of lower carbon using modern renewable energies in a complementary manner with the traditional technologies."³²⁸

Alvarez notes that technology is not only needed for mitigation but also for adaptation. In order to adapt to the changing climate, Peru needs technology but also other countries should recognize the technologies that already exist in the country. He stresses that the communities in Peru are already adapting. The experience of these communities needs to be recognized and replicated, and thus the country needs resources.³²⁹

Durand brings out the target of continuing to work on native low-cost solutions:

"We are a society of low carbon and we believe we can keep on being that. So we want technical and financial help. Not to bring top technology for adaptation but rather in order to strengthen our ancestral, traditional capacities, combine those with modern technology especially in irrigations systems, management of water, changes of cultivation. A combination of modern knowledge and local knowledge. In a country that is extremely diverse, that is extremely complex in terms of geographical terms and manifestations of climate change."³³⁰

³²⁷ Ortega Dueñas 2009, 242-272. More on the use of traditional knowledge and technologies for adaptation see Llosa Larrabure et al. 2009.

³²⁸ Interview Madalengoitia 2009. "[S]e presenta una gran oportunidad para el mundo pero también para nuestros países en particular de aprovechar esas experiencias para rediseñar una estrategia de desarrollo sostenible que visualice una sociedad más baja en carbono, utilizando las energías renovables modernas, en forma complementaria con las tecnologías tradicionales."

³²⁹ Interview Alvarez 2009.

³³⁰ Interview Durand 2009. "Somos una sociedad de bajo carbono y creemos que podemos seguir siéndolo. Entonces queremos apoyo técnico y financiero. No para traer tecnología de punta en la adaptación sino más bien para fortalecer nuestras capacidades ancestrales, tradicionales, combinarlas con tecnología moderna, sobre todo en sistemas de riego, en gestión del agua, en cambios de cultivo. Una combinación de conocimientos modernos y conocimientos locales. En

The discourse of global benefits sees that pre-Hispanic knowledge and technologies should be used together with modern technology, forming an interesting alternative for adaptation. It is also noted that the communities are already adapting and also this experience should be recognized. In order to be able to use these pre-Hispanic and also present experiences, Peru needs resources from other countries. It is also mentioned that the levels of emissions in Peru are low, although it is brought into light that the levels might not always be low; “we believe we can keep on being that”. In order to keep the emission levels low, financial and technical resources are needed. Typical to the discourse of global benefits, the national benefits are not highlighted but instead the attention is put on the benefits at the global level. The experience that exists in Peru could be beneficial to many countries including the country itself, and for this help, especially financing and technology, should be given to Peru.

With the combination of traditional and modern technologies and knowledge, Peru can develop without continuing the contaminating path of developed countries based on the use fossil fuels but at the same elevating the standard of living of the population.

"In fact, [...] in this point we visualize Peru at the international level as a species of a laboratory as for the responses to climate change. With the help of knowledge and clean technologies of the developed world a sort of global framework on new technologies can be designed to achieve a new type of development, low in carbon, which can successfully face the climate change at global level."³³¹

“[T]o position the country, Peru, as a laboratory of climate change. As we have all the ecosystems of the world and we have all the climates of the world. So here is where one must invest in the topic of climate change. So we need more, this, help, resources [...]”³³²

DeSombre notes that the nature of environmental politics gives influence to some countries that traditionally would not be seen as powerful. Countries with biodiversity resources located within their borders, that are important to the rest of the world, have the ability to dictate the terms on which the rest of the globe can have access to them, or the conditions under which these resources

un país que es sumamente diverso, que es sumamente complejo en términos de áreas geográficas y manifestaciones del cambio climático.”

³³¹ Interview Madalengoitia 2009. “De hecho, [...] en este punto visualizamos el Perú a nivel internacional como un especie de laboratorio en cuanto a las respuestas frente al cambio climático. Con el apoyo del conocimiento y las tecnologías limpias del mundo desarrollado se podrá diseñar una suerte de marco de referencia global, en materia de nuevas tecnologías, para el logro de un nuevo tipo de desarrollo, bajo en carbono, capaz de enfrentar exitosamente el cambio climático a nivel global.”

³³² Interview Alvarez 2009. “[P]ara posicionar el país, al Perú, como un laboratorio de cambio climático. Ya que tenemos todos los ecosistemas del mundo y tenemos todas las climas del mundo. Entonces aquí es donde se tiene que invertir al tema de cambio climático. Entonces necesitamos más, este, apoyo, recursos [...]”

will be protected. In the case of climate change, developing countries whose present-day and future behaviour “may influence the ability of states to manage a global environmental problem can gain great influence by refusing to undertake action to protect the resource unless it is on their terms”. DeSombre sees that the threat of refusing to participate is generally credible. “Even if they may be harmed by the environmental problem, their time horizons are generally shortened by the need to meet the basic needs of their current populations.”³³³

In the discourse of global benefits, Peru has resources, both natural and cultural, that can be used to position the country as a climate change laboratory. Traditional knowledge should be used together with modern, clean technologies of the developed countries. This way a global framework for a new type of development can be designed. The discourse reminds us that Peru has a large variety of ecosystems and climates present in the country, and that these are beneficial to the planet since the natural and cultural diversity would also benefit other countries. This can be seen as a way of gaining more power in the negotiations, and as a result influencing the developed countries to give financial and technological help to the country.

In this discourse, the benefits that Peru has to offer to the rest of the planet can also be seen as the country’s forest resources. Durand notes that even though adaptation is the priority for the country, they will also do their effort on mitigation. As for reducing emissions, the priority for Peru is maintaining its’ forests since 47 percent of the emissions in Peru are from land use change and basically this comes from deforestation. However, this is a voluntary action.

“Peru is not committed to emission reductions but it will pose as a proposition of the country that deserves a rewarding from the developed countries’ part. I am stopping from emitting and need financial support.”³³⁴

Alvarez, on the other hand, starts from the premises of the discourse of responsibility. He reminds us that the developed countries need to be the ones leading the way in mitigation. However, Peru also needs to do its’ part, and consequently the Minister of Environment at COP14 (December 2008) in Poznan made an offer that Peru would stop the deforestation in the country.

“And from there comes the offer, the intentions of the Minister who indicated in Poznan, well, of maintaining the 54.8 million of hectares of forests that is practically

³³³ DeSombre 2002, 181-182.

³³⁴ Interview Durand 2009. “El Perú no está comprometido en reducción de emisiones pero que sí se va a plantear como un activo del país que merece una incentivación por parte de los países más ricos. Yo estoy dejando de emitir y necesito apoyo financiera.”

to stop the deforestation that Peru has in 10 years. That means 47 percent of the emissions that Peru produces. That is a lot more than the commitment that the developed countries are assuming. Better said, a country that is extremely vulnerable, extremely vulnerable, that is, this, is not developed, is not of Annex-I, does not have international commitments, has the will, political will of being able to reduce its' emissions in 47 percent. So we want an answer, better said, a similar answer from the developed countries in the level that corresponds to them. If we reach, this voluntary target we will be implementing in ten more years what the developed countries are trying to do."³³⁵

This discourse reminds us that the developed countries should take the lead in mitigation. Peru, on the other hand, is vulnerable to climate change and adaptation is its' priority, although it is also indicated that Peru will do its' part. As already noted in the discourse of national interest, mitigation is required in the area of forests and energy. Even when land use change, including deforestation, produces the largest share of greenhouse gases in Peru, it is highlighted in the discourse of global benefits that stopping deforestation in Peru is a voluntary action. Peru is an extremely vulnerable developing country that does not have obligatory emission reduction commitments, but it is willing to considerably reduce its' emissions. It is highlighted how this voluntary action is more ambitious than the commitments of the developed countries. In order to be able to do this, developed countries should reward Peru with financial support.

The Amazon rainforest is present in eight different countries³³⁶ in South America, sixty percent is in Brazil.³³⁷ After Brazil, Peru has the second biggest part of the Amazonia with 13 percent of the rainforest situated in the country³³⁸. The Amazonia is important for the global biodiversity and has been declared one of the world's biodiversity 'hotspots'. Even though the Amazon rainforest constitutes only 7 percent of the earth's land surface, it accounts for 35 percent of the global tropical forests. The Amazon rainforest also has an important role in the global climate system as it acts "as a giant 'heat pump' sending energy from the tropics to moderate the climate of the colder, higher, latitudes." The rainforest additionally functions in the global climate system as a carbon sink taking up carbon dioxide that otherwise would enter the climate and this way contribute to climate change.

