Iiris Jakola

RESILIENCE: AN ALL-ENCOMPASSING SOLUTION TO GLOBAL PROBLEMS?

A Biopolitical Analysis of Resilience in the Policies of EC, FEMA, UNDP, USAID, WB, and WEF

Master's Thesis International Relations Master's Degree Programme in Global Biopolitics 2015

Lapin yliopisto, yhteiskuntatieteiden tiedekunta

Työn nimi: Resilience: An All-Encompassing Solution to Global Problems? A Biopolitical

Analysis of Resilience in the Policies of EC, FEMA, UNDP, USAID, WB, and WEF

Tekijä: Iiris Jakola

Koulutusohjelma/oppiaine: Master's Degree Programme in Global Biopolitics / International

Relations

Työn laji: Pro gradu -työ<u>X</u> Sivulaudaturtyö__ Lisensiaatintyö__

Sivumäärä: 93 Vuosi: 2015

Tiivistelmä:

This thesis examines the use of resilience in international policy-making. A concept that originally meant an ability of ecosystems to absorb disturbance has not only been welcomed in many disciplines outside ecology, but lately become popular in the policies of international organisations that claim resilience as a solution to various 'global problems' such as climate change, underdevelopment, or economic crises. The study contributes to the ongoing critical discussion on the governance effects of resilience. Here, the Foucauldian theory of biopolitics and the concept of governmentality are useful. Resilience now addresses human systems and communities with concepts from natural sciences, thus making it a biopolitical phenomenon.

Specifically, the thesis asks how mainstreaming resilience affects the pursuit of agendas in six organisations: European Commission, Federal Emergency Management Agency, United Nations Development Programme, United States Agency for International Development, World Bank, and World Economic Forum. Using Foucauldian discourse analysis, the study is thematically divided into adaptive, entrepreneurial and governing aspects of resilience. Each part explicates how truth, power and subjectivity are constructed in the discourse. The analysis shows that contrary to the policy claims, resilience does not function as a solution but is constitutive of the problems it attempts to solve. The current policy discourse confirms pre-existing practices and power relations, and further problematizes issues on the agendas.

The thesis confirms that the policies are trapped in a neoliberal biopolitics that has problematic implications for human subjectivity and political agency. It further concludes that if resilience is to have any practical relevance and positive effects, the policy discourse has to be changed, for which current critical accounts do not offer a plausible direction. Therefore, a distinction between resilience as a policy tool and social resilience is needed, whereby the use of resilience as a policy solution is reduced to disaster risk reduction and similar technical functions, and social resilience is recognised as a communal capacity that cannot be subject to policy regulation.

Avainsanat: resilience, biopolitics, governmentality, discourse, neoliberalism, international policy-making

Muita tietoja:

Suostun tutkielman luovuttamiseen kirjastossa käytettäväksi X.

CONTENTS

1 Introduction	1
1.1 Research question	1
1.2 Brief history of the concept of resilience	2
1.3 Policy analysis	6
2 Theoretical framework and methodology	9
2.1 Biopolitics, biopower, and governmentality	9
2.2 Discourse and 'an analytics of biopolitics'	13
2.3 Structure of the study	16
3 Adaptive resilience	18
3.1 Disastrous environment	18
3.2 Vulnerable human	23
3.3 Building resilience and adaptive capacity	28
4 Entrepreneurial resilience	33
4.1 Economic resilience	33
4.2 The entrepreneurial subject of resilience	36
4.3 Economically responsible behaviour	41
5 Governing life globally through resilience	47
5.1 The complex operating environment	47
5.2 Resilience as global governance	51
5.3 The subject's security and political agency	57
6 Rethinking resilience	63
6.1 Beyond neoliberalism – with or without resilience?	63
6.2 Need and potential for discursive change	68
6.3 Differentiating between resilience as a policy tool and social resilience	73
7 Conclusions	79
Bibliography	83
Appendices	92
Appendix 1: List of the documents used for the discourse analysis	92
Appendix 2: List of the analysis questions	93

Frequently used abbreviations

EC European Commission

FEMA Federal Emergency Management Agency (USA)

UNDP United Nations Development Programme

USAID United States Agency for International Development

WB World Bank

WEF World Economic Forum

1 Introduction

In current accounts of the state of the world, it is quite commonplace to note that we live in "a world of complexity and contingency, of risk, relationality, flows and mutability" (Welsh 2014, 1). Ulrich Beck (2009) has coined this by explaining that we live in a 'world risk society' defined by inescapable and uncontrollable dangers, a theory that seems to be empirically strengthened by each disaster we experience (Evans 2013, 143). We learn to think of contingent 'global risks' as the greatest issues on the international political agenda. Amid this kind of speech, it is difficult not to come across the word *resilience*. One bumps into this catchword in various policy and research contexts, from environmentalism and climate change to development, economy and national security (Walker & Cooper 2011, 143), to name but a few.

1.1 Research question

In policy discourse, resilience is increasingly and more strongly presented as part of the solution to these 'global problems'. Organisations in different operational levels and with different mandates are one by one adopting resilience into their agendas. As a regional political organisation with global reach, the EU aims to increase resilience within the EU in terms of climate change and infrastructure, and beyond the EU in its humanitarian and development operations. Although the EU's foreign policy is subject to agreement between governments of the member states, the European Commission (EC) has a remarkable role in planning when it comes to development policy. Also some single countries have welcomed resilience in their national policies. A good example is the USA, where the Federal Emergency Management Agency (FEMA), an agency of the Department of Homeland Security, uses resilience as a tool in emergency management, and where the United States Agency for International Development (USAID) mainstreams resilience as an approach to development. Globally operating agencies such as the United Nations Development Programme (UNDP) and the World Bank (WB) are promoting resilience as the best operational and policy framework for development. The UNDP has a strong role to play when it comes to international policy-making: many UNDP policies find their way into national policy-making. WB and the World Economic Forum (WEF), a consortium connecting economic actors from state-level politicians to representatives of multinational enterprises, are also integrating resilience into the practices of global economy. With these examples alone, it is obvious that resilience plays a prominent role in various policy fields.

With a strong scientific background, resilience often receives a status of *the* approach to be mainstreamed throughout an agency and with which to confront policy problems. What is missed by resilience scientists and policy-makers is how the diffusion of resilience affects the above mentioned organisations' agenda setting and possibilities to address these problems. There is also an increasing critical literature claiming that what resilience actually does is to function as an instrumental tool for the sustainment and strengthening of global neoliberal governance. It may happen that the very issues in which resilience is supposedly helpful as an operational approach or as a policy concept remain unaddressed and the potential of resilience, differently framed, to function positively in terms of these problems is sidestepped. Thus this thesis asks: *To what extent 1) does resilience in the policies of EC, FEMA, UNDP, USAID, WB, and WEF enable these organisations to solve the problems on their agendas and 2) is there (consequently) a need to reformulate discourse on resilience?*

1.2 Brief history of the concept of resilience

To be clear from the start, resilience does not have one single definition or understanding but it receives different disciplinary meanings and functions, even within a single discipline (Brand & Jax 2007). Yet, for the purposes of this thesis, it is important to give an indicative idea of what we are dealing with. According to the terminology of the Office of the United Nations Disaster Risk Reduction, resilience is "[t]he ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions" (UNISDR 2007). From the quote we can see resilience is an active concept, describing a desired way of action – in the exemplary case with regard to so-called hazards. We might as well talk about resilience to risks, shocks, disasters, crises or change. These contingent factors increasingly shape our understanding of the world. They reflect the so-called complexity turn in social sciences (Urry 2005). Complexity theory and resilience both relate to how systems operate in a complex world. To understand current usage of resilience especially in the context of global politics it is important to understand how complexity has infiltrated social sciences.

Resilience has not always been concerned with disasters and crises in the human world or with the ability of human communities to deal with them. It was initially an ecological concept, first discovered in the 1970s by C.S. Holling. Holling (1973) separated resilience and stability as properties of an ecosystem. He argued that resilience shouldn't be understood as capacity to resist changes and perturbations but on the contrary as the ability to absorb them and to persist despite oscillations in the surrounding environment. Stability, on the other hand, referred to a system's ability to rapidly return to equilibrium after a shock. (Ibid., 17.) All this gained currency as concerns for ecosystems and environment grew and there appeared a need to ensure effective resource management. We can see that already in the beginning of the discussion, adaptation to and survival in changing situations were keys for resilience.

At the end of the century, resilience began to be applied in many new disciplines such as anthropology, ecological economics and environmental psychology (Folke 2006, 255). The revival of resilience in the 1990s concerned its application to 'social-ecological systems'. Ecological and environmental scientists perceived the traditional way of treating ecosystems manageable separately from social systems unsustainable because they both increasingly affect each other (Berkes & Folke 2000), comprising social-ecological systems that "act as strongly coupled, complex and evolving integrated systems" (Folke et al. 2002, 437).

In these complex adaptive systems, not only adaptation to changes but continuous (re)organisation, transformation and development is emphasised (Folke 2006, 259–260). The idea of resilience changed from passive adaptation to active transformation through changes, yet without losing the system's original function. Although human social systems were included in this "hybrid concept" of resilience (Brand & Jax 2007), the main focus of resilience scientists remained in ecosystem management, now taking social aspects into account. However, identifying ecosystems with social systems such as local communities or civil society makes it possible to address people in ecological and biological terms. In social-ecological resilience terms, humans and their unions can be seen to possess similar capacities and abilities and perform similar functions as ecosystems. That humans got a part in this ecological project was crucial for the future development of resilience discourse.

In the 2000s, we have witnessed a mainstreaming of the concept of resilience to all kinds of systems. Today, not only ecosystems, but for example states, societies and individuals in social and economic terms can exhibit or lack resilience. Resilience has broadened its scope

into economics and sustainable development (Levin et al. 1998), with the definition accommodating into "the ability of the system to withstand either market or environmental shocks without losing the capacity to allocate resources efficiently" (Perrings 2006, 418). Economic fluctuations and crises require economies to rise from each more resilient than before. The same is applied to individuals who endure crises at personal level. The cause of such a crisis can be man-made or natural. Psychological resilience focuses on how resilience as a personal capacity helps people to handle traumatic events such as natural disasters, terror attacks or personal losses more easily (e.g. Bonanno et al. 2006; Reich 2006). At the community level, social resilience describes communities' ability to "withstand external shocks to their social infrastructure" (Adger 2000, 361). A comprehensive account of the development of the concept of resilience from its original purely ecological meaning to more general resilience approaches has been given by Fridolin Simon Brand and Kurt Jax (2007).

Resilience is an important object of study because of its actuality. Research on resilience has mushroomed during the last decade, with both openly praising, admittedly supporting, suspicious, and critical voices having been heard. So far social-ecological resilience has been the most influential branch of 'resilience science'. At the turn of the millennium, a network of like-minded scientists formed the Resilience Alliance, "a research organisation comprised of scientists and practitioners from many disciplines who collaborate to explore the dynamics of social-ecological systems" (RA 2004)¹. Brian Walker and David Salt (2006, xiii) discuss the idea of resilience as a capacity to absorb disturbance and maintain function: "This sounds like a relatively straightforward statement but when applied to systems of humans and nature it has far-reaching consequences". Indeed, the importance of resilience for current academic discussions cannot be overlooked, as "[r]esilience approaches increasingly structure, not only academic, but also government policy discourses, with each influencing the development of the other" (Welsh 2014, 1). Expertise in resilience is gathered internationally in institutions like the Stockholm Resilience Centre (SRC 2012) that function as intermediators between "the academic world of environmental science and the policy-making world of international development organisations" (Walker & Cooper 2011, 154).