³³⁵ Interview Alvarez 2009. "Y de allí radica por ejemplo el ofrecimiento, la voluntad del ministro que hizo en Poznan, pues, de mantener el 54,8 millones de hectáreas de bosques. Que es prácticamente detener la deforestación que tiene el Perú en 10 años. Que significa el 47% de las emisiones metas de que produce el Perú. Que es mucho más que el compromiso que los países desarrollados están asumiendo. O sea, un país que es altamente vulnerable, altamente vulnerable que es, este, no es desarrollado, no está del Anexo-1, no tiene compromisos internacionales, tiene la voluntad, la voluntad política de poder reducir sus emisiones en 47%. Entonces queremos la respuesta, o sea, una respuesta similar de los países desarrollados en el nivel que les corresponde. Si nosotros logramos esa meta voluntaria vamos a estar cumpliendo en 10 años más de lo que los países desarrollados están pretendiendo hacer."

³³⁶ These countries are Bolivia, Brazil, Colombia, Ecuador, Guyana, Peru, Suriname and Venezuela.

³³⁷ DeSombre 2002, 144.

³³⁸ Ministerio de Medio Ambiente del Perú 2010, 16.

However, as deforestation increases worldwide “a carbon sink can be transformed into a carbon source, as cut or burned trees release the carbon they had stored.”³³⁹

Ames sees that in addition to showing how vulnerable the country is, Peru should also make it clear that it is also a vocal country, together with Brazil in the region, because of the size of Amazonia in its territory.

“[W]e are the second country in Latin America that has forests in the Amazon that finally will generate benefices in the planet in breathing supposedly cleaner. And it is [the Amazon] contributing in reducing more the emissions of CO₂. [...] Because we have this capacity and potentiality of green resources, of forests, that can also help in some way to control these emissions.”³⁴⁰

Ames sees that Peru needs to reiterate how vulnerable it is so that the countries responsible reduce emissions and provide funds for adaptation.

“But not asking for a favour, [instead] requiring, demanding that this corresponds to us so as to able to do a series of actions including sustainable management of forests that finally will serve to the planet, right?”³⁴¹

The global benefits are also highlighted because of the size of Amazon that pertains to Peru. For this, Peru is a vocal country in the region. In the discourse of global benefits, the role of the Amazon as a carbon sink is stressed. It is seen that financial support should be provided to Peru in order to take action and to sustainably use the forest resources, and thus benefiting the entire planet. The discourse of global benefits is also used here in order to obtain financial resources from the ones responsible of climate change: the developed countries.

³³⁹ DeSombre 2002, 144.

³⁴⁰ Interview Ames 2009. “[S]omos el segundo país de América Latina que tiene todo el bosque en la Amazonía que finalmente va a generar beneficios en el planeta en respirar un poco más, supuestamente más limpio en el planeta. Y está contribuyendo en reducir más esas emisiones de CO₂. [...] Porque tenemos esa capacidad y potencialidad de recursos verdes, de bosques que pueden ayudar a de alguna manera a también controlar esas emisiones.”

³⁴¹ Interview Ames 2009. “Pero no pidiendo un favor, exigiendo, demandando que eso nos corresponde para poder hacer una serie de acciones inclusive de manejo sostenible de bosques que finalmente va a servir al planeta, ¿no?”

8. DISCOURSE OF DEVELOPMENT

The discourses of responsibility and national interests are the undermining elements of the “discourse of development”. Even when these discourses have different perspectives and structure the world and the problem of climate change in different ways, when combined these discourses build a certain image of climate change. As seen in the discourse of responsibility, the developed countries are more responsible than the other countries for having caused the problem of climate change. In the discourse of national interests, already existing problems (e.g., people depend on the climate, poverty and low levels of resources) in Peru were stressed, highlighting that Peru is a developing country and should address more urgent problems before restricting its’ emissions . The discourse of development stresses that because of this, the developed countries need to acknowledge the right to development that Peru has.

The discourse of development starts from the premise that Peru is a developing country and for this it needs to develop most of all. For Calvo, it is important that Peru has its right to development. For this he states:

“What we cannot do are sacrifices or condition anything of [our] development saying that we will do it for the global problem. [...] What we cannot condition is we will try to be the champions and reduce our emissions to zero for the well being of the rest of the humanity. What has the rest of the humanity done for us?”³⁴²

Calvo sees that restricting the developing countries by putting emission reductions on them is principally to keep their levels of poverty high.

“[F]or me it is an extreme hypocrisy when in the case of Europe they say that China should not develop so many cars or so many centrals. Well, for every central that China opens let’s close one in Europe or for every car more in China let’s take one away in Europe. Let’s see who does this? [...] So I want that the other one who has always been poor keeps on being poor so that I can keep on doing what I want.”³⁴³

³⁴² Interview Calvo 2009. “Lo que no podemos hacer son sacrificios ni condicionar nada del desarrollo a decir que lo vamos a hacer por el problema global. [...] Lo que no podemos condicionar es vamos a tratar de ser los campeones y reducir nuestras emisiones a cero por el bien estar del resto de la humanidad. ¿Que ha hecho el resto de la humanidad por nosotros?”

³⁴³ Interview Calvo 2009. “[A] mí me parece una extremada hipocresía en el caso de Europa cuando dice que China no debería desarrollar tantos autos o tantas centrales. Bueno, pues por cada central que abra China cerramos en Europa o por cada auto que aumente en China quitamos una en Europa. ¿A ver quien lo hace? [...] Entonces yo quiero que el otro que ha sido pobre siga siendo pobre para yo poder seguir haciendo lo que yo quiero.”

In the discourse of development, the problem of climate change is seen as a challenge for the development of Peru. It is seen that Peru needs to develop first before addressing the global problem of climate change and thus cannot condition its' development for the wellbeing of other countries but rather must be concerned with its own population. It is seen that emission reductions for developing countries will be harmful for their development. Putting emission reductions would keep the developing countries poor as they could not develop. Here development is seen as more important for Peru than mitigating climate change.

The developing countries have insisted since 1972 on linking environment with development. This move to link environment and development was successful and “has been enshrined as international policy since the Rio Conference in 1992”. Williams sees that the developing countries share the interest³⁴⁴ in ensuring that environmental protection should not be at the expense of what they see as the right to development. The developing countries are worried that they have to limit development for the good of the planet and for this have insisted that international policies should protect their prospects of development. In short, Williams notes that it must be recognized that developed countries did not consider environmental costs during their industrialization process, and consequently it would be unfair to impose additional burdens on the developing countries' prospects of economical growth. The developing countries “have continued to maintain attachment to the norm that recognizes a right to development and its corollary that the greenhouse gas emissions of poor countries will increase as they develop”.³⁴⁵

Madalengoitia sees that the responsibility of developing countries is to utilize the crisis brought on by climate change as an opportunity to redirect their model of development. For her, it is important that the global politics respect the national priorities and the national sovereignty so that the countries can seek for a balance between the national and global interests. To make this clear she states:

“[B]etter said, as the global climate crisis goes, a country cannot, in the name of its own development, leave aside the serious global consequences of climate change. We must seek for a convergence between the legitimate interests of national development and the global interests. And for this the technological and financial support of the developed countries results fundamental.”³⁴⁶

³⁴⁴ Williams notes that this linking of environment with development is one the five interests that the developing countries share across a number of environmental issues. For more see Williams 2005.

³⁴⁵ Williams 2005, 56 and 62.

³⁴⁶ Interview Madalengoitia 2009. “[O] tal como va la crisis climática en el mundo, un país no puede prescindir, a nombre de su propio desarrollo, de las graves consecuencias globales del cambio climático. Hay que buscar una

For Iturregui, equity is also present in the theme of mitigation since the developing countries have their right to sustainable development. She suggests that it is clear that it will require a great effort for the developing countries when they will have commitments reducing their emissions. For this commitment, there must be a counterpart to assure significant financial resources as well for adaptation.³⁴⁷

Even though the discourse of development highlights that Peru has its' right to development and it cannot condition this, it is noted that the country has to take into account the problem of climate change. It is seen that the developing countries should use climate change and the crisis produced by it as an opportunity to redesign development. However, in the discourse of development, it is important that the developing countries can seek a balance between national and global interests. The interests of national development are seen as legitimate for the developing countries. In order to be able to manage the challenge that climate change and mitigation mean to the development of developing countries, it is seen that technological and financial support are needed from the developed countries.

Williams sees that provision of technology is another of the five shared interests that the developing countries have in environmental issues. Noting the technological gap between North and South, the developing countries have argued that it will be impossible for them to respond to the environmental crisis and avoid using environmentally damaging technologies if adequate technological assistance is not transferred from North to South. In addition to technological support, developing countries have insisted that mechanisms of funding should be appropriate and efficient. "Specifically they have contended that additional resources should flow to assist them in efforts to combat global warming."³⁴⁸

In the discourse of development, the origin of the problem of climate change is once more stressed. Madalengoitia sees that the development of developed countries was based on the use of fossil fuels. In this sense for her, equity means that the developed countries recognize this reality and assume their responsibility in the origin of the problem of climate change. She clarifies:

convergencia entre los intereses legítimos de desarrollo nacional y los intereses globales, y para ello resulta fundamental el apoyo tecnológico y financiero de los países desarrollados."

³⁴⁷ Interview Iturregui 2009.

³⁴⁸ Williams 2005, 56 and 62.

“It is certainly a way to compensate developing countries, because with the type of technologies based on the exploitation of fossil fuels, the developed countries have been the origin of the global problem that we all must face today, but as stated in the Convention of the United Nations, assuming “the common but differentiated responsibilities”. And as [the developed countries] have technologies and resources, a product of this development, so they are in conditions to contribute with clean technologies so that the developing countries do not contribute to aggravate the problem and could improve the quality of life of its population without producing these negative effects for the climate that the developed countries produced.”³⁴⁹

Madalengoitia sees that giving technological and financial resources is necessary so that the developing countries would not worsen the problem but instead could decrease it. She reminds us that if the developing countries continue with the same type of development as the developed countries have the crisis will be thousand times worse.³⁵⁰

In the discourse of development, the origin of climate change, i.e., the use of fossil fuels by the developed countries, is again mentioned. It is seen that the development of developed countries is based on the use of fossil fuels, and thus they now have technologies and resources that the developing countries do not have. The developed countries should transfer clean technologies to developing countries, reminding us that if the developing countries have access to clean technologies they will not worsen the problem of climate change but could instead improve the quality of life of their population.

The discourse of responsibility sustains that the problem of climate change will get worse without emission reductions in the developed countries. The discourse of development highlights that the problem will get worse if the developing countries follow the same path of development as the developed countries, and thus the developed countries should financially and technologically support programs in developing countries. Even when, this is the way the developed countries rationalize why the developing countries need to reduce their emissions, here it is used for justifying resource transfers to developing countries. The interdependence between countries is also seen crucial here.

³⁴⁹ Interview Madalengoitia 2009. “Es, indudablemente, una forma de compensar a los países en desarrollo, porque con el tipo de tecnologías basadas en la explotación de los combustibles fósiles, los países desarrollados han sido el origen del problema global que hoy todos debemos enfrentar, pero como dice la Convención de Naciones Unidas, asumiendo “las responsabilidades comunes pero diferenciadas”. Y como cuenta con tecnologías y recursos, producto de ese desarrollo, entonces están en condiciones de contribuir, con las tecnologías limpias, a que los países en desarrollo no contribuyan a agravar el problema y puedan mejorar la calidad de vida de su población, sin producir esos efectos negativos para el clima que produjeron los países desarrollados.”

³⁵⁰ Interview Madalengoitia 2009.

It is important to note how the use of the interdependence between countries changes depending on the objective of the discourses. The degree of interdependence, dependence on the actions of others, is crucial in both of the discourses but is used in different ways. In the discourse of responsibility, it is seen that the problem will get worse if emissions are not reduced in the developed countries; in the discourse of development, it is seen that the problem will get worse if the developing countries follow the developed countries' path to development and do not receive resources from them. Though the degree is used somewhat differently, in both cases, the developed countries are the ones that have to act to tackle climate change. In the first case, they need to reduce their emissions and on the second case give technological and financial support for the developing countries so as not to worsen the problem.

In the discourse of development, there is certain criticism of State action with respect to climate change. Even when it is on the national agenda, it is not seen a priority when in the economy. Ames feels that the authorities of this phase in Peru are unfortunately a bit limited in their decisions to avoid negative impacts on economic activities; she sees that it should not be like this.³⁵¹ Durand, on the other hand, notes that climate change is on the national agenda and the country participates in the UNFCCC, but recognizes that climate change does not have the same priority in the public agenda in Peru as other sectors.

“And at the political level there is a pronouncement of global policies but in the day to day policies much more attention still needs to be put to the theme [climate change], right? In the policies of daily decisions, in the real policies of taking decisions and assigning public funding there is no priority.”³⁵²

Meanwhile, Torres sees that climate change is not the highest priority in Peru:

“[T]hey won't say to you that they are in favour of climate change. Neither will they say to you that it doesn't worry them, right? But at the time of designing of policies, at the time of budget, right?, at the time of taking decisions in order to determine inversions that have to do with natural resources associated with climate change, it [climate change] is not a priority number 1, right? The theme of climate change equally like the theme of environment in Peru is not a central theme when taken in economic terms, right? [...] There is discourse but at the time of taking economic decisions it weights very little.”³⁵³

³⁵¹ Interview Ames 2009.

³⁵² Interview Durand 2009. “Y a nivel político hay un denunciado de políticas globales pero en la política del día a día todavía falta poner mucha más atención al tema, ¿no? En la política de decisiones diarias, en las política real de la toma de decisiones y asignación de fondos públicos no hay una prioridad.”

³⁵³ Interview Torres 2009. “[N]o te van a decir que están a favor del cambio climático. Tampoco te van a decir de que no les preocupa, ¿no? Pero a la hora del diseño de las políticas, a la hora del presupuesto, ¿no?, a la hora de toma de decisiones frente a determinar inversiones que tienen que ver con recursos naturales asociados al cambio climático, no es una prioridad número 1, ¿no? El tema climático al igual que el tema ambiental en el Perú no es un tema central

The discourse of development criticizes how climate change is not taken into account in either investment or public funding decisions. In this discourse, a concern with respect for climate change is observed. It is perceived that even when the country participates in climate change policies at the global level, it is not considered at the national level when making decisions on investment, budget, or policy design. In economic terms, it is noted that climate change like environmental issues in general are not a priority in Peru.

Peru has grown economically in the recent years and is one of the fastest growing countries in the region. According to the Economic Commission for Latin America and the Caribbean³⁵⁴, the annual growth rate of gross domestic product (GDP) in Peru in year 2002 was 5.0 percent, 6.8 percent in 2005, 8.9 percent in 2007 and 9.8 percent in 2008³⁵⁵. The Central Reserve Bank of Peru estimated that the country will grow 5.5 percent in 2010³⁵⁶. In general, the discourse of development perceives that economic activities and decisions have a higher priority than climate change in the agenda of Peru. As Paterson noted, climate change questions the meaning of human welfare. He questioned if we value economic growth and material goods over risks that come with the impacts of climate change.³⁵⁷

GDP measures the flow of services and goods produced within the market. However, many important economic activities are completely excluded from measurements of GDP, such as costs of crime and prisons, volunteer work and the depletion of natural resources. Many have emphasized that the gross domestic product is a measure of economic activity, not economic well-being. Costanza et al. note that “it is also important to recognize that GDP is not inherently bad; it measures what it measures”. Rather it has been misused to indicate something it does not measure and was never intended to measure. A concern has been raised that “GDP measurement encourages the depletion of natural resources faster than they can renew themselves”. A further concern is that present economic activity is degrading ecosystems and thus reducing the services that, until now, have been provided to humans practically for free. It has also been noted that the overall quality of human life increases as GDP increases up to a point, but beyond this point further increases in material well-being have the negative side effects of lowering healthy relationships, knowledge,

cuando se lleva a términos económicos, ¿no? [...]Discurso hay pero a la hora de tomar decisiones económicas pesa muy poco.”

³⁵⁴ ECLAC, known also for the Spanish abbreviation CEPAL (Comisión Económica para América Latina y el Caribe).

³⁵⁵ ECLAC 2009, 3.

³⁵⁶ Banco Central de Reserva 2010, 2.

³⁵⁷ See chapter 3.4.

community cohesion, a sense of purpose, wisdom, connection with nature and other dimensions of human happiness.³⁵⁸

Guinand refers in some sense to this question on the meaning of human welfare. She sees that climate change does not have the same weight in national policies in Peru as it has in other, especially the European countries.

“And why not? Because, well, the problem is that in developing countries and in a country like Peru that has had a high growth in the last years and is propelling economic growth, well, it is a bit complicated to say, it is very difficult to explain that we are promoting growth but at the same time we are limiting in some sense, well, our energy consumption because development as we have it understood and as it is sold implies energy consumption.”³⁵⁹

Guinand sees this is a big challenge for the developing countries since the model of development that the countries have been pursuing is now being questioned.