Besides actuality, resilience merits attention on account of its broad applicability to various policy fields. A well-argued genealogy of the concept of resilience and how its usage has

¹ The Resilience Alliance publishes an openly accessible electronic journal *Ecology and Society* to bring up the research of its members.

evolved during the last decades is provided by Jeremy Walker and Melinda Cooper (2011). On top of strictly environmentally-oriented organisations, resilience, often associated with environmental management, has assumed a growing role in such policies as development, emergency management, humanitarianism, infrastructure, and national or global economy. As illustrated at the start, all the more organisations are adopting resilience policies or mainstreaming resilience throughout their agendas. It is as if during the last ten years actors on local, national, regional, and global levels had one by one discovered it as a solution to various challenges.

During the last years, the concept of resilience and its active promoters have been faced with increasing criticism. Jonathan Joseph (2013, 45-52) has noted that the discourse "predominates in Anglo-Saxon countries and in those international organisations that fall under the influence of Anglo-Saxon ways of thinking" and that its meaning varies depending on the objects of governance. Marc Welsh (2014, 2) has observed there is now an "emerging critical literature [that] links complexity, resilience and modes of neoliberal governmentality". Scholars representing this critical trend mainly come from the fields of security studies, international relations and political science, and they have pointed out effects of resilience on subjectivity and power or demonstrated its compatibility with the dominant neoliberal framework and practices of governance (e.g. Joseph 2013; Reid 2013a; Walker & Cooper 2011; O'Malley 2010; Zebrowski 2009). The use of resilience as a tool in fields like disaster politics, economic crises, and climate change adaptation has raised questions of whether the emphasis on people's capacities to cope with these issues is just a way to remove responsibility from the governing agencies to people. It is clear that despite the immense popularity of resilience, it would be a mistake to take for granted the alleged positive effects of resilience in terms of the major global issues that international organisations are expected to tackle.

What should we make of resilience, then, as on the one hand it is said to be the key to global problems and on the other hand the key to how these things are articulated and communicated in governmental practice? Acknowledging the growing critical engagement, David Chandler (2014b, 46) is correct to note that "[i]t is not just policy advocates who are at home in the world of resilience advocacy". He continues that "[i]n both policy advocacy and in much of the critical analyses, resilience is [...] a reflection either of global complexity or the needs of power" (ibid.). This is not to undermine the importance of studying the political implications

of discourses. The problem with analysing discourses on a merely 'technical' level, revealing practices of governance, is that it often lacks political valuation and remains simplistic and reductionist (Donzelot & Gordon 2008, 54). Thus far the most comprehensive critical analysis of the 'resilience paradigm' has been given by Brad Evans and Julian Reid (2014) who articulate the ontological background and political implications of resilience. What have been lacking are discourse analyses of resilience policies, given that resilience now counts as a 'global policy field' (Hannigan 2012, 20). Empirical examples have of course been given, but they tend to be restricted to a single institution, a country, or an event and illustrative to the main arguments of the author.

What is common for all theorisations and policies of resilience is that they make assumptions about life and the nature of the world. If we accept the view that discourse is the location where the social construction of the world takes place, then a discourse on resilience is a practice of building up a particular 'régime of truth' (Foucault 1980, 131) that affects how we perceive life and the world. Where life and politics intersect in such a way, we have come to the realm of *biopolitics*, the politics of life (Foucault 2007; 2008). It is hard to deny that resilience is a biopolitical issue when you look at how it addresses life: it attaches life with some abilities and capacities and then makes claims as to how these should be put into use. Unfortunately resilience is not a clear-cut policy program that could be evaluated point by point. In order to be able to make an assessment of the effects of resilience policies and whether they help in response to the problems they attempt to solve, we need to look at how resilience functions as a biopolitical discourse.

1.3 Policy analysis

To answer the research question (p. 2), a study of some policy material was needed. The five organisations presented in the beginning – EC, FEMA, UNDP, USAID, WB, and WEF² – were chosen on account of an overview of actors that during the last couple of years have explicitly included resilience in their activities by issuing policy documents that touch on resilience. The overview did not, deliberately, concentrate on academic experts or policy

² Borrowing from Hannigan's (2012) nine categories of organisational actors in the 'global policy field of international disaster politics', these organisations cover five of the main categories: nation states (USA), regional organisations (EU), international finance institutions (WB), United Nations-affiliated intergovernmental organisations (UNDP), and the private sector (WEF's members consist of corporations). Referring to the five objects of analysis either the term actor, agency, or organisation as distinct from institution (Young 1994, 3–4) is used.

think-tanks (such as Resilience Alliance or Stockholm Resilience Centre) which are sometimes behind these actors concretely promoting resilience in their activities and hence showing how resilience science is supposed to translate into practice. Selection of actors was influenced by the thought that it is important to look both at actors that have mainstreamed resilience for years and at those where its use is more recent. Also, against the recurrent argument that resilience is a neoliberal discourse, it is interesting to see how 'specifically neoliberal' institutions of global economy treat resilience; do they subscribe to socialecological resilience or some other version? The scope of research is limited and thus it is not possible – nor has it been the intention at any point – to provide an exhaustive empirical analysis of actors that take part in the resilience discourse globally. It is of course accurate to ask why some actor was chosen and not another. Considering state actors, the UK has during the last decade been very active in developing resilience strategies. Indeed, it has already been an exemplary case of many academic contributions (e.g. Chandler 2014a; Joseph 2013; Lentzos & Rose 2009; Zebrowski 2009). As for UN agencies, United Nations Environment Programme (UNEP) could as well have been chosen as an advocate of resilience for environmental sustainability. Yet, UNDP appears to be today an even more prominent player in the global policy field of resilience.³

The objects of analysis are explicitly Western. This is not to say that resilience has not gained any currency in the non-Western world; there are numerous resilience projects going on in Africa or South-East Asia, for example. These are, however, often initiated and at least partly funded by the UN, the EU or a Western donor state. As previously noted, albeit being part of the Western political architecture, it is not clear from the outset if these actors subscribe to the same understanding of resilience.

For closer analysis, 10 documents were chosen⁴: from the EC, 1) an 'EU strategy on adaptation to climate change' and 2) an 'Action Plan for Resilience in Crisis Prone Countries 2013-2020'; from the USA, 3) a FEMA paper on 'Crisis Response and Disaster Resilience 2030: Forging Strategic Action in an Age of Uncertainty' and 4) a USAID policy programme guidance 'Building Resilience to Recurrent Crisis'; from the UNDP, 5) a report 'Towards Human Resilience: Sustaining MDG Progress in an Age of Economic Uncertainty' and 6) the 'Human Development Report 2014'; from the WB, 7) the 'World Development Report 2013'

_

³ The importance of resilience for UNDP is reflected in its motto: "Empowered Lives. Resilient Nations."

⁴ A complete list of the documents on p. 92.

and 8) a report on 'Building Resilience: Integrating Climate and Disaster Risk into Development'; from the WEF, 9) the 'World Risk Report 2013' and 10) report of 'World Economic Forum Annual Meeting 2013: Resilient Dynamism'.⁵

Analysing one or two texts from a single actor may appear superficial, but based on how recently resilience has increased in popularity, it is important to look at several actors to see if this phenomenon has a common ground. What makes resilience so powerful in today's global politics is exactly how widely accepted and praised it has become. Yet, there is no intention to make a quantitative empirical contribution to resilience research but to gain a better understanding of what the actors talk about when they talk about resilience, and how the diffusion of the concept shapes their political agendas and strategies to pursue them — not forgetting alternative interpretations of resilience. The whole of the documents is referred to as 'the policies' or 'the documents'. When referring to the results of the analysis as a whole, expressions 'the (policy) analysis' and 'the analysis results' will be used. As for the single organisations and their documents, the abbreviation and publication year are indicated.

⁻

⁵ The reason for choosing two documents from each actor was the big amount of recently published resilience-related material. To ensure the discourse is up-to-date only documents that were three years old at maximum (as for July 2014) were considered. The documents either specifically focus on resilience or have resilience as an overall framework. Although most are classified as reports, they are very forward-looking and not only accounting for past activity. The documents vary in length between 11 and 44 pages. Some of the documents include pictures or graphs which were intentionally left out of the analysis to treat each document in an equal manner. As for the UNDP documents and the World Development Report, only the summary or overview was analysed because the whole texts would have been out of the limits of a detailed analysis.

2 Theoretical framework and methodology

In this chapter the theoretical framework of the thesis is introduced. First, because the thesis is structured around a discourse analysis, the social constructionist idea of discourse and specifically the Foucauldian way of conducting a discourse analysis with 'an analytics of biopolitics' is presented. This involves looking at the premises, power effects and subjectivities of discourse. Discourse serves both as a methodological and a theoretical concept. Second, the theory of biopolitics as it was originally framed by Michel Foucault (2008; 2007; 1990) is introduced. Biopolitics includes two distinct concepts, namely those of biopower and governmentality, the meanings of which will be clarified. It is also explicated how we can think of resilience in biopolitical terms.

2.1 Biopolitics, biopower, and governmentality

Although the concept of biopolitics was first used already in 1920 by the Swedish political scientist Rudolph Kjellén, it was attached to different theoretical standpoints – such as organicist or racist politics – than what are dominant today (Lemke 2011, 9–15). Foucault can be taken as the key thinker of contemporary biopolitical thought, and a Foucauldian understanding of biopolitics will be used in this thesis. In his genealogy of power, Foucault differentiates three consequent but coexisting forms: sovereign, disciplinary and biopower. Foucault (1995) detects the shift from sovereign forms of power to the use of disciplinary techniques regulating the individual. He first introduced the idea of biopolitics in 1976 in *The History of Sexuality Vol. 1* (Foucault 1990, 140–145). The emergence of biopower as a shift in power's strategy culminates in Foucault's famous quote: "One might say that the ancient right to *take* life or *let* live was replaced by a power to *foster* life or *disallow* it to the point of death" (ibid., 138, emphasis in the original). Foucault detects biopower as power that takes as centre and object of strategy the life of the human species (Foucault 2007, 1, 104–105). Biopower contrasts sovereign power by not aiming at total domination and destruction of life at will, but aiming at controlling, administering and fostering life (Foucault 1990, 138–143).

Biopolitics is a step from power over life of the disciplined body to power over life of the human as species: "this was nothing less than the entry of life into history, that is, the entry of phenomena peculiar to the life of the human species into the order of knowledge and power,

into the sphere of political techniques" (Foucault 1990, 141–142). In other words, Foucault refers to biopolitics as "a specific modern form of exercising power" where "modern human and natural sciences and the normative concepts that emerge from them structure political action and determine its goals" (Lemke 2011, 33). This is a clear indication of the biopolitics of resilience that has a strong background in natural science from where it is making its way into political discourse and programs. Foucault sometimes uses the concepts of biopolitics and biopower rather interchangeably. Yet, biopower can be regarded as a particular form of power that using "numerous and diverse techniques" takes as its object the life of the human as a biological being, whereas biopolitics is the governmental practice of that biopower onto population through "an entire series of interventions" (Foucault 1990, 139–140).

Common to all accounts of biopolitics is the simple fact that they refer to a politics that has to do with life (Lemke 2011, 2). After this obviousness we are on uncertain ground. After Foucault, biopolitics has been given at least two contradicting interpretations: either a positive, affirmative politics of life or a negative, disastrous politics of death. Conceptual ambiguousness is argued to be one of the problems of biopolitics (Esposito 2008, 15). Yet, there is no need to conclude that "the idea of biopolitics risks diversification to the point where it will have little critical force" (Mills 2013, 73). As Roberto Esposito (2008, 32–33) notes, Foucault himself did not decide over one or the other of the conceptual poles of biopolitics and was never exact with definitions.