“It now results that the model that we pursued is being questioned. And from there comes a problem of what will we then do. How will we continue developing, under which parameters and searching which final goal? [...] What is it that will be prioritized as the political agendas in the countries? Right? A monoculture with high energy consumption or small self-sustaining companies, [that are] energy efficient, that probably do not produce that much but what they produce they produce in a very sustainable way. This is the big challenge.”³⁶⁰

The discourse of development explains why climate change is not high on the national policies. It is seen that in developing countries in general, and especially in Peru with its recent economic growth, it is extremely difficult for the country to promote growth and limit itself at the same time. It is implied that the model of development that the countries have been pursuing comes from outside; “because development as we have it understood and as it is sold”. It is a big challenge for developing countries to develop because the way development has been understood is now being questioned. It is noted that now the countries have to think on how to develop, using which

³⁵⁸ Costanza et al. 2009, 4 and 9-10.

³⁵⁹ Interview Guinand 2009. “¿Y por qué? Porque, bueno, el problema es de que en los países en desarrollo y en un país como el Perú que ha tenido un alto crecimiento en los últimos años y que está propulsando un crecimiento económico, este, es un poquito complicado decir, es muy difícil de explicar que estamos promoviendo un crecimiento pero a la vez nos estamos limitando de alguna manera, este, nuestro consumo energético porque es un desarrollo como lo hemos entendido y como se está vendiendo implica consumo de energía.”

³⁶⁰ Interview Guinand 2009. “Ahora resulta que el modelo que perseguíamos está siendo cuestionado. Y entonces allí viene un problema de entonces que vamos a hacer. ¿Cómo vamos a seguir desarrollando, bajo que parámetros y buscando que objetivo final? ¿Que es lo que se va a priorizar como agendas políticas en los países? ¿Verdad? Un monocultivo con alto consumo de energía o pequeñas empresas autosostenibles, eficientes energéticamente que probablemente no producen tanta cantidad pero lo que producen lo producen de una manera muy sostenible. Es ese el gran reto.”

parameters and what is the final goal from now on. Should the countries now prioritize high energy consumption and big production or should they prioritize energy efficiency and small production in a sustainable manner? It is stressed that this is an enormous challenge for the developing countries.

The discourse of development leads us to an interesting and important question; what is development? In the discourse of development, development is not defined. It is only highlighted that Peru needs and has a right to develop. What is development then? As a concept, development is complex and there is no right or exclusive definition for it. For example, Arturo Escobar sees development as a historically singular experience. It is the creation of a domain of thought and action. For him, three axes define development. The first axis is the forms of knowledge that refer to development and through which it comes about and is elaborated into theories, concepts, objects, and similar. The second axis is “the system of power that regulates its practice” and third the types of subjectivity promoted by this discourse, those through which people come to recognize themselves as underdeveloped or developed. The forms found along these axes constitute “development as a discursive formation, giving rise to an efficient apparatus that systematically relates forms of knowledge and techniques of power.”³⁶¹

Every person, institution or science can define development in their own way. More generally development is understood as the improvement in the quality of human life. This way it can be seen as a continuous process “that has lasted as long as there have been human beings, and for which there is no end in sight”.³⁶² It is important to note that the way development is understood to certain extent defines the best manner to achieve it. Protagonists of economic growth support free trade and the full use of developing countries’ potential. Those in favour of human development highlight that development is not possible if the local people do not have a possibility to implement it themselves.³⁶³

In the human development, the development paradigm is about expanding the people’s choices to lead lives that they value. Thus development is much more than economic growth. It is noted that growth is only a means, if an important one, for expanding the choices people have. Fundamental is enhancing human freedoms and capabilities – the range of things people can do or be in life. ”The

³⁶¹ Escobar 1994, 10.

³⁶² Ogola & Jänis.

³⁶³ Karjalainen 2007.

most basic capabilities for human development are to lead long and healthy lives, to be knowledgeable, to have access to the resources needed for a decent standard of living and to be able to participate in the life of the community.”³⁶⁴ In the Human Development Index³⁶⁵ published by the Human Development Report, Peru is ranked 63 out of 169 countries with comparable data; it is included in the list of countries with high human development in the ranking of year 2010. Peru’s Human Development Index has risen 0.9 percent annually from 0.560 to 0.723 between 1980 and 2010. Peru has the highest index for health (0.850), then comes education (0.731) and the lowest index is for income (0.607). The Human Development Index of Latin America and the Caribbean is 0.706 for 2010, placing Peru above the regional average.³⁶⁶

³⁶⁴ UNDP.

³⁶⁵ Since 1990 the Human Development Report, under the auspice of United Nations Development Program (UNDP), has published each year the Human Development Index (HDI). The HDI was introduced as an alternative to conventional measures, like the rate of economic growth and the level of income, on national development. The HDI is intended to provide a push for a broader definition of well being. It provides a composite measure of three basic dimensions of human development: education, health and income.

³⁶⁶ UNDP 2010.

9. CONCLUSION

The research in this thesis was about how the concept of justice/equity is perceived in the climate change debate in Peru. As already mentioned, the discourse of responsibility was the hegemonic discourse found in the research material and the founding premise of the three other discourses: the discourse of national interests, the discourse of global benefits and the discourse of development.

The discourse of responsibility highlights the principle of common but differentiated responsibilities. This is seen as the most important principle when confronting climate change. It is stressed in the discourse that the developed countries are mostly responsible for having caused climate change and for this they have to take the lead in tackling the problem. The origin of the problem and the corresponding different levels of responsibility are emphasized. In the discourse, the problem is perceived to worsen if the developed countries do not reduce their emissions. For this and because of their great responsibility, the developed countries need to be the ones to make the big greenhouse gas emission reductions. In addition to reducing their emissions, the developed countries also need to assume their responsibility by paying for the harm produced in the developing countries. The discourse stresses that helping developing countries should be done by giving them financial and technological support.

Because of Peru's rather small greenhouse gas emissions, the discourse of responsibility underlined that the country's priority is adaptation especially since it also is extremely vulnerable to the adverse effects of the phenomenon. As for mitigation, it should not have legally binding emission reduction commitments. However, the discourse does acknowledge that developing countries should also do their share of mitigation, but there should be a difference with the reductions required in the developed countries.

The global nature of the problem is noted. Most probably in Peru, it is noted that the developed countries will not agree to emissions reductions only on their part but also demand this from the developing countries. In the discourse, it is seen that it is important to take equity into account when determining the amount of emission reductions since it would not be fair to treat all the countries equally when their responsibilities are different.

Even though the developing countries are mostly seen as one group in the discourse of responsibility, it is also seen that equity should be present in defining different levels of

responsibility between the developing countries. It is seen that the emerging countries and the rest of the developing countries form different groups. The emerging countries should have a higher level for emission reductions than the rest of the developing countries. However, the developed countries should recognize also the right to development of the emerging countries and this should be seen in their emission reductions.

Studying the perception of justice/equity in the climate change debate in Peru, it can be seen that the perception is based on the second justice approach as presented by Paterson.³⁶⁷ In the discourse of responsibility, justice/equity is perceived in the sense of righting the wrong. The premise is the responsibility of the developed countries for having caused the problem of climate change and for having harmed the others. Consequently, they have a moral responsibility to address the situation. This is the main factor that shapes the justice/equity concept in the climate change debate in Peru. The communitarian objection to responsibility; that it is implausible that justice can surpass community boundaries, is overcome by highlighting the interdependence of the countries. The interdependence is seen as evident in the discourse of responsibility. The objection to responsibility as based on the impossibility of tracking lines of causality is also overcome since the causal lines are presented in the discourse as obvious.

The discourse of national interests is based on the discourse of responsibility: the developed countries have a bigger responsibility, and consequently they need to assume a bigger burden when addressing the problem. In the discourse of national interests, the reasons why adaptation is a priority for Peru are highlighted. This priority is made more concrete by highlighting the diversity and the problems the country already has. Peru has limited resources and the country has more immediate problems, especially with respect to poverty. These problems need to be solved instead of to be thinking on how to mitigate climate change. The problems produced by climate change are associated with an increase in the human suffering. The notions of human security; vulnerability, risk and resilience, are central in the discourse. As in the discourse of responsibility, the discourse of national interests also highlights how the developed countries have harmed others, especially the poor communities in Peru.

In the discourse of national interests, a stand is also taken on the manner that Peru should confront climate change. Even when it is seen that the country has more immediate problems to solve than

³⁶⁷ See chapter 3.4.

climate change, it is also seen that the country should include climate change as a theme in the medium- and long-term. It is seen that continuity in policies is lacking in Peru.

The discourse of national interests sees mitigation as an opportunity for Peru and it should be done in areas and projects that are beneficial for the country. Mitigation is especially seen to be beneficial in the areas of energy and forests and in the Clean Development Mechanism-projects. The energy sector is important especially for strategic reasons. Using clean and renewable energy resources are seen as one possible means of mitigating climate change.

Though confronting climate change is seen as something important and that mitigation on the part of the developed countries is especially crucial, the discourse of national interests stresses that the only purpose when tackling climate change is not to reduce the emissions but instead countries like Peru need to adapt and also prevent the poverty from getting worse and guarantee the accessibility to energy resources in the country. Briefly, in the discourse of national interests, action on adaptation and mitigation are seen as helping solve a global problem while also at the same time solving local problems.

The discourse of global benefits mostly leaves these national interests in the background and instead highlights what Peru has to offer for the benefit of the whole planet. The cultural and natural diversity, traditional knowledge and technologies and the Amazonian rainforest are especially brought into light. Though the country is not seen as big player and in the other discourses where the almost non-existent responsibility of Peru is stressed, the discourse of global highlights the importance of the uniqueness and great potentiality of Peru.

The discourse of global benefits brings into light pre-Hispanic knowledge and technologies. It is noted that these civilizations were accustomed to the climatic variability, and that their adaptation technologies and knowledge make them still valid today. These knowledge and technologies should be used together with modern technologies. It is noted that together these form interesting alternatives for adaptation and mitigation. The natural and cultural resources present in Peru are also used in order to position the country as a form of a laboratory of climate change. For these reasons, it would be beneficial for the developed countries to help the country financially and technologically both in adaptation and mitigation. This would benefit Peru and other countries.

Peruvian forest resources also offer benefits for the rest of the planet. First, it is brought into light that Peru is willing to stop the deforestation in the country, and that this voluntary action would be

much more ambitious than the commitments of the developed countries. To be able to stop the deforestation, financial support is needed from the developed countries. In the discourse of global benefits, the size of Amazon pertaining to Peru is also stressed. Peru needs financial support to use its' forest resources in a sustainable manner. It is seen that this support corresponds to Peru. Especially the role of the Amazon as a carbon sink is brought into light. In the discourse, it is reminded that the rainforest and using it in a sustainable manner bring benefits to the entire planet. As noted, cooperative needs and global benefits are highly present in the discourse.

Of the two latter discourses, the discourse of national interests was more present in the research material than the discourse of global benefits. However, I felt it is noteworthy to analyse the significance of both. Though national interests discourse is more present, it is also important to note that global benefits discourse is present. As for not having obligatory emission reductions and justifying why adaptation is a priority, the national interests dominate and state-centrism is highly present. When seeking help and support for adaptation and mitigation, the global benefits come to front stage and national interests are left behind these. As Palosaari notes the relationship between the ways of outlining the problem of climate change determines the type of actions to confront climate change³⁶⁸. If national interests dominate, state-centrism is stronger and international cooperation is made more difficult; in contrast, when seen more as a global problem and global solutions are sought, then international cooperation will most probably be easier.

In the discourse of development, acknowledgement of Peru's right to development by the developed countries is central. Climate change is seen as a challenge to the development of Peru. Peru needs to advance national development and it cannot condition its development for the well-being of others, although it is also seen that Peru needs to take into account the problem of climate change. One possible solution would be to use this as an opportunity to redesign development. It is stressed that the developing countries need to be able to seek a balance between the global and national interests. To be able to manage the challenge of climate change and the development at the same time, the discourse sees that support, technological and financial, for developing countries is needed from the developed countries.

The origin of climate change, use of fossil fuels by the developed countries, is again reminded in the discourse of development. It is seen that the developed countries should give clean technologies to the developing countries. These technologies are seen to be a product of the development based

³⁶⁸ Palosaari 2009.

on the use of fossil fuels. To strengthen the argument for the need of technology transfers, it is stated that the problem of climate change will worsen if the developing countries are not helped. The interdependence between countries is seen crucial also here. It is important to note how the use of the interdependence between countries changes depending on what is sought after by the discourses. The developed countries are the ones that have to act to tackle climate change. In the discourse of development, it is seen that they need to give technological and financial support for the developing countries so that they will not worsen the process of climate change.

The discourse of development criticizes to some length the priority given to economic activities in Peru. It is seen in the discourse that even though climate change to a certain extent is on the national agenda, it is not considered when making decisions on inversions or budget. In general, climate change is not seen as a priority when seen from the point of view of economic activities. Paterson questioned if we value economic growth and material goods over risks that come with the impacts of climate change. In the discourse of development, it is seen that to develop is now a big challenge for the developing countries because the traditional development models are now being questioned. The countries now have to think on how to develop, under which parameters and what is the final goal. What will be the meaning of human welfare?

On the basis of the interpretations presented in this research it can be said that justice/equity is perceived in the sense of righting the wrong in the climate change debate in Peru. The perception is based on responsibility and causality. The developed countries have caused climate change and have a moral responsibility to address it. This is the main factor that shapes the justice concept in Peru. Interdependence is seen as central to the understanding of justice; justice is seen as a transboundary concept. The developed countries need to reduce their emissions and also pay for the harm produced in the developing countries by giving them technological and financial support. It was also noted that the emerging countries should reduce their emissions more than Peru and the rest of the developing countries because of different levels of responsibility. For Peru adaptation is a priority and mitigation should be voluntary for the country. Acknowledgement of Peru's right to development is important and the country needs support from the developed countries both for adaptation and mitigation.

The variety of competing national interests in an issue like climate change is huge. All the countries have their special conditions and could use these for justifying their non-participation in cooperation on climate change. This would, and most probably does, make cooperation and getting to a new agreement on how to globally confront climate change a difficult challenge. On the other

hand, Peru and many other developing countries appeal to the greater responsibility of the developed countries for having caused climate change. Consequently, it is not fair to require developing countries to have the level of the developed countries in emission reductions. As for Peru, the emission reductions should be voluntary and in areas beneficial for the country according to the discourse of national interests. This might be one of the solutions in the negotiations on a new agreement on how to get the developing countries to make their share in the emission reductions. As Giddens sees it “[w]e should look for policies which coordinate with the interests of developing countries, while still having the effect of cutting back emissions.” Reductions in beneficial areas for developing countries are offered as one of the solutions in the discourse of national interests.

It is not possible to determine within the scope of this thesis how justice be better achieved in a problem like climate change. That goal has to be left for future research. However, I hope to have shown that considerations for justice will certainly play a role in the international negotiations on a new climate change agreement. The responsibility for having caused climate change and the request for justice are strongly present in the climate change debate in Peru and can be seen in the discourses found in this research.

For the purposes of the planet as a whole, it should be obvious that the Parties need to get to an agreement on how to continue addressing climate change post-2012. After all, the atmosphere is a common resource to all of us. However, the Parties negotiating are sovereign countries each with their particular national interests. Nonetheless, the transboundary nature of climate change in some sense defines the actions of the Parties. Vanderhein³⁶⁹ noted that climate change challenges conventional assumptions about state sovereignty and the geographically limited nature of principles of justice. In the discourses found in this research justice was all but geographically limited. As Shue notes:

“To take ethics seriously, then, is to take seriously the possibility that at least sometimes the best course to follow, all things considered, is not the course that would most advance whichever interests one happens to be attached to, like the interests of one’s own nation. [...] If ethics always required that one go against one’s own interest, it would be impossible to be ethical. If ethics never required that one go against one’s own interest, it would be pointless to be ethical. Ethics rests upon taking the interests of others seriously [...].”³⁷⁰

³⁶⁹ See chapter 3.5.2.

³⁷⁰ Shue 1995, 456-457.

In the coming year(s), the response of the countries to tackle climate change after 2012 and the position that justice concerns have in the negotiation will be defined.

BIBLIOGRAPHY

Interviews

Alvarez, Jorge 16.4.2009.

Ames, Eliana 3.4.3009.

Calvo, Eduardo 19.3.2009.

Durand, Eduardo 2.4.2009.

Gálmez, Verónica 1.4.2009.

García, David 3.4.2009.

Giesecke, Ricardo E. 13.4.2009.

Guinand, Lupe 27.3.2009.

Iturregui, Patricia 1.4.2009.

Madalengoitia, Laura 14.4.2009.

Torres, Juan 25.3.2009.

Literature

Banco Central de Reserva del Perú (2010); *Nota Informativa: La economía peruana tiene fortalezas y presenta buenas perspectivas económicas para el 2010, afirman economistas*. Available at <<http://www.bcrp.gob.pe/docs/Transparencia/Notas-Informativas/2010/Nota-Informativa-BCRP-20100504.pdf>>, accessed 1.2.2011.