Irrespective of whether biopolitics is negatively or positively perceived, it has to do with power. Foucault rejected the traditional idea of power as a capacity that can be owned or located and which works as oppression. Although "not trying to develop a general model of power" (Dillon 2013, 166), Foucault nonetheless understood power as relational, as a "multiplicity of force relations" that are embedded in society and function according to some logic and intentions, through subjects but not generated by them (Foucault 1990, 92–95). As Colin Gordon (2000, xiv–xv) notes, Foucault's studies did not consider any particular ideology as such but the use of technologies of power in different political projects. Foucault takes biopolitics from a historical and analytical perspective, focusing on it as a governmental

_

⁶ The negative approach is represented by Giorgio Agamben who recognises biopower but also that the sovereign power of life and death has not disappeared and can be seen in the production of 'bare life' – life in its mere biological existence separated from politically qualified life (Agamben 1998). Affirmative, although differing accounts of biopolitics have been given for example by Esposito (2008), Hardt and Negri (2009), McVeigh (2013) and Reid (2013b). For a more extensive comparative discussion of biopolitics as understood by Foucault, Agamben, Hardt, Negri, Esposito and others, see Lemke (2011).

practice, without strong value judgements. Governing populations by biopolitical means is a strategy available for all ideologies, belief systems and governmental rationalities, and it is thus impossible to judge without knowing the underlying values, aims and motives. This thesis follows that line of understanding, even though some view the mainstream interpretation of Foucault's works being too narrowly focused on the normative administration of population (Hardt & Negri 2009, 57).

In order to comprehensively understand Foucault's approach, the concepts of biopolitics and biopower have to be added with *governmentality*, which is a broader concept in comparison. In its most general sense, governmentality refers to the 'how' of government (Gordon 1991, 7). It indicates a relationship between the empirical practice of government and thought (Dean 2010, 28). It is literally the question of different "mentalities of government" that become realised through certain regimes of practices, the question of "thought made practical and technical" (ibid., 27). Foucault (2007, 108–109) also attached governmentality with a more distinctly historical meaning: it describes the gradual process starting from the 16th century of the governmentalization of the state and a concurrent emergence of the population as an object of government. Together these phenomena marked the advent of a distinct and autonomous rationality that transforms both sovereignty and discipline to function in new ways. Foucault described the concept as follows:

First, by "governmentality" I understand the ensemble formed by institutions, procedures, analyses and reflections, calculations, and tactics that allow the exercise of this very specific, albeit very complex, power that has the population as its target, political economy as its major form of knowledge, and apparatuses of security as its essential technical instrument. Second, by "governmentality" I understand the tendency [...] [that] has constantly led towards the preeminence over all other types of power – sovereignty, discipline, and so on – of the type of power that we can call "government" and which has led to the development of a series of specific governmental apparatuses (appareils) on the one hand, [and, on the other] to the development of a series of knowledges (savoirs). Finally, by "governmentality" I think we should understand [...] the result of the process by which the state of justice of the Middle Ages became the administrative state in the fifteenth and sixteenth centuries and was gradually "governmentalized." (Foucault 2007, 108–109.)

Although Foucault outlined governmentality as the general way in which to think about governing, he linked this practice very closely to the advent of liberalism. He did not consider liberalism as merely an economic theory but "as a style of thinking quintessentially concerned

with the art of governing" (Gordon 1991, 14). Liberalism and later neoliberalism became dominant governmental rationalities that used biopolitical technologies of security on the level of population. Liberalism governs not by law and order, but through the free movement and circulation of people and things. This freedom of movement is not a right given to citizens but an effect of economic rationality to optimise the conduct of population. (Foucault 2007, 48–49.) In Gordon's (1991, 43) words, in todays' neoliberal governmentality "[e]conomics thus becomes an 'approach' capable in principle of addressing the totality of human behaviour, and, consequently, of envisaging a coherent, purely economic method of programming the totality of governmental action". Academic works on governmentality have indeed to a large part concentrated on discussing and problematizing different features of the current neoliberal world order.

Despite recent popularity of the governmentality approach, one has to be conscious of its risks. The general focus of governmentality studies on programs has led to a one-sided view of their power and ability to obstruct any opposition and struggle (Lemke 2013, 31). In resilience research, so far little attention has been given either to opposition and struggle interior to policy programs (ibid., 42–43) or possible alternative applications of resilience where its advantages would be affirmed and criticism directed to reducing negative political implications. Programs on resilience might thus have points of compromise and resistance written in them. Thomas Lemke also criticises the usual technical manner in which governmentality studies approach their objects without making value propositions (ibid., 46–47).

However, there is some sense to Foucault's "exemplary abstention from value judgements" (Gordon 1991, 6) regarding governmentality. There is an intrinsic value in analysing regimes of power embedded in society. Governmentality cannot give answers as to what is good or bad government, partly because it is not a coherent theory but rather a "distinctive critical perspective and a style of thought" (Lemke 2013, 51). Following Lemke, we should acknowledge the uselessness of extending governmentality to resilience as yet another area of study by demonstrating how regimes of government function in that case, which is likely to give foreseeable results and effectively rule out "any surprising insights derived from the empirical data and material" (ibid., 51). Although policy programs by no means directly equate their effects in the 'real world', discussing his study of the prison institution, Foucault (1991, 81) demonstrated the importance of studying them:

You say to me: nothing happens as laid down in these 'programmes' [...] these programmes induce a whole series of effects in the real (which isn't of course the same as saying that they take the place of the real): they crystallize into institutions, they inform individual behaviour, they act as grids for the perception and evaluation of things.

Governmentality is a useful concept for the study of resilience, firstly because it functions as an exemplary criticism rather than foundational critique (Dean 2010, 50; see also Owen 1995). It reveals the contingent nature of any governmental practice and questions its fundamental truths, but makes no claim as to whether we should completely reject that practice or guide ourselves to a certain direction. It also allows us to look at resilience as a specific regime of practices through which we are governed and govern ourselves (Dean 2010, 28). This is appropriate in trying to assess the dangers and benefits of resilience as the received attitude towards various phenomena. When we view resilience as a practice sustained by a collection of contingent truth-claims, we have come to the social constructionist realm of discourse. Governmental discourses as examples of the Foucauldian politics of "rules of truth and truths of rule" are always making things happen in the material world (Dillon 2013, 166), hereby legitimating a governmentality study on discourse.

2.2 Discourse and 'an analytics of biopolitics'

Although studying policy documents, the thesis does not primarily address explicit plans of action but the discursive use of resilience. It means resilience is not something concretely visible or measurable. The social constructionist approach takes a critical stance towards any taken-for-granted knowledge. It explains our knowledge to be historically and culturally specific and both structured and maintained through social interaction and processes (Burr 2003, 2–9). Language is therefore not a tool with which we describe an outside reality but a means to actively construct it and attach it with meanings. However, these meanings are not fixed but form a terrain of contestation where they are reworked and changed; language becomes a struggle after meaning. (Ibid., 52–57.) Discourses are always multiple and they compete with each other. Some become popular and dominant; others provide challenge and alternative.

Foucault (1980) saw this struggle for meaning through language as the interplay of power and knowledge. Power always generates new knowledge through various instruments – for

example human sciences that delve into the workings of body and mind – and this knowledge are further used to produce or maintain power relations. Power and knowledge come together in discourse, which can then be drawn upon to exercise power (Burr 2003, 67–68). Discourse is a way of speaking about and the power of representing things; discourses "systematically form the objects of which they speak" (Foucault 1972, 49). A discourse contains statements that at a given time and in a particular society have "received the stamp of truth" (Burr 2003, 68) – or as Foucault would put it, what becomes when knowledge is formed in power relations is power-knowledge that manifests itself in a discourse (Foucault 1995, 27–28). Power is thus both productive of and dependent on knowledge.

In addition of being productive, power is active and relational. A powerful discourse does not emerge out of nowhere. Discourses function through a group of relations "established between institutions, economic and social processes, behavioural patterns, systems of norms, techniques, types of classification, and modes of characterization" (Foucault 1972, 45). These relations make "possible the formation of a whole group of various objects" and create "a field of regularity for various positions of subjectivity" (ibid., 44, 55). Hence, discourses not only name things: they are the result of a constellation of relations that regulate the conditions under which something can emerge as an object or a subject position can be claimed. Which discourse can become prominent is subject to power relations.

What makes a discourse analysis specifically 'Foucauldian' is its focus on the ideological and power effects of discourse; discourses often imply what we can do to others and what can be done to us (Burr 2003, 18). It is an enormous power resource to be able to formulate or claim a discourse and make use of it politically. While looking at instances of language use, a Foucauldian discourse analysis also takes an interest in the practices legitimated by a discourse, and the underlying material conditions and social structures that contextualise these practices (ibid., 169–170). Power effects are often not explicit in texts that are the object of analysis. The analysis has to deconstruct the text and ask certain questions from it to reveal these effects. The results of such an analysis are, however, as much only an interpretation of the discourse as the discourse is an interpretation of reality. Thus one has to be critical when identifying discursive formations. This thesis looks at resilience as a discourse through biopolitical glasses that serve as an interpretative framework.

Foucault himself never gave any clear methodology with which one could pursue a biopolitical analysis of discourse. This is where Lemke's outline of an "analytics of biopolitics" becomes useful (Lemke 2011, 118–120). What he aims at is to "combine two concepts coined by Foucault, governmentality and biopolitics, in order to conceive of biopolitics as 'an art of government'" (ibid., 127). Here, biopolitics deserves the status of a governmental rationality of its own, rather than being merely a tool of liberal governmentality. This analytics was used as method to conduct the empirical analysis for the thesis. Drawing on Foucault's ideas, Lemke (2013, x) identified three analytical perspectives from which one could analyse a biopolitical phenomenon; resilience is studied from these perspectives to find out the structure and content of the discourse surrounding it.

First, there is *knowledge of life and living beings* that create regimes of truths on which a discourse can be based. As for knowledge on resilience, one can ask for example who has the authority to define and measure resilience and what things are considered problematic in terms of resilience. Second, *power relations* inherent to a biopolitical practice are discovered by looking at hierarchies or structures of inequality. Here one looks at how power generates knowledge on resilience to make some forms of life appear as valuable and others as 'not worth living', or to make some forms of suffering worth political attention and others acceptable. Also, the promotion of a biopolitical practice makes some winners and benefiters, others losers and sufferers – the analysis looks at how resilience distributes these positions. Third, the analytics of biopolitics targets *forms of subjectivation*. What kind of a subject is formulated through resilience and how it is expected to act? To what extent "can this process [of subjectivation] be viewed as an active appropriation and not as passive acceptance" (Lemke 2011, 120)?

A similar three-fold approach has been used before by for example Johanna Oksala (2013). In her view, resistance to biopolitics requires addressing truth, power, and subject (ibid., 71) – axes that construct biopolitics. Foucault identified these axes as the triple core of his thought. Foucault is sometimes described as a power enthusiast who gave little room for the subject, but here he clearly warns of overemphasising any of the three elements – a passage that brilliantly crystallises the Foucauldian analytics of biopolitics and is therefore worth quoting at length:

What is involved, rather, is the analysis of complex relations between three distinct elements none of which can be reduced to or absorbed by the others, but whose relations are constitutive of each other. These three elements are: forms of knowledge (*savoirs*), studied in terms of their specific modes of veridiction; relations of power, not studied as an emanation of a substantial and invasive power, but in the procedures by which people's conduct is governed; and finally the modes of formation of the subject through practices of self. It seems to me that by carrying out this triple theoretical shift – from the theme of acquired knowledge to that of veridiction, from the theme of domination to that of governmentality, and from the theme of the individual to that of the practices of the self – we can study the relations between truth, power, and subject without ever reducing each of them to the others. (Foucault 2011, 9.)