Barnett, Jon (2001); *The Meaning of Environmental Security: Ecological Politics and Policy in the New Security Era*. London: Zed.

Bodansky, Daniel (2001); *The History of the Global Climate Change Regime*. In Luterbacher, Urs & Sprinz, Detlef F. (eds.); *International Relations and Global Climate Change*. Cambridge: Massachusetts Institute of Technology.

Burr, Vivien (2003); *Social Constructivism*. London: Routledge.

Brown, Chris (1992); *International Relations Theory: New Normative Approaches*. New York: Harvester Wheatsheaf.

CEPAL (2009); *Anuario estadístico de América Latina y el Caribe*. Available at <http://www.ecac.org/publicaciones/xml/6/38406/LCG2430b_2.pdf>, accessed 1.2.2011.

Cohn, Carol (2006); *Motives and methods: using multi-sited ethnography to study US national security discourses*. In Ackerly, Brooke A., Stern, Maria & Ture, Jacqui; *Feminist Methodologies for International Relations*. Cambridge: Cambridge University Press.

Comunidad Andina (2008); *El Cambio Climático no tiene fronteras. Impacto del cambio climático en la comunidad andina*. Lima: Comunidad Andina.

CONAM (2004); *Bridging gaps in dealing with climate change: the case of Peru*. Available at <http://unfccc.int/files/meetings/cop_10/at_the_kiosk/15_dec_wednesday/application/pdf/041215ci_garan.pdf>, accessed 1.2.2011.

Costanza, Robert; Hart, Maureen; Posner, Stephen & Talberth, John (2009); *Beyond GDP: The Need for New Measures of Progress*. The Pardee Papers No. 4. Boston: Boston University, The Frederick S. Pardee Center for the Study of the Longer-Range Future.

DeSombre, Elizabeth R. (2002); *The global environment and world politics*. London: Continuum.

Dryzek, John S. (1997); *The Politics of the Earth: Environmental Discourses*. Oxford: Oxford University Press.

El Comercio (2010); *Aprueban plan energético que se aplicará hasta el 2040*. Available at <<http://elcomercio.pe/impresas/notas/aprueban-plan-energetico-que-se-aplicara-hasta-2040/20101125/674257>>, accessed 10.1.2011.

Escobar, Arturo (1994); *Encountering Development: The Making and Unmaking of the Third World*. Princeton, New Jersey: Princeton University Press.

Eskola, Jari & Suoranta, Juha (2001); *Johdatus laadulliseen tutkimukseen*. Tampere: Vastapaino.

Eskola, Jari & Vastamäki, Jaana (2007); Teemahaastattelu: opit ja opetukset. In Aaltola, Juhani & Valli, Raine; *Ikkunoita tutkimusmetodeihin 1, Metodien valinta ja aineiston keruu: virikkeitä aloittelevalle tutkijalle*. Jyväskylä: PS-Kustannus.

Finnish Meteorological Institute; *Kasvihuoneilmiö*. Available at <http://www.fmi.fi/ilmastonmuutos/miksi_2.html>, updated 9.11.2010.

FONAMA; *Carbon Market: A Business Opportunity in Peru*. Available at <<http://www.fonamperu.org/cdm.php>>, accessed 26.11.2009.

FONAMb; *Portafolio de Proyectos Peruanos de Carbono*. Available at <<http://www.fonamperu.org/general/mdl/portafolio.php>>, updated 19.11.2010.

Friends of the earth international (2007); *climate change. voices from communities affected by climate change*.

Frost, Mervyn (1996); *Ethics in international relations: a constitutive theory*. Cambridge: Cambridge University Press.

Fundación Conservación Internacional (CI), the Nature Conservancy (TNC) and World Wildlife Fund (WWF) (2007); *Áreas Naturales Protegidas Perú*.

Giddens, Anthony (2009); *The Politics of Climate Change*. Cambridge: Polity Press.

Grubb, Michael (1995); Seeking fair weather: ethics and the international debate on climate change. *International Affairs*, Vol. 71(3): 463-496.

Hakkarainen, Tuuli; Nokelainen, Pasi; Nahi, Tytti; Sandell, Toni; Toikka, Miia & Purje, Henri (2010); *Cancunista kajahti. Ilmasto-oikeudenmukaisuus ohjenuoraksi vaalikaudelle 2011-2015*. Kepan ajankohtaiskatsaukset 7. Helsinki: Kepa.

Hardin, Garret (1968); The Tragedy of the Commons. *Science*, Vol. 162: 1243-1248.

Harris, Paul G. (2009); Climate change in environmental foreign policy: science, diplomacy, and politics. In Harris, Paul G. (ed.); *Climate Change and Foreign Policy: Case studies from East to West*. London: Routledge.

Harris, Paul G. & Yu, Hongyuan (2009); Climate change in Chinese foreign policy: internal and external responses. In Harris, Paul G. (ed.); *Climate Change and Foreign Policy: Case studies from East to West*. London: Routledge.

Haukkala, Ville (2001); Introduction. In Haukkala, Ville (ed.); *Every human has an equal right...?: equity problems in climate policy and politics*. Tampere: University of Tampere. Department of Regional Studies and Environmental Policy.

Herne, Kaisa (2001); Epävarmuus ja ympäristöllinen oikeudenmukaisuus. *Kosmopolis* 31(2): 7-27.

Hirsijärvi and Hurme (2001); *Tutkimushaastattelu. Teemahaastattelun teoria ja käytäntö*. Helsinki: Yliopistopaino.

Holden, Barry (ed.) (1996); *The Ethical Dimensions of Global Change*. Basingstoke: Macmillan Press.

Ilmonen, Kari (2007); Muuan diskurssianalyysi: Esimerkkinä Chydenius-instituutin vaikuttavuustutkimus. In Aaltola, Juhani & Valli, Raine (ed.); *Ikkunoita tutkimusmetodeihin II: näkökulmia aloittevalle tutkijalle tutkimuksen teoreettisiin lähtökohtiin ja analyysimenetelmiin*. Juva: PS-kustannus.

International Union for Conservation of Nature and Natural Resources (IUCN), United Nations Environment Programme (UNEP) & World Wildlife Fund (WWF) (1980); *World Conservation Strategy. Living Resource Conservation for Sustainable Development*.

IPCC (2007a); Global Climate Projections. In Solomon, S; Qin, D; Manning, M; Chen, Z; Marquis, M; Averyt, K.B.; Tignor, M & Miller, H.L. (eds.); *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge and New York: Cambridge University Press.

IPCC (2007b); Policies, instruments, and co-operative arrangements. In Metz, B.; Davidson, O.R.; Bosch, P.R.; Dave, R. & Meyer, L.A. (eds.); *Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge and New York: Cambridge University Press.

IPCC (2007c); Summary for Policymakers. In Pachauri, R.K. & Reisinger, A. (eds.); *Contribution of Working Groups I, II and III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge and New York: Cambridge University Press.

IPCC (2007d); Summary for Policymakers. In Solomon, S; Qin, D; Manning, M; Chen, Z; Marquis, M; Averyt, K.B.; Tignor, M & Miller, H.L. (eds.); *Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge and New York: Cambridge University Press.

Jacoby, Tami (2006); From the trenches: dilemmas of feminist IR fieldwork. In Ackerly, Brooke A.; Stern, Maria & True, Jacqui; *Feminist Methodologies for International Relations*. Cambridge: Cambridge University Press.

Jo, Anthony (2008); *Climate Change: Impacts on Communities and Institutionalization in Peru*. Climate policy and environmental equity- seminar in Helsinki, Finland.

Jokela, Minna (1994); *Miten toteutan teemahaastattelun valtio-opin opinnäytteessä?* Turku: Turun yliopisto. Valtio-opin laitos.

Jokinen, Arja & Juhila, Kirsi (1993); Valtasuhteiden analysoiminen. In Jokinen, Arja; Juhila, Kirsi & Suoninen, Eero; *Diskurssianalyysin aakkoset*. Tampere: Vastapaino.

Jokinen, Arja; Juhila, Kirsi & Suoninen, Eero (1993); *Diskurssianalyysin aakkoset*. Tampere: Vastapaino.

Juhila, Kirsi & Suoninen Eero (1999); Kymmmenen kysymystä diskurssianalyysistä. In Jokinen, Arja; Juhila, Kirsi & Suoninen Eero; *Diskurssianalyysi liikkeessä*. Tampere: Vastapaino.

Karjalainen, Jenni (2007); *Mitä on kehitys?* Attac. Available at <<http://www.maailmantalous.net/?q=fi/node/83>>, accessed 5.1.2011.

Karp, Larry & Zhao, Jinhua (2009); *Suggestions for the Road to Copenhagen*. Report to the Expert Group on Environmental Studies 2009:1. Stockholm: Regeringskansliet. Ministry of Finance.

Kaskinen, Tuulia; Alanen, Olli; Neuvonen, Aleksi & Åman, Pirkka (2009); *Ei kehitystä ilman ilmastoa. Ilmasto- ja kehityspolitiikan leikkauspisteet*. Kepa's Working Papers N:O 27. Helsinki: Kepa.

Khor, Martin (2009); *Historical responsibility as a guide to future action in climate change*. Available at <http://www.southcentre.org/index.php?option=com_content&view=article&id=1014:historical-responsibility-as-a-guide-to-future-action-in-climate-change&catid=95:front-page-articles&lang=es>, accessed 10.5.2010.

Korppo, Anna & Luta, Alex (2009); *Kööpenhaminan sopu vielä kaukana*. Ulkopolitiikka 3. Available at <<http://www.ulkopolitiikka.fi/article/528/>>, accessed 10.5.2010.

LABOR Asociación Civil – Perú. Available at <www.labor.org.pe>, accessed 10.5.2010.

Llosa Larrabure, Jaime; Pajares Garay, Erick & Toro Quinto, Oscar (eds.) (2009); *Cambio climático, crisis del agua y adaptación en las montañas andinas. Reflexión, denuncia y propuesta desde los Andes*. Lima: desco. Red Ambiental Peruana.

Luterbacher, Urs & Sprinz, Detlef F. (2001); Problems of Global Environmental Cooperation. In Luterbacher, Urs & Sprinz, Detlef F.; *International Relations and Global Climate Change*. Cambridge: Massachusetts Institute of Technology.

Merton, Robert K.; Fiske, Marjorie & Kendall, Patricia L. (1990); *The Focused Interview: A Manual of Problems and Procedures*. New York: The Free Press, A Division of Macmillan, Inc.

Milliken, Jennifer (1999); The Study of Discourse in International Relations: A Critique of Research and Methods. *European Journal of International Relations*, Vol. 5(2): 225-254.

Ministerio de Energía y Minas (2010); *MEM aprueba Política Energética Nacional al 2040*. Available at <<http://www.minem.gob.pe/descripcion.php?idSector=6&idTitular=2870>>, updated 24.11.2010.

Ministerio del Ambiente del Perú (2009); *Datos sobre el clima*. Available at <http://www.minam.gob.pe/cop15/index.php?option=com_content&view=article&id=55&Itemid=50>, accessed 10.5.2010.

Ministerio del Ambiente del Perú (2010); *El Perú y el Cambio Climático. Segunda Comunicación Nacional del Perú a la Convención Marco de las Naciones Unidas sobre Cambio Climático 2010*. Lima: MINAM.

Ministerio del Ambiente del Perú; *Inventario Nacional Integrado de Emisiones de Gases de Efecto Invernadero del Perú en el año 2000*. Available at < <http://www.minam.gob.pe/>>, accessed 10.5.2010.

Ministry for Foreign Affairs of Finland (2008); *Tausta: Ilmastomuutos koettelee Perua*. Available at <<http://www.finlandia.org.pe/public/default.aspx?contentid=133763&nodeid=38044&contentlan=1&culture=fi-FI>>, updated 16.7.2008.

Müller, Benito (2002); *Equity in Climate Change. The Great Divide*. Oxford Institute for Energy Studies. Available at < <http://www.oxfordenergy.org/pdfs/EV31.pdf>>, accessed 31.3.2010.

Ogola, Hikloch & Jänis, Julia; *Mitä kehitys on?* Available at <http://oppimateriaalit.internetix.fi/fi/avoimet/3yhteiskunta/globalit/02_kehitys>, accessed 5.1.2011.

Ortega Dueñas, Ramiro (2009); El agua en la agricultura prehispánica y la problemática asociada con el cambio climático global – Región Cusco. In Llosa Larrabure, Jaime; Pajares Garay, Erick & Toro Quinto, Oscar (eds.); *Cambio climático, crisis del agua y adaptación en las montañas andinas. Reflexión, denuncia y propuesta desde los Andes*. Lima: desco. Red Ambiental Peruana.

Palosaari, Teemu (2009); *Ilmastonmuutoksen vaikutukset kansainväliseen politiikkaan Arktisella alueella*. Ilmastonmuutos yhteiskunnallisesta näkökulmasta- seminar. University of Tampere, Tampere.

Paris, Roland (2001); Human Security, Paradigm Shift or Hot Air? *International Security*, Vol. 26(2): 87-102.

Paterson Matthew (1996); International Justice and Global Warming. In Holden, Barry (ed.); *The Ethical Dimensions of Global Change*. Basingstoke: Macmillan Press.

Paterson, Matthew (2001); Principles of Justice in the Context of Global Climate Change. In Luterbacher, Urs & Sprinz, Detlef F.; *International Relations and Global Climate Change*. Cambridge: Massachusetts Institute of Technology.

Patton, Michael Quinn (2002); *Qualitative Research & Evaluation Methods. 3 Edition*. Thousand Oaks: Sage Publications.

Pietikäinen, Sari & Mäntylä, Anne (2009); *Kurssi kohti diskurssia*. Tampere: Vastapaino.

PNUMA (Programa de las Naciones Unidas para el Medio Ambiente) & SERMARNAT (Secretaria de Medio Ambiente y Recursos Naturales) (2006); *El Cambio Climático en América Latina y el Caribe*.

PNUMA (Programa de las Naciones Unidas para el Medio Ambiente) Oficina Regional para América Latina y el Caribe (2004); *Informe Nacional sobre el estado del ambiente. GEO PERÚ 2002-2004*.

Rastas, Anna (2005); Kulttuurit ja erot haastattelutilanteessa. In Ruusuvoori, Johanna & Tiittula, Liisa (eds.); *Haastattelu: tutkimus, tilanteet ja vuorovaikutus*. Tampere: Vastapaino.

Rawls, John (1971); *A theory of justice*. Oxford: Oxford University Press.

Redclift, Michael & Sage, Colin (1999); Resources, Environmental Degradation, and Inequality. In Hurrell, Andrew & Woods, Ngaire; *Inequality, Globalization, and World Politics*. Oxford: Oxford University Press.

Saaranen-Kauppinen, Anita & Puusniekka, Anna (2006); *Diskurssianalyysi*. KvaliMOTV - Menetelmäopetuksen tietovaranto. Tampere: Yhteiskuntatieteellinen tietoarkisto. Available at, <http://www.fsd.uta.fi/menetelmaopetus/kvali/L7_3_6_1.html>, accessed 12.2.2010.

Salmela, Anu (2004); *Feministinen etnografia*. Turun yliopiston naistutkimuskeskus. Available at <http://vanha.hum.utu.fi/naistutkimus/feministinen_etnografia/3.html>, accessed 10.5.2010.

Shue, Henry (1993); Subsistence Emissions and Luxury Emissions. *Law & Policy*, Vol. 15(1): 39-60.

Shue, Henry (1995); Ethics, the Environment and the Changing International Order. *International Affairs*, Vol. 7(3): 453-461.

Shue, Henry (1999); Global Environment and International Inequality. *International Affairs*, Vol. 75(3): 531-545.

Shukla, P.R. (1999); Justice, Equity and Efficiency in Climate Change: A Developing Country Perspective. In Tóth, Ferenc L.; *Fair Weather: Equity Concerns in Climate Change*. London: Earthscan Publications.

Stern, Nicholas (2007); *Stern Review: The Economics of Climate Change. Summary of Conclusions*. Available at <http://www.hm-treasury.gov.uk/d/CLOSED_SHORT_executive_summary.pdf>, accessed 27.4.2009.

Suoninen, Eero (1993); Kielen käytön vaihtelevuuden analysoiminen. In Jokinen, Arja; Juhila, Kirsi & Suoninen, Eero; *Diskurssianalyysin aakkoset*. Tampere: Vastapaino.

Suoninen, Eero (1999); Näkökulmia sosiaalisen todellisuuden rakentumiseen. In Jokinen, Arja; Juhila, Kirsi & Suoninen Eero; *Diskurssianalyysi liikkeessä*. Tampere: Vastapain.

Teivainen, Teuvo (1999); *Fujimorin Peru: uusliberalismi, likainen sota ja kehitysyhteistyö*. Helsinki: Like.