Truth, power, and subject are categories set by the analytical framework. The questions Lemke proposed for each category were modified in order to make them coherent with the resilience framework, for example by adding to the question the word resilience. Altogether 16 questions were used (a complete list on p. 93). The 10 policy documents were analysed by going through them three times, each time concentrating on one category of questions. Answers found were separated from the original text as units of their own and later reorganised thematically. When the research material is quoted, single questions are not indicated because the arguments have importance as parts of the three analytical dimensions. Lemke's proposition is a combination of Foucault's thoughts on biopolitics and later contributions to this field of study (Lemke 2011, 118). Lemke has succeeded in analytically coining the triple core of knowledge, power, and subject into a form that is easy to apply in further research. The analytics of biopolitics is well compatible with the concepts of biopower and governmentality which together serve as the theoretical framework for the thesis.

2.3 Structure of the study

The following four chapters each address the elements of truth, power, and subjectivity. They look at the truth-claims surrounding resilience policies, subjectivities generated, practices legitimated, and various political implications of this current urge by various actors to diffuse resilience as a solution to the most dissimilar of problems.

In chapters 3–5, analysis results are thematically organised according to the issues that are on the policy agendas and the consequent emphases on the different dimensions of resilience. They show how from these perspectives the diffusion of resilience into the policies of the

studied organisations is shaping their strategies to pursue their political agendas. Chapters 3–5 present distinct features of resilience, though not necessarily being different discourses but possibly overlapping dimensions.

Chapter 3 introduces the first dimension: adaptive disaster resilience. Here the disastrous nature of the world and humanity's vulnerability are considered, with an idea of building resilience as an individual and communal capacity. The focus is on adaptation to the prevailing conditions of the world. In chapter 4, attention is given to the entrepreneurial, economic dimension of resilience. Economy serves as a crisis factor but also as an opportunity structure and as a system to whose needs the subject is constructed.

Chapter 5 adopts a more macro perspective on resilience and finds out what role resilience plays as a governance discourse. Many actors claim to understand resilience so well they are willing to help others build resilience. Resilience is taken up as an operational focus in many powerful organisations, but it is not an isolated island of activity. Resilience has been incorporated to many other policies and mainstreamed throughout organisations, which contributes to strengthening the global governance architecture. Governance has also effects on the agency of the subject, which is discussed in this chapter.

Finally, in chapter 6 it is asked if the problems of the current discourse constitute a need to reformulate our understanding of resilience, and some recent contributions to this discussion are accounted for. It is also necessary to keep an eye open to possible frictions and hints of resistance within and around the discourse that might give a chance for different uses of the concept. It is asked if there are alternative ideas of resilience amid the current discourse or if some of the ideas from the analysis can be generated to construct the discourse anew. Ultimately this chapter ponders if resilience is of any use for individuals, communities, states or other actors in solving their problems. An alternative approach to resilience is outlined. In chapter 7 the thesis is concluded by drawing together the different dimensions of the current policy discourse and the problems that the analysis revealed. Future prospects with regard to the importance and use of resilience and research around it are briefly discussed.

3 Adaptive resilience

The most explicit reason why the organisations were promoting resilience had to do with a shared view of the disastrous state of the world. The logic goes that we live in disastrous times, and because we are – despite our best efforts – vulnerable to disaster, although some more than others, there is a necessity to adapt, and resilience is a key to this capacity. This chapter shows that by prescribing resilience as a cure for disaster, the policies are establishing the permanence of disaster as a truth that demands building resilience by problematizing vulnerability. Resilience as a form of adaptation is also critically discussed.

3.1 Disastrous environment

In the policies, many statements were about disasters, emergencies and conflicts threatening people and societies. EC (2013b, 1) highlights the severity of the issue: "The increasing frequency and intensity of disasters and humanitarian crises results in great suffering and loss of life, posing a major threat to long-term development, growth and poverty reduction." Some of these 'events' can be located at a state or in a region but often an impact is felt directly or indirectly in many further places, either physically or in economic and development terms. The main idea is that resilience helps in responding to disaster. The need to actively cooperate for resilience in all levels is due to the nature of risk and disaster that do not respect national boundaries (EC 2013b, 4; FEMA 2012, 20) and which "no one country or agent acting alone" can deal effectively with (WB 2013a, 33–34). Also, "[t]he resilience of a country includes its capacity to recover quickly and well from disasters" (UNDP 2014, 11–12), reflecting social-ecological resilience as "capacity of a system to absorb disturbance and reorganize while undergoing change" (Walker et al. 2004).

What counts, then, as disaster, hazard, risk or threat for resilience? Resilience does not take part in such a debate or demarcate an area of application for example by focusing solely on so-called natural disasters as single events in opposition to long-term situations like famines and droughts (Hannigan 2012, 13). On the contrary, resilience is promoted as the general way of action in 'adverse events' of which we can gather a long list from the policies, ranging from natural to infrastructure hazards. Whichever problem is on the agenda can function as a

target for which resilience is built; for example, EC focuses on resilience to climate change (EC 2013a) and humanitarian crises (2013b).

The relationship between disasters and politics has been subject to a strong academic debate (Hannigan 2012, 6–12). Disasters have been studied for decades, but the reason for the earlier neglect of the "disaster-politics nexus" was due to the assumed apolitical nature of disaster response (ibid., 7). Responses to disasters were usually conducted by non-governmental humanitarian agencies that worked 'outside of politics', leaning on humanitarian values of neutrality and impartiality (Duffield 2007, 74–76; Barnett & Weiss 2008, 3–5). Resilience as a manner of response is nothing short of a political choice and a clear change in discourse; 10 years ago it played only a minor role in the studied organisations but is now the received attitude. While disasters are not apolitical, it has also been argued that what constitutes a disaster is a process of social construction that can be acted upon, and that "there is no such thing as a natural disaster" (Smith 2006).

Disaster resilience cannot be taken as merely a technical or benevolent response to objectively identifiable disasters, devoid of power effects. The concern for adverse events is strongly connected to the discourse of sustainable development where changes in our environment threaten the whole existence of social-ecological systems, constituting a threat that can't be left to humanitarians alone. Two decades ago, Arturo Escobar (1996) noted that nature's signification as 'environment' and the identification of 'global problems' that its changes give rise to is a rather novel phenomenon that can be traced back to the 1972 Club of Rome report *Limits to Growth* and later upheld by the discourse of sustainable development. Social-ecological resilience has incorporated these environmentalist ideas that our environment has inherent limits – illustrated by concepts like 'tipping points', 'thresholds' and 'planetary boundaries' – to which human activity should be adapted (Folke et al. 2011; Powell, Kløcker Larsen & van Bommel 2014). Carl Folke et al. (2011, 719) describe how

[d]uring the last couple of generations, we have witnessed an amazing expansion of human activities into a converging globalized society, enhancing the material standard of living for a large part of people on earth [...] [The expansion] has pushed humanity into a new geological era, the Anthropocene, and generated the bulk of the global environmental changes with potential thresholds and tipping points, currently challenging the future wellbeing of the human population on Earth.

The policy analysis endorses this dangerousness. The discourse is based on a collection of truth-claims that the world is disastrous and will be even more so in the future (FEMA 2012, 15). Environmental concerns dominate the disastrous prospects of the future: "[t]he costs of disasters are rising and become increasingly unaffordable, as climate change generates more severe weather related events and as the world faces new hazards and pressures" (EC 2013b, 1). The rise in the cost of disasters is generally thought to be due to the impacts of climate change "expected to increase the severity, frequency, or scale" of disastrous events (FEMA 2012, 8). For the resilience discourse climate change functions as the ultimate catastrophe – an uncontested truth – that threatens not only ecosystems and societies but economies and services provided by ecosystems? (EC 2013a, 2–3). As W. Neil Adger et al. (2001, 708–709) have noted, "the dominant ideas within global environmental change are based on a belief that we are on the verge of global catastrophe, placing strain on a fragile earth and risking irreversible change". These ideas are backed by scientific analyses and generally accepted knowledge (ibid., 701, 706).

Many have connected this endemic disaster landscape with the conditions of neoliberal governmentality. Neoliberalism is commonly understood as "a theory of political economic practices proposing that human well-being can best be advanced by the maximisation of entrepreneurial freedoms within an institutional framework characterized by private property rights, individual liberty, unencumbered markets, and free trade" (Harvey 2007, 22). Yet, neoliberalism implies also "a complex assemblage of ideological commitments, discursive representations, and institutional practices" (McCarthy & Prudham 2004, 276). Neoliberalism is "an *environmental* project" in so far as it incorporates environmentalism through the discourse of sustainable development (ibid., 277–279, emphasis in the original) which effectively reconciles the needs of growth and environment (Escobar 1996) with practices like commodification and privatisation of ecosystem services (Robertson 2004). Rather than rejecting environmentalism as opposed to the principles of capital and market economy, neoliberalism endeavours to manage environment to these ends.

Recalling Foucault's (2007; 2008) ideas about (neo)liberal governmentality, these are reflections of liberalism's aim to ensure its objects a space of freedom to act according to their interests, a 'milieu of security' where life processes and circulations of the population can

⁷ For a critical discussion of ecosystem services in environmental management, see Robertson 2004.

take place according to certain norms (Foucault 2007, 20–23). For Foucault, liberalism was never primarily an economic doctrine but a governmental rationality that "will act on the environment and systematically modify its variables" (Foucault 2008, 271). Liberalism thus aims to secure life in its liberal forms to sustain itself (Evans & Reid 2013, 86–89). Paradoxically, producing this freedom of activity entails pointing out, controlling and managing a myriad of events and phenomena that are considered as endangering the freedom and interest of people. The interplay of freedom and security has been a never-ending game of liberalism (Foucault 2008, 63–66). Here we come to an early connection between liberalism and resilience. People are urged to live according to what Foucault described as the motto of liberalism: "live dangerously" (ibid., 66). Foucault argued that "individuals are constantly exposed to danger, or rather, they are conditioned to experience their situation, their life, their present, and their future as containing danger" (ibid.). Thus in a neoliberal framing, those who favour resilience are preconditioned to see danger everywhere. The dangers are not necessarily war, plague or invasion like under the sovereign rule, but biopolitically framed everyday events such as illness, old age, criminality, or bankruptcy threatening human life.

According to Evans (2013, 35), distinct to current forms of neoliberalism is that they advance a catastrophic topography that is "planetary in vision". Everything can potentially be a threat. In the era of resilience, this is reflected in the policies so that development not only has to be sustainable but also "climate and disaster resilient" (WB 2013b). This is not a neutral claim but reflects rationality behind evoking threats: liberalism proceeds through catastrophic emergencies that function as sites of intervention and regulation (Evans 2013, 37, 44). The more we seek to identify and analyse threats, the more our 'imaginary of threat' expands and things suddenly become dangerous (ibid., 87–88). This has led to a "terrifying yet normal state of affairs" (Evans & Reid 2014, 16) where everyday events can possibly generate a catastrophe – a view that the world is "insecure by design" (ibid., 194).

The policy analysis to a great extent supports this critique of liberal endangerment where the normality of environment is generalised crisis (Massumi 2009). The normalisation of emergency and catastrophic topographies of the present is reflected by UNDP:

Yet, development everywhere is facing a series of new challenges, ranging from climate change to the energy crisis, from food insecurity to citizens' insecurity, from financial and economic crises to growing global inequalities. Shocks and crises appear to have become the norm, rather

than the exception. And as a result, countries have become ever more vulnerable in the face of such challenges. We now live in a world of uncertainty. (UNDP 2011, 1.)

What should we then make from the shocks, stresses, conflicts and dramatic events that are said to characterise contemporary living (USAID 2012, 9)? Should we question the disastrous truth told us by international organisations promoting resilience? Even if we take all disasters to be socially constructed events and stopped defining them as crises, it is true that the events we habitually term natural disasters are to some extent unpredictable and statistically inevitable in specific geographical spots and not the result of neoliberal dominance.

The acknowledgement of disaster politics in resilience discourses ought not to lead to a rejection of certain events locally regarded as problems. Although affirming the neoliberal truth-claim of endangerment, resilience policies are tasked with providing tools for people to act against it. Resilience to disturbances in the living environment can be useful if it leads to greater awareness and knowledge of disastrous events that can be prepared for; resilience is used as a technical concept similar to the 'capacity of a system'. It includes early warning systems (WB 2013a, 36), innovative technology such as resilient construction materials (EC 2013a, 6) and institutional capacity to respond to shocks (UNDP 2014, 14). All this

[...] requires that there be specific technical capacities in organisations and institutions on the front lines of a crisis response and that core country systems (such as procurement, public finance management, and monitoring and evaluation systems) display qualities of performance, stability and adaptability (UNDP 2011, 10).

If the aim is to experience as little harm as possible it may require resilience to events that cannot be prevented by political will. The problem with this technical framing of resilience is that it may mask the underlying politics of the discourse (Evans & Reid 2014, 22); responses to natural hazards are no less political than responses to man-made conflicts.

Here, even a predisposition to a dangerous environment can generate a position where resilience is needed. The difficulty is an objective identification of disaster. EC, FEMA, UNDP, USAID, WB, and WEF apply resilience to what they see as disaster, not necessarily to what the target populations of their policies would view as such. It is a widely held view that especially climate-related disasters have increased in frequency (WB 2013a, 9; Clark 2012). Indeed, we can't deny the occurrence of severe weather-related or geophysical events

with massive human and material loss. Some interpretations attribute the growing impacts firstly to the expansion of population and its concentration in high-risk areas such as coasts and seismic regions (Hannigan 2012, 59–60). Development of communication and monitoring technologies has also helped the formation of a global community of disaster researchers and thus enhanced keeping disaster records (ibid.). Disasters may have increased in absolute number, but attention should be paid to the discursive effect of disaster resilience: is it reducing impact or occurrence of disaster or invoking more disaster? Is the major effect of resilience to enlarge the sense of eternal endangerment? From the analysis can be said that resilience is part of the social construction of disaster, not a solution to objectively identifiable events.

3.2 Vulnerable human

The documents highlighted that we should take the issue of resilience seriously on the account that we are all vulnerable to various negative events (WB 2013a, 35; UNDP 2011, 2). Vulnerability is stated as a truth that can be verified by scientific knowledge and statistics on adverse events. Indeed, if we were somehow above all threats that life can face, there would be no need to be resilient. But what is meant with vulnerability? Early scholarship on ecological resilience did not address vulnerability (Holling 1973), but it came into the discussion once resilience started to be applied to social-ecological systems, often in terms of environmental hazards (Adger 2006, 268–270). Adger (2006) has reviewed research on vulnerability and outlined convergences with resilience literature; it is clear that the concepts of vulnerability and resilience are related. Definitions for vulnerability are many, but as Adger (ibid., 269) notes, "[i]n all formulations, the key parameters of vulnerability are the stress to which a system is exposed, its sensitivity, and its adaptive capacity. Thus, vulnerability research and resilience research have common elements of interest."

Analysis results are in line with the above formulation. Mostly vulnerability is given no explicit definition but regarded as a general negative status that makes people and nations subject to various shocks. However, as there are different kinds of hazards, also vulnerability is differentiated (UNDP 2011, 3). There is, first, vulnerability to severe weather and climate

⁸ From the last 10 years one could mention the South-East Asian tsunami (2004), the Haiti earthquake (2010), the Japan earthquake and tsunami (2011), hurricane Sandy in North America (2012) and typhoon Haiyan in the Philippines (2013). These are only a few examples that happened to receive wide international attention.

change risks (WEF 2013a, 20; EC 2013a, 2), in other words vulnerability to disasters. There is also vulnerability of infrastructure or "critical supplies" (FEMA 2012, 9, 17). References to economic vulnerability were frequent especially in the UDNP (2011) report on human resilience. Economic vulnerability is reflected either on macro or micro level, in other words it can consider national economies or the economy of households (UNDP 2011, 3; WB 2013a, 11–12).

Hence, on a factual level, vulnerability cannot be described as merely a social phenomenon or be caused by environmental change alone because it is attached to natural, physical and social systems alike and attributed to different hazards. The organisations aim to project vulnerability as a problem that resilience can help to diminish, thereby increasing the capacity of the vulnerable to face disaster. Vulnerability is a threat not only to the life in question but to the process of development: "[m]aking vulnerability reduction central in future development agendas is the only way to ensure that progress is resilient and sustainable" (UNDP 2014, 13).

Resilience is promoted by actors at national, regional or global level. It is required both in the richest and the poorest countries, and everything in between. But is vulnerability equally spread? The policies are replete with explicit couplings of vulnerability with 'the poor' or 'poverty' (EC 2013b, 1; UNDP 2011, 2; WB 2013a, 4). Analysis indicates that being vulnerable does not necessarily mean being poor – all countries and populations are affected – but if you're poor, you're immediately considered vulnerable. Here the discourse establishes an asymmetry and enhances existing power relations between those countries and institutions that are promoting resilience and the so-called poor and vulnerable populations that are in need of it. This is then taken to practice "by comprehensively addressing the root causes" of vulnerability (USAID 2012, 14), which often means poverty. Poverty is seen a threat to the environment because "[g]iven the resource-dependence of rural populations in developing countries [...] it is tempting to conclude that poverty is a major cause of environmental degradation in poorer economies" (Barbier 2010, 636). Although this is a simplistic picture (ibid.), resilience policies regard poverty as the biggest cause of vulnerability. The value of life is defined by the ability to escape vulnerability (i.e. the ability to build resilience to manage environment). Emphasising the vulnerability of the life of a population or an individual casts a negative shadow and implies that this life is not sufficient, or is somehow

not worth of living. Life is stigmatized by loss, suffering and impoverishment (UNDP 2011, 2; USAID 2012, 3).

There are at least two ways of understanding vulnerability. One is to look at it as a context-specific condition that is contingent on stress, sensitivity and adaptive capacity (UNCEB 2013, 13). The more vulnerable you are, the less resilient you will be, and vice versa. This means you have to become resilient to reduce vulnerability. Are resilience and vulnerability merely each other's antonyms in a technical, factual sense? As Philippe Bourbeau (2013, 9) has pointed out, this question implies the problematic premise of much of the resilience literature to treat resilience in a binary way, as an "all or nothing concept". More strikingly, this leads to accepting vulnerability as a pre-given condition which leads to a demand for resilience; while some are deemed more resilient than others, "none can be understood as being fully resilient. [...] We can only ever be somewhere along the continuum of resilience, and therefore ultimately are all in need of enabling to become more resilient." (Chandler 2012, 217.)

The second approach is pursued by authors with a critical standpoint. They emphasise that the whole discourse of resilience is based on the idea that to be able to become resilient the object – be it the individual human, a social-ecological system, or humanity and biosphere at large – has to be accepted as "fundamentally vulnerable" (Evans & Reid 2013, 84). Evans and Reid argue that resilience is a deeply political question. They see vulnerability as an ontological assumption of biological life and any effort to frame vulnerability in technical terms is only a "mask of mastery for liberal power". (Evans & Reid 2014, 1, 22, 40.) Despite the subject's factual exposure to and probability to be hit by a disaster, it is thought that disasters are perpetual and in the face of them, the human is always vulnerable. It is further argued that vulnerable subjects of resilience should not look to states or other authorities for guarantee of security but secure life for themselves (Reid 2013a, 359); yet, resilience calls not for freedom from danger but a need to engage with the necessity of exposure to danger (Evans & Reid 2013, 87, 95). The vulnerable subject's mission becomes to demonstrate its resilient capacity to live with the world's dangers (Reid 2012a, 76). From this perspective, it is impossible to reduce vulnerability through resilience.

Biopolitics as a mode of governing promotes some forms of life for certain political interests. It seeks to determine what a good life is, what threatens this form of life and what measures have to be taken in order to secure that life from those threats. Central to neoliberalism is a specific understanding of subjectivity and "human nature" (Read 2009, 26). When the life of the human subject is defined by its vulnerability and the gaze of liberalism (Evans & Reid 2013, 87) screens the world in order to control the reasons for that vulnerability, this inevitably has its political consequences on how we should conduct our lives. The inclusion of vulnerability in the resilience discourse has generated strong power relations between those who can determine vulnerability and those who are deemed vulnerable. All agencies used their authority to conceive vulnerability as self-evident truth that translates into political demands of appropriate behaviour to deal with that vulnerability.

It is important to ask why many lives are only determined through suffering from vulnerability (e.g. EC 2013b, 1; USAID 2012, 3) and not by the suffering that this supposed vulnerability causes? This reflects Chandler's (2012, 216) remark that in terms of endemic crises and disasters, the targets of international crisis intervention are nowadays "vulnerable subjects" and not "victims", with a further emphasis on prevention rather than protection *in* crisis. Does this mean that instead of falling victim to a sudden shock that would require immediate humanitarian response, the poor are considered predisposed to vulnerability and thus their probability of falling victim to a disaster is acknowledged beforehand and the immediate needs can be neglected under the shadow of pre-acknowledged vulnerability? Here vulnerability leads to bypassing calls for first-hand humanitarian aid, which advocates of humanitarianism fear to be the outcome of resilience policies (Levine et al. 2012). Also, vulnerability becomes a legitimating factor for governmental interference: the legitimacy for sketching resilience policies partly lies on accounts of the vulnerable objects of these plans.

Judith Butler (2006; 2009) takes quite an opposite approach to vulnerability and claims that by understanding vulnerability/precariousness we might actually achieve more security. Rather than seeing vulnerability as the miserable condition of some populations that can be exploited, in Butler's terms we should recognise our mutual interdependence and vulnerability. We are all, as humans, dependent on others for our existence: "Loss and vulnerability seem to follow from our being socially constituted bodies, attached to others, at risk of losing those attachments, exposed to others, at risk of violence by virtue of that exposure" (Butler 2006, 20). Hence, everyone depends on others for his or her survivability, and therefore we shouldn't think of other people or nations as threats to our existence. Butler outlines that mindfulness of this interdependence could be a basis of non-military and non-

violent solutions to global affairs; not abandoning autonomy but recognising the concomitant physical vulnerability to one another (ibid., 27–29). Here vulnerability is intersubjective rather than in the policy analysis where it is a feature of the subject in its relation to an external reality.

Despite the idea that vulnerability is a feature of all life, Butler acknowledges the fact that human physical vulnerability is inequitably distributed and that many populations are conditioned to be living a life that makes them more vulnerable than others, and that is why all have obligations for others in terms of minimizing precarity (Butler 2006, 30–32; 2009, 25–26). Calling for global responsibility and a moral obligation to "make life liveable" by addressing basic needs, Butler sounds like a global humanitarian who tries to convince the international community about its obligations. The approach is idealistic but arguably naïve in terms of practicality: the required global reciprocal recognition of vulnerability is unlikely to realise. Governments and international organisations acknowledge vulnerability, but there is always an inner hierarchy that ascribes it to a smaller group who are more or most vulnerable in relative terms (UNDP 2014, ii; FEMA 2012, 2; EC 2013a, 2).

Another problem is that the acceptance of precariousness does not mean the disappearance of injurability and threat; neither does it give the feeling of security. Precarity is a useful analytical concept for observing the workings of vulnerability in the resilience discourse. Butler's idea of interdependence and mutual vulnerability is arguably present in the liberal way of security and development where other countries' development is a concern for our security. But how could we make use of the concept of vulnerability without falling into a trap of eternal endangerment? A lot depends on how we think of vulnerability: is it inherent of human life, just a contingent circumstance of today or is it about some structural 'root causes'? If we subscribe to one or both of the latter two, vulnerability could be an indicator of how to direct security measures in a society. The danger remains, however, that resilience projects in so-called vulnerable societies easily become like today's peace-building missions in post-conflict countries where "post-conflict reconstruction is not only directed at countries affected by war" but where "peace-building missions are directed at reconstructing the *people* living in those countries" (Alt 2013, 87, emphasis in the original).

As the analysis revealed, not only is resilience not reducing vulnerability but it is sometimes pursued in and of itself, in which case vulnerability is regarded a hindrance. The idea is that

vulnerability prevents people from becoming resilient (Chandler 2012, 217); in other words, a vulnerable system has effectively already "lost resilience" (Folke 2006, 262). A change in the discourse and operations of the studied organisations is needed, for resilience could be a means of overcoming some vulnerabilities by recognising them when they are factual. Resilience should give the possibility to feel secure *despite* vulnerability and also to reduce vulnerability (Berkes 2007). Here, resilience is understood as an active capacity of people, not a passive interest of government.

If we are to speak of vulnerability in a non-discriminating way, its biopolitical use that is implicit in the documents should be strongly reversed. Today, some populations are biopoliticised by describing them as "chronically vulnerable" (USAID 2012, 9) as if vulnerability was an illness. There is a need to reject a discourse that treats life as exclusively vulnerable or vulnerable lives not fully living. An autonomous capacity to pursue security should be affirmed, but if this is aimed at by rejecting vulnerability altogether, it can be detrimental to the everyday security in the surrounding conditions that you can oppose but maybe not make away. Denying vulnerability to achieve security would also suggest denying the world's complex and interconnected nature that gives rise to what the organisations term vulnerability.

3.3 Building resilience and adaptive capacity

In the policies, the premise of the disastrousness of the world and the ensuing vulnerability of social-ecological systems are the background against which resilience is promoted. Resilience is said to reduce vulnerability and help systems and societies to withstand shocks that cannot all be prevented (USAID 2012, 4; WEF 2013B, 28). Ecological and environmental scientists derive the resilience of social-ecological systems from nature's and ecosystems' capacity to absorb disturbances in their environment (Walker et al. 2004). Central to the agencies' understanding of resilience is its attachment both to persons and systems. The difference in emphasis between resilience scholars and policy-makers is that while scholars highlight the innate ability of living systems to react resiliently, policy-makers tend to formulate resilience as a capacity that can be "learnt", "build", and "increased". A central element of resilience – whether you look at the discourse in academia or in international politics – is the concept of adaptive capacity/adaptability. Some actors included adaptation in their definitions of resilience (EC 2013b, 3; WEF 2013b, 18; USAID 2012, 4).

Prominent resilience scientists view resilience "as a framework for understanding how to sustain and enhance adaptive capacity in a complex world of rapid transformations" (Folke et al. 2002, 437). Adaptive capacity is an inseparable part of the so-called social-ecological systems. Walker et al. (2004) have described adaptability, along with resilience and transformability, as three complementary attributes that determine the dynamics of social-ecological systems. Adaptability refers in this case to a social component: "the capacity of humans to manage resilience" (ibid.). In other words, adaptability is seen both as a part and a prerequisite of resilience (Folke et al. 2010).

International organisations have taken up these scientific interpretations and reformulated them in policy discourse. USAID (2012, 5, 10) declares one of its main goals in the resilience programme to be "increased adaptive capacity" that is "the ability to quickly and effectively respond to new circumstances". It is specifically the human populations whom the resilience policies try to provide with adaptive capacity, which is a prime example of biopoliticisation. The need to apply ecological resilience to social systems and increase their adaptability rises from the previously recognised environmental rationality that guides resilience scholars to a large extent. Lack of recognition for the interdependence of the social and the ecological is in their view the biggest reason for problems in ecosystems or natural resource management (Folke et al. 2010). In the sustainability discourse, "[t]his new reality, from which there is no escape, must be recognized—and managed" (WCED 1987), and profound social and societal change is likely to be required (Folke et al. 2010).

As observed, the principal issue stated to require adaptation is climate change, which is where the concept of adaptation has found its way into the language of international relations (Alt 2013, 95). Adaptation has gained so much in importance that it has become the "preferred governance configuration" of the social-ecological resilience discourse (Powell, Kløcker Larsen & van Bommel 2014, 141), coined diversely in terms such as 'adaptive governance' (Folke et al. 2011), 'planetary stewardship' (ibid.), 'earth system governance' (Biermann et al. 2010), or 'ecosystem stewardship' (Chapin et al. 2010), all of which point towards political action in line with the normative idea of sustainability. To transfer the originally ecosystem-related concept to demands of social and societal change is a clear example of the biopolitics of resilience: with anthropogenic effects (WEF 2013b, 29) of the era of the 'Anthropocene', human populations are not just adapting to an external natural environment but functioning as drivers of environmental change and increased interdependence of human societies (Biermann

2014). EC (2013a, 2) concludes there is "no choice but to take adaptation measures to deal with the unavoidable climate impacts and their economic, environmental and social costs". Especially with regard to climate change, "resilience and adaptation now sit side by side, potentially displacing the more revolutionary concept of mitigation" (Welsh 2014, 5).

Part of the effectiveness of resilience is the regime of truth it has constructed around these 'scientific truths'. The question whether climate and other environmental change are real phenomena that require a human response is a matter not appropriate to be dealt with here⁹, but it is clear they are constructed as problems in the adaptive resilience discourse. Again, irrespective of the true events that have taken and are taking place, it is the political language of the policies around these changes that requires critical attention. Being critical does not mean rejecting the changes as such (Evans & Reid 2014, 148). As Biermann (2014, 57) correctly notes, the Anthropocene "has to be understood as a global political phenomenon".

The political question is what implications the institutional mainstreaming of adaptive governance entails. Adaptation to the vulnerable conditions of the biosphere requires a change in behaviour, and the policy discourse is clear on the responsibilities at all levels to build resilience (USAID 2012, 16). Resilience building is expected from each individual in general and leaders in particular (WEF 2013b, 18), and from all countries in general but from riskprone communities in particular (ibid., 4; EC 2013b, 2). Reid (2012a, 72) highlights the tendency to put pressure for building resilience on those people who are most likely to act in an 'environmentally ignorant' manner: the poor. Indeed, Folke et al. (2010) lead us to ask if in a particular system there is a "social dimension that creates barriers or bridges for ecosystem stewardship" or if there are "deeper, slower variables in social systems, such as identity, core values, and worldviews that constrain adaptability". Folke et al. are indirectly pointing to the poor as a 'social dimension' or 'variable' that requires correcting. Importantly, the local and the global poor have been the main points of application for policies inspired by liberal concerns for order and security, as well as for many resilience policies today, for "[w]hile the wealthy are most heavily armed and bellicose, the poor seem to inspire most fear" (Dillon 2013, 169).

⁹ For a discussion of the "denial discourse", see for example Adger et al. 2001, 706–708.

Should we talk about positive adaptation or negative acceptance of the "permanence and unfathomable variability" of risk (WEF 2013b, 4)? Many scholars are concerned with the generalised demand to adapt. They argue that in the dominant discourse, the human is resilient "in so far as it adapts to rather than resists the conditions of its suffering in the world" (Reid 2012a, 76) and it can only "avoid extinction through the ability to constantly adapt to uncertainty" (Duffield 2011, 763). Bourbeau (2013, 8) observes that resilience is often defined as *positive* adaptation to a *negative* shock. He is correct in displaying the possibilities for both positive and negative adaptation, which is situation-, time- and culture-specific (ibid., 8–10). Adaptation can include a consequent change, and this change can be either positive or negative, the determination of which is sometimes a question of value. In other words, one can adapt to both positive and negative changes (ibid., 8).

Consequently, there is a need to differentiate between adaptation as passive acceptance, adaptation as neutral acknowledgement, and adaptation as positive affirmation. In some instances, adaptation can be merely a way to survive a physical threat; in others, adaptation indeed signifies a political surrender, if one by adapting to a situation gives up the possibility to stand up against suffering. Adaptation does not necessarily mean resilience replacing resistance: adaptation can be an affirmative decision not to give up and a determination to hold on to something politically important despite changes in the surrounding conditions. This is a positive interpretation of "the capacity to absorb shocks and still maintain function" (Folke 2006, 253).

There is nothing problematic in building resilience as such, even if the tools are imported, as long as it is a self-generated project. It is creditable that when facilitating efforts to build resilience, the organisations aim to account for local needs, desires, commitments, knowledge, and inclusive decision-making among key actors (USAID 2012, 16; EC 2013b, 4). But policy-makers should understand that no matter how much they rhetorically invest in respecting 'local ownership' and 'local practices', they hardly reach the point of respecting real political diversity (Alt 2013, 98), something that does not take place in the atmosphere of consensus-building (UNDP 2011, 13). Folke et al. (2011, 729) interestingly note that "transparent, and inclusive decision-making processes that are viewed as legitimate by stakeholders, are a precondition for effective adaptive governance systems to emerge", yet "[e]ven though self-organisation and collaboration in polycentric settings hold a great potential, these require both institutional and economic support to be able to function

effectively in the longer term". Here, stakeholder agency is ostensible and conditioned upon outside assistance, which necessitates a reconfiguration of the discourse in line with a more active agency outlined above.

Although this chapter on adaptive resilience has put emphasis on structure and external problems, remaining vague on the agency of the subject, Joseph (2013, 40) notes a shift "from thinking about the dynamics of systems to emphasising individual responsibility, adaptability and preparedness". Folke (2006, 253) reminds that while a "lot of work on resilience has focused on the capacity to absorb shocks [...] there is also another aspect of resilience that concerns the capacity for renewal, re-organisation and development". Whereas in the ecological literature resilience is sometimes reactively modelled as mere adaptation to external influences, lately more proactive subjectivities have emerged (O'Malley 2010, 489), whereby resilience welcomes "active and reflexive agents capable of adaptive behaviour" (Joseph 2013, 39). The policies seem to be well placed for the goal of achieving resilience, but does it come with a paradox: with resilience, disaster risk reduction (DRR) actually invokes more disaster and endangerment? The idea of adaptation to the necessity of adversity and disaster has become crucial for developmental discourse, meaning that the subject of adaptation – the individual or the community – has to constantly work on itself and change (Alt 2013, 100).

4 Entrepreneurial resilience

It is only recently that policy organisations have been vocal about resilience in economic terms. This chapter addresses this discursive development and shows that more than simply applying the idea of persisting in disaster to surviving from economic shocks, economic resilience is about active incentives to a specific kind of economic behaviour. In addition, in this case it is not a new solution to an old problem, but a new appearance for old tools.

4.1 Economic resilience

At the turn of the millennium, when international organisations – the UN ahead – first started to adopt resilience policies into their agendas, they were mostly concerned with resilience in terms of DRR or climate change adaptation (CCA). The UN has effectively mainstreamed DRR: for instance in 2013, UNISDR (2013) published a document where the roles of each UN organisation in DRR are described. However, despite a widespread emphasis on resilience in humanitarian crises, natural disasters and other 'extreme events', resilience is increasingly being applied to primarily economic issues on local, national and global levels. In addition to development agencies, resilience is currently a policy priority for explicitly economic and financial actors.

To understand this shift it is important to remember that the current policy discourse rose from the ecological and environmental discourses. Sustainable development, as the leading paradigm of international development for the past two decades, has kept ecological and environmental concerns high on the international agenda. It is now well argued that development has long served the interests of liberal governance (see e.g. Mezzadra, Reid & Samaddar 2013, 2–3; Reid 2013a, 353; Duffield 2007). The doctrine of sustainable development – that some 20 years ago started to guide development to a less economicoriented and more environmentally conscious direction – has effectively given rise to and generated acceptance for a myriad of neoliberal policies and practices (Reid 2012a; Duffield 2007). The proponents of sustainable development argued that focusing development on economic improvement would harm environment and compromise the sustainability of various environmental "life-support systems" that people rely on for comprehensive well-being (Reid 2013a, 354). Resilience fits in this narrative because it is believed to help in

securing the long-term progress of development: "the [EU] Commission aims to establish a systematic and holistic approach to building resilience in crisis and risk-prone contexts, notably by supporting populations at risk to [...] quickly recover from stresses and shocks without compromising long-term development prospects" (EC 2013b, 2).

Given the above, it is no coincidence that economic organisations are suddenly very interested in promoting resilience or that development agencies emphasise economic resilience. WB (2013b, viii) concludes that resilient development "makes sense both from a poverty alleviation, as well as from an economic, perspective." Resilience is the latest truth of sustainable development in its aim to reconcile the needs of economy and environment (Escobar 1996). There is indeed ever a tension to be solved because of what the WEF (2013a, 17) calls the "interplay between stresses on the economic and environmental systems" that will challenge both global and national resilience. President of Overseas Private Investment Corporation Elizabeth Littlefield notes in her address to the WEF (2013b, 32): "Sustainability includes social, environmental and financial perspectives. It is not necessary to separate the charitable and profit-seeking sides of your brain. It is possible to both make money and help the planet." So is it only, or primarily, because of ecological reason and concern for the life of the biosphere, effectively internalised by neoliberal discourses (Reid 2013a) why these different organisations are emphasising economic resilience?

One thing to be considered is that the documents were produced either amid or in the aftermath of global economic and financial crises (WEF 2013b, 4; WB 2013a, 4; UNDP 2011, 2) and some of the organisations, notably WB and WEF are explicitly economic actors. But there is also something else. Today, economic resilience is partly pursued in and of itself. Resilience has increasingly become to mean surviving in explicitly economic shocks and crises (UNDP 2011, xi). Household resilience is widely studied (ibid., 5), and national economies are evaluated in terms of resilience (WEF 2013a, 9), similarly to the wide-spread practice of stress tests for banks or national economies. It is very logical for governance to speak about economic resilience when there is an on-going economic crisis. If households, enterprises and states as economic actors only fell into despair or refused the shocks, economy would stagnate. Resilience gives people and states an urge to a fearless acceptance of the situation.

As previously discussed, while resilience is strongly attached to the concept of vulnerability, vulnerability itself is seen as a problem with "root causes" that need to be taken care of (USAID 2012, 14). On the one hand, poor communities are more likely to end up in situations where resilience is asked for. For instance, poor states have worse chances to get credit that would compensate for the economic losses at hand and enable the continued state provision of public goods and services (WB 2013a, 32; UNDP 2011, 10). On the other hand, it is viewed that "[w]ealthier states with stronger infrastructure and better-educated populations will be in a more advantageous position to deal with disaster and emergencies than poorer ones" (FEMA 2012, 3). There is a hierarchy of vulnerability laid between rich and poor states. When vulnerability depends on the wealth of the subject, it links with both economic resilience and environmental concerns: "Since poverty is believed to be a cause, as well as an effect, of environmental problems, growth is needed with the purpose of eliminating poverty and with the purpose, in turn, of protecting the environment" (Escobar 1996, 330).

While all organisations express a concern about how the human objects of their policies will survive in economic hardships, some problematize household and state-level poverty on account of the organisation's overall goals. Poverty may cut short progress made on development and reaching the Millennium Development Goals (UNDP 2011, 3), and it can lead to an increasing dependence on outside aid (FEMA 2012, 9) and further increase vulnerability to economic shocks (UNDP 2011, xi), partly because people in low-income countries are less prepared (WB 2013a, 15), and "countries with the lowest risk preparation capacity generally have the highest poverty risk" (WB 2013b, 9).

Poverty and lack of resilience form a vicious circle where both enforce each other, and "the urgent need to implement resilience —or adaptation— measures targeted towards the poor" is marketed even though its impact on poverty reduction is prospected only "beyond 2100" (WB 2013b, 9). Hence, today's poor are destined to stay in that category since their resilient behaviour is not contributing to their own wealth but to that of their descendants. It is one of the characteristics of contemporary biopolitics that life is posed as a problem for itself. Foucault (1990, 143) described this problematization by saying that "[f]or millennia, man remained what he was for Aristotle: a living animal with the additional capacity for political existence; modern man is an animal whose politics places his existence as a living being in question". Problematized is lack of resilience and poverty that causes it, not poverty as a political problem. In this case, when resilience is mainstreamed into policies of economic

development, it practically narrows rather than broadens the horizon for economic improvement in poor regions of the world.

One of the reasons why liberalism as a governmental rationality has been hard to reject is its ability to project itself as natural in so far as it allows things to take their natural course and develop without interference (Foucault 2008, 15–17). People's pursuit of this 'natural interest' will in a Smithian sense lead to the good of the whole population. Oksala (2013, 59) summarizes this naturalness in that "one of the most important ontological tenets of economic liberalism and neoliberalism is the doctrine of economic neutrality: economic facts are objective, universal and politically neutral". Or as James McCarthy and Scott Prudham (2004, 276) put it: "the hegemony of liberalism is made most evident by the ways in which profoundly political and ideological projects have successfully masqueraded as a set of objective, natural, and technocratic truisms." Hereby anything that is argued in economic terms is politically neutral. As for resilience, this implies arguing that economic fluctuations are inevitable – and that adapting to them with appropriate resilience is an economic necessity.

As it is clear that resilience functions according to a neoliberal logic and is now a vital part of its truth-telling power, should we be concerned of being fooled by neoliberal leaders who speak of economic necessity and "constantly repeat to us that the crisis is dire and our situation is desperate" (Hardt & Negri 2012)? Or is the promotion of economic resilience a demonstration of how "neoliberal economic argument has won in the governmental game of truth organised according to the undisputed, biopolitical value of life" and "the maximal material wellbeing of the population" (Oksala 2013, 61)? To answer these questions, the following section will look at what implications the observed economisation of the resilience discourse has on subjectivity.

4.2 The entrepreneurial subject of resilience

The policy discourse puts a heavy load of expectations onto the subject. Individual subjects and the communities they form are expected to think about future, prepare for shocks, and protect themselves and their property (FEMA 2012, 1; WB 2013a, 21). Building economic resilience is a task that everyone is expected to endorse. As already noted, economic resilience often focuses on the household (UNDP 2011, 5). Taking the household as the point

of departure indicates that the main target of building adaptive capacity and thereby economic resilience is to affect individual behaviour. Households are expected, among other things, to empower women, and given incentives to do their own risk mapping and preparations (WB 2013a, 23, 40). As is the case with neoliberal governmentality in general, resilience in particular does not mean a reduced interference with the population, on the contrary. Resilience functions by embracing the ability of individuals and collectivities to absorb and withstand disturbance, which may lead to the thought that governance is distant and we should take up agency by being resilient. As biopolitics problematizes the life of the subject, self-government "extends to cover the way in which an individual questions his or her own conduct (or *problematizes* it) so that he or she may be better able to govern it" (Dean 2010, 19, emphasis in the original).

Resilience is for neoliberalism a collection of truths it can use to specific ends in the same way as modern power relations in general increasingly work "through the specified freedoms of modern subjectification" (Dillon 2013, 167), including the creation of a resilient subjectivity. Resilience exemplifies how current neoliberal economic rationalities are brought into any domain of life; anything can be an object of economic analysis (Foucault 2008, 268). Today, economist Gary Becker's thoughts are explicitly used by WB (2013a, 21) in a reference to his *A Treatise on the Family* where households are described as "little factories" participating in an exchange of goods and services, and investing in their members with specific expectations on outputs. WB has throughout its existence aimed at effecting economic behaviour, and resilience makes no exception.

Expectations on individuals and households are not points of a program on how to become resilient. They are "practices that try to shape, sculpt, mobilize and work through the choices, desires, aspirations, needs, wants, and lifestyles of individuals and groups" (Dean 2010, 20). They are part of a process of subjection where the resilient subject is constructed, a subject that allegedly has capacity to handle economic difficulties. Speaking in the early 1980s of the long-term aims of his research, Foucault noted that he had tried to "create a history of the different modes by which, in our culture, human beings are made subjects" (Foucault 2000, 326). Foucault studied both liberalism and neoliberalism as a governmentality "in which people are governed and govern themselves" (Read 2009, 29). In *The Birth of Biopolitics* (Foucault 2008), Foucault paid a lot of attention to the effects of neoliberalism on the subject of economic man, *homo œconomicus*. In the concept of homo œconomicus we encounter an

early idea of today's resilient subject. Foucault (ibid., 269) refers to Becker's works when concluding that

Homo æconomicus is someone who accepts reality. Rational conduct is any conduct which is sensitive to modifications in the variables of the environment and which responds to this in a non-random way, and economics can therefore be defined as the science of the systematic nature of responses to environmental variables.

The economic man as someone who accepts reality translates very well into the current resilience discourse. Walker and Salt (2006) have theorised this acceptance of reality as a part of what they term 'resilience thinking', a term that unlike many other definitions is not a description of a system's capacity but an applied framework to think about governing these systems in the right way. Walker and Salt emphasise the importance of understanding "how the world really works", which is as complex adaptive social-ecological systems where people and nature are intimately linked. A system that accepts reality is one that appreciates the changes brought about by the "adaptive cycle" that each system moves through. The repeated cycle means that change is inevitable, though not predictable or linear. (Ibid., 4, 113.) Those systems most open to the option that change entails, in other words those that best accept reality, will be most successful, the most resilient.

That the economic agencies (WB and WEF) are busy presenting tools with which individuals or households can enhance their economic resilience is a reflection of the "risk landscape" that they see now determines our lives (Evans 2013, 35). If there was no risk, resilience would be out of demand. These actors have found ways to portray and even categorise risks if not predict them (Evans 2013, 36–37; WEF 2013a). Risk and resilience are intimately connected in risk management, which is

[...] the process of confronting risks, preparing for them, and coping with their effects. [...] Much of the emerging literature on risk in a development context emphasizes the important role that risk management can play in increasing resilience to negative shocks. However, to increase prosperity and well-being, risk management also has an essential role in helping people and countries successfully manage positive shocks. (WB 2013a, 12.)

Managing risk is correlated with increased resilience to various shocks. What this passage interestingly points out is that the shock can be both positive and negative, and managing the

positive ones increases resilience to the negative ones. In the policy analysis, positive shock is synonymous with opportunity. Opportunity is "the possibility of gain" (WB 2013a, 11), which implies a strategic benefit in confronting the shocks. Economic considerations intersect with the original ecological tenets of resilience according to which living systems "develop not on account of their ability to secure themselves prophylactically from threats, but through their adaptation to them. They evolve in spite of and because of systemic shocks." (Evans & Reid 2014, 30.)

The positivity of shock echoes thoughts of classical neoliberal thinkers such as Friedrich von Hayek, for whom "the complexity of the market required [...] optimising the conditions for self-organisation and adaptive evolution. As an open, complex system the economy evolved most effectively in far from equilibrium conditions". (Zebrowski 2013, 10–11.) Walker and Salt (2006) draw on another economist, Joseph Schumpeter, and the idea of 'creative destruction'. They claim that as a system moves along the adaptive cycle to the release phase, "linkages are broken, and natural, social, and economic capital leaks out the system. [...] But the destruction that ensues has a creative element." (Ibid., 77–78.) The logic goes that since systems can't stay in the conservation phase forever and change will inevitably occur, it is better to embrace than deny it. The subject's function is to be a risk manager and an opportunist. When capital is released for experimentation and new beginnings, it is "the time of greatest potential for the initiation of either destructive or creative change" (ibid., 82). As Reid (2013a, 363) notes, resilience discourse constructs disasters not as threats to be categorically avoided but as "events of profound 'opportunity' for societies to transform themselves economically and politically".

Resilience thus invites to embrace risk – not to enjoy the suffering it might entail but to seize opportunities that lie in 'far from equilibrium conditions'. Approaching risk can even be a business opportunity, as "European companies, including SMEs [small and medium-sized enterprises], can be early first movers in developing climate-resilient products and services and grasp business opportunities worldwide" (EC 2013a, 5). For the resilient subject, risk and opportunity go hand in hand (O'Malley 2013; 190–193) so that resilience constitutes "an opportunity for transformation, in terms of adaptation to changing environments, empowerment, improved livelihoods and economic opportunities" (EC 2013b, 3). Economic and development organisations are concerned that households and economies which lack resilience will be averse to confront risks and thereby resort to "adverse coping mechanisms"

(UNDP 2011, 5) that further worsen their situation and compromise development gains achieved so far. The WB (2013a, 4) reminds how shocks "play a major role in pushing households below the poverty line and keeping them there", but also that while "a negative shock can push them into destitution, bankruptcy, or crisis, poor people may stick with technologies and livelihoods that appear relatively safe but are also stagnant." In neoliberalism, economic failure has often been attributed to a personal failure to enhance human capital (Harvey 2007, 34), which in the current discourse is the same as a lack of resilience.

The resilience of homo economicus is also to a great extent about an 'entrepreneurial spirit'. Foucault noted that homo economicus is not, as in classical liberalism, a man of exchange, but an entrepreneur of himself (Foucault 2008, 225–226). In the resilience discourse, entrepreneurs are agents able to seize the opportunity when it occurs and lead a system to a growth phase (Walker & Salt 2006, 114–115). Although resilience scientists have attached resilience with short-term losses on efficiency and long-term profits of not undergoing regime change, economic agencies now speak of resilient dynamism that is supposed to enable "tackling immediate problems and long-term challenges at the same time" (WEF 2013b, 4). In economics, it becomes important to be resilient and dynamic at the same time. It is not about trying to maximize efficiency and profit but to rise up to each new occasion despite economic uncertainties. The WEF (2013b, 4) talks about resilient dynamism and "the importance of strategic agility, the ability not only to manage risk but also to adapt to its permanence and unfathomable variability".

Now, at the latest, it is clear that what is pursued is not some toolbox where you draw a tool for each disturbance that requires resilience – which is something policy actors should aim at if they want to have a positive effect on the lives of people who face economic problems. Instead, pursued is a mindset that the subject is supposed to internalize, a way of "seeing the world through a resilience lens" (Walker & Salt 2006, 117). When the subject becomes its own enterprise, a call to embrace risk becomes a call to invest in 'human capital' (Alt 2013, 94). The analysis shows that the real effect of economic resilience in the policies is to condition the subject to accept economic problems, even poverty, by relying on its entrepreneurial spirit. Although economic resilience is a lot about own initiative, it is in essence not about surviving on your own but integrating into the system as an entrepreneur; self-reliance is then to be exhibited when the system works badly (ibid., 97).

Some agencies see a need to create a culture of resilience where entrepreneurial skills are taught forward and where people grow up into resiliency (WEF 2013b, 17, 26; FEMA 2012, 14). What should we make of this policy that promotes self-reliance and encourages everyone to be so to speak the master of their own fate? This is a process of subjectivation where the subject is portrayed not only resilient, but also responsible. Resilience and responsibility is a tricky pair. The resilient subject is supposed to act like an entrepreneur who is alone responsible for his living and for sensing changes in the environment that require adaptation. Also, the entrepreneur is 'free' to organise work the way he wants and can take advantage from changes rather than blocking them out. What the entrepreneur might lose in efficiency he might gain in resilience and robustness (WEF 2013b, 17). Are resilient subjects then more autonomous if they can take individual initiative and influence innovations and projects in their local community (FEMA 2012, 14; WEF 2013b, 24)? Or are they simply left on their own, forced to be self-reliant? As it was important to pay attention to the "generalization of the grid of homo acconomicus to domains that are not immediately and directly economic" (Foucault 2008, 268), it is important to see how the entrepreneurial subject of resilience reaches us from various directions, hoping to work on the group level to make us less risk averse (WB 2013a, 25).

Economic resilience can be part, among other things, of poverty reduction, equality of opportunities, or women's empowerment (EC 2013b, 3; WB 2013a, 23), all of which aim for better economic conditions. These are all positive objects. Yet, even if they are just blueprints whose connection with reality remains to be seen, they are always discursive tools with power effects. Maurizio Lazzarato (2012, 54) pointed out in his discussion on capitalism that every "economic, political, or social mechanism produces effects of power specific to it, requires specific tactics and strategies, and affects the "governed" according to different processes of subjection and subjugation". We have already looked at the process of subjection in economic resilience. Now it is time to look for the different power relations that the subject falls into when trying to be economically resilient.

4.3 Economically responsible behaviour

The preceding analysis showed that economic resilience strives for a subject ready to take risks or at least accepts their presence in order to gain opportunity. This subject is more proactive than the adaptive subject of disaster resilience; it endorses both "fundamental goals

of and motivations for risk management: that is, resilience in the face of adverse events and prosperity through the pursuit of opportunities" (WB 2013a, 11). These characteristics go very well together with expectations that global economy and job markets currently pose against people all around the world. What are the motives behind this variation of resilience? Is economic resilience driven by a concern for people and their well-being amid economic turbulences or more by a concern for the functioning of the system as such? Joseph (2013), among others, has claimed that resilience has risen to prominence because it neatly fits the requirements of global neoliberal governmentality.

Foucault (2008, 270) described the homo economicus of liberalism as someone who is "manageable" and "eminently governable". Economic man was in his view someone whose behaviour could be directed by techniques of governance. The policy analysis shows that when resilience is promoted as a way of approaching disasters or economic shocks, more sophisticated aims are included in the message. Some of these further goals that extend merely surviving different disturbances are macroeconomic sustainability, competitiveness, poverty reduction and human development (WEF 2013b, 5; UNDP 2014, 10; WB 2013b, viii). It is argued that "versions of resilience are being mobilised to facilitate archetypal governmental technologies of neoliberalism; government at a distance, technologies of responsibilisation, and practices of subjectification that produce suitably prudent autonomous and entrepreneurial subjects" (Welsh 2014, 2). This would mean that resilience as a policy concept is not a tool to find solutions, but a tool with which to highlight the problem, and to confirm pre-given solutions. But in order to consider the claim that what resilience really does is to make us fit for neoliberal economy (Joseph 2013; Reid 2013a), we need to look at what, according to the discourse, is central in building resilience: existence and availability of financial tools and insurance.

Insurance is a technology that protects against losses. The relation of resilience and insurance is thus logical, as insurance can be used to build resilience towards risk. Insurance has been understood as a technology of governance long before resilience became a dominant discourse around which the question of insurance now situates itself. Francois Ewald (1991) theorised insurance as a technology of risk; risk being not a particular danger but an arrangement and a mode of treating those dangers collectively in a population. Risk, according to Ewald, is a calculable possibility of loss against which the insurer guarantees an compensation (ibid., 201, 204). What constitutes a risk is then a result of social and political

processes, because "[n]othing is a risk in itself; there is no risk in reality", and yet "anything can be a risk" (ibid., 199).

The available forms of insurance at a given time are determined by an "insurantial imaginary" of the insurer (ibid., 198), which again is depended on the collective "imaginary of threat" (Evans 2013) that prevails in a society. Although often neglected by security studies, insurance closely links with national security as security experts are continuously screening and mapping the dangers against which insurance might be needed and thus create a market for insurers (Aradau & van Munster 2008, 2–3). The policy discourse of UNDP and WB in particular promotes insurance because it is seen as one way of building the capacity to withstand and absorb the disturbances that according to these imaginaries and probability calculations can face anybody and particularly those deemed somehow vulnerable. Lack of insurance or of an access to it is problematic from a resilience point of view (WB 2013a, 14, 16). Resilience policies are very coherent that this problem most strongly concerns the poor, "because poor households have fewer assets, more limited risk-coping mechanisms, and less access to capital markets to help them cope with economic fluctuations" (UNDP 2011, 5).

The power of insurance is not only in its ability to decide on the faith of subjects but in the way it ensures the continuation of social and economic processes (Ewald 1991, 208–210). The establishment of insurance partly replaced political struggle over juridical responsibility of losses (ibid., 201–202). Likewise, resilience is more concerned with the consequences that inevitable disasters have on the development gains of populations and households, or on national economies, than on who or what caused them and how they could be prevented. Discussing resilience as a framework for understanding, Welsh (2014, 6) asks if foregrounding "the where, when and how of change-inducing events" happens at the expense of considering why they take place. As a way of building resilience, insurance helps in recovering and moving forward towards new opportunities without searching for responsible ones. Indeed, resilience is described as an ability to survive both internal mistakes and external shocks (WEF 2013b, 19).

Rather than being a form of solidarity and provided by state or employer (Ewald 1991), insurance today is planned on the level of population but provided individually. Insurance of course requires capital – both the capital to be insured and with which to pay for the insurance – and is therefore said to divide more than unite (Aradau & van Munster 2008; Duffield 2007)

since only the wealthy have access to it. It is no wonder that poor countries invest less in insurance and register far smaller rates in usage of financial tools than wealthy countries (WB 2013a, 28). But resilience policies problematize these facts as well as the observed "risk-averse" (ibid., 8) and "adverse" (UNDP 2011, 5) practices that the poor are using instead. Again, acknowledging the local does not mean respecting local practices. Insurance is also a moral technology to "conduct one's life in a manner of an enterprise", thereby "transforming one's relationship with nature, the world and God so that, even in misfortune, one retains responsibility for one's affairs by possessing the means to repair its effects" (Ewald 1991, 207). The poor might not have money for full-scale insurance but the states they live in should at least make it available. Some risks are categorised as "idiosyncratic", "breakdowns in processes" or "human error" (WB 2013a, 5: WEF 2013a, 36), which means one can diminish or prevent them. But others are "systemic", "exogenous" or "global" (ibid.) and out of the reach of individuals, which is why insurance and resilience are supposedly needed.

While the insurance industry is not focusing on causes, resilience's scope is broader: it is keen to understand differences in preparedness (UNDP 2014, 1) and to find out what other ways there are to become resilient. The resilience discourse has even brought with it models on how to calculate economic resilience (see e.g. Rose 2004) and how to conduct a "national resilience measurement" (WEF 2013a). Along with insurance, another thing supposedly crucial for resilience is the existence of financial markets and financial capacities of the state (WB 2013a, 27; EC 2013a, 10). WB (2013a, 16) makes this explicit:

[...] why aren't people and societies better at managing risk? Although the specific answer varies from case to case, it is always related to the obstacles and constraints