Tiittula, Liisa & Ruusuvuori, Johanna (2005); Johdanto. In Ruusuvuori, Johanna & Tiittula, Liisa (eds.); *Haastattelu: tutkimus, tilanteet ja vuorovaikutus*. Tampere: Vastapaino.

UNDP; *The Human Development concept*. Available at <<http://hdr.undp.org/en/humandev/>>, accessed 5.1.2011.

UNDP (2007); *The Human Development Report 2007/2008. Fighting climate change: Human solidarity in a divided world*. New York: Palgrave Macmillan.

UNDP (2010); *Peru. Country profile of human development indicators*. Available at <<http://hdrstats.undp.org/en/countries/profiles/PER.html>>, accessed 5.1.2011.

UNEP (2009); *Negotiating Adaptation: International issues of Equity and Finance*. Copenhagen Discussion Series. Paper 3. Available at <<http://www.unep.org/climatechange/LinkClick.aspx?fileticket=vyttfYtHi4Y%3D&tabid=389&language=...>>, accessed 13.3.2010.

UNFCCC (1992); *United Nations Framework Convention on Climate Change*.

UNFCCC; *CDM: Registration*. Available at <<http://cdm.unfccc.int/Statistics/Registration/RegisteredProjByRegionPieChart.html>> and <<http://cdm.unfccc.int/Statistics/Registration/NumOfRegisteredProjByHostPartiesPieChart.html>>, accessed 1.3.2011.

UNFCCC; *Draft decision -/CP.16. Outcome of the work of the Ad Hoc Working Group on long-term Cooperative Action under the Convention*. Available at <http://unfccc.int/files/meetings/cop_16/application/pdf/cop16_lca.pdf>, accessed 1.3.2011.

UNFCCC; *Kyoto Protocol*. Available at <http://unfccc.int/kyoto_protocol/items/2830.php>, accessed 1.3.2011.

UNFCCCd; *The Mechanisms under the Kyoto Protocol: Emissions Trading, the Clean Development Mechanism and Joint Implementation*. Available at <http://unfccc.int/kyoto_protocol/mechanisms/items/1673.php>, accessed 1.3.2011.

UNFCCCe; *Project Search*. Available at <<http://cdm.unfccc.int/Projects/projsearch.html>>, accessed 1.3.2011.

UNFCCCf; *Status of Ratification*. Available at <http://unfccc.int/essential_background/items/2877.php>, accessed 1.3.2011.

UN General Assembly (1988); *A/RES/43/53*. Available at <<http://www.un.org/documents/ga/res/43/a43r053.htm>>, accessed 26.10.2009.

United Nations Office on Drugs and Crime (2008); *Coca Cultivation in the Andean Region. A survey of Bolivia, Colombia and Peru*.

Vanderhein, Steve (2008); *Atmospheric Justice: A Political Theory of Climate Change*. Oxford: Oxford University Press.

Vogler, John (1996); Introduction. *The Environment in International Relations: Legacies and Contentions*. In Vogler, John & Imber, Mark F. (eds.); *The Environment and International Relations*. London: Routledge.

Williams, Marc (2005); *The Third World and Global Environmental Negotiations: Interests, Institutions and Ideas*. *Global Environmental Politics* Vol.5:3: 48-69.

The World Bank Group (2010); *The Economics of Adaptation to Climate Change. A Synthesis Report. Final Consultation Draft*. Washington: The World Bank Group.

Woods, Ngaire (1999); Order, Globalization, and Inequality in World Politics. In Hurrell, Andrew and Woods, Ngaire; *Inequality, Globalization, and World Politics*. Oxford: Oxford University Press.

Zürn, Michael (2002); From Interdependence to Globalization. In Carlsnaes, Walter; Risse, Thomas & Simmons, Beth A. (eds.); *Handbook of International Relations*. London: Sage.

Annexes

Annex 1: Interview questions

Preliminary questions

Name

Age

Profession and where do you work?

Theme 1: Consciousness of climate change in Peru

- How do you see the consciousness of climate change in Peru?
- How do you think this consciousness could be made better?
- Does climate change have a position on the national agenda?
- If climate change has a position on the national agenda when did it get there?
- What reasons do you see that there are for its rise to the national agenda?
- How is the problem of climate change seen in Peru?
- Has the discussion on climate change been useful in Peru? Has this discussion on the issue had effects?

Theme 2: International negotiations on climate change

- What is the position of Peru in the international negotiations on the subject?
- What are the priorities for Peru?
- Which criteria are important for Peru when evaluating the agreements already reached and the negotiations on way now?
- Which principles should be the most important when negotiating the climate change regime?
- How do you see the concept of equity or justice?
- Do you think that the developing countries should reduce their greenhouse gas emissions?

Theme 3: National strategy on climate change

- What are the priorities for Peru to confront climate change?
- How do you see the national policy on climate change in Peru?
- Has the national policy on climate change been efficient? Has it gone forward?
- Has the state of Peru put enough of efforts in order to confront climate change?
- What is Peru doing on adaptation?
- How should the (historical) responsibility for causing climate change be distributed?
- What is Peru doing on mitigation?
- What is Peru ready to do on mitigation?
- Should Peru mitigate its greenhouse gas emissions?
- Land use change is the factor that most produces greenhouse gases in Peru and this is closely connected to poverty. People do not have a choice to do otherwise nor do they have knowledge on the effects of this on the nature. What could be done on this issue in Peru?

- Is there something else you would like to say that we have not talked about during the interview?

- May I cite you in my thesis?
- Do you know people that are central when talking about climate change in Peru and who you think might be useful to interview?

Annex 2: List of respondents

	Name	Profession/title	Work place ³⁷¹	Experience on climate change	Sex	Age	Place of interview	Length of interview (minutes)
1	Jorge Alvarez	Master in environmental engineering	General Coordinator of the second national communication of climate change to UNFCCC in the Ministry of Environment of Peru.	Since 2001 working at CONAM and then Ministry of Environment of Peru.	male	30-39	Work	52
2	Eliana Ames	Lawyer	Climate Change Officer, Oxfam GB and professor at the Sagrado Corazón Femenist University.	Last 5 years prioritizing the theme of climate change in teaching at university. Since the end of 2008 Climate Change Officer at Oxfam GB.	female	30-39	Work	36
3	Eduardo Calvo	Master in environmental sciences	Professor in 2 universities, adviser for the Ministry of Foreign Affairs of Peru and a member of IPCC.	Negotiator of the UNFCCC between 1997-2004 and since 1997 member of the IPCC.	male	40-49	Cafeteria	30
4	Eduardo Durand	Architect	Head of the climate change unit in the Ministry for Environment of Peru.	Since 2008 working at the Ministry of Environment of Peru. As citizen been interested in the issue of climate change for the past 5 to 6 years.	male	60-69	Work	43
5	Veronica Gálmez	Forest Engineer	Works at a nongovernmental organization	Since August 2008 working at Intercooperation,	female	20-29	Work	44

³⁷¹ At the time of the interview.

			Intercooperation on a program of social administration of the ecosystems of the Andean forests.	especially on climate change issues.				
6	David García	Specialist in energy and carbon emissions	Coordinator of the area of carbon at FONAM.	Working on climate change issues in CONAM ³⁷² and then in FONAM ³⁷³ for the past 5 years.	male	20-29	Work	54
7	Ricardo E. Giesecke	Physicist	Regional coordinator at the Andean Community on a project called Adaptation to the Impact of Rapid Glacier Retreat in the Tropical Andes.	Previously worked at CONAM as the head of the climate change unit.	male	60-69	Work	93
8	Lupe Guinand	Biologist	Head of the Area of Environment at the University Antonio Ruiz Montoya.	Previously worked at the Andean Community as the coordinator of the environment and sustainable development program.	female	50-59	Work	58
9	Patricia Iturregui	Environmental lawyer	Adviser on climate and energy security at the Embassy of Great Britain in Peru.	Worked on climate change issues in CONAM from 1996. Participated in the UNFCCC negotiations from COP2 to COP7.	female	50-59	Work	57

³⁷² National Council of Environment (Consejo Nacional de Medio Ambiente). CONAM was replaced by the Ministry of Environment.

³⁷³ National Fund of Environment (Fondo Nacional de Medio Ambiente).

10	Laura Madaleno	Sociologist	Expert in environment, climate change and sustainable development.	Since 1990 working on issues concerning the environment.	female	50-59	Work	53
11	Juan Torres	Biologist	Works at a nongovernmental organization ITDG at the area of climate change and professor of general ecology and ecology of mountains at the Agrarian University of la Molina.	Has been working on desertification for 38 years and as it is closely connected to climate change this way has been working on the issue.	male	50-59	Work	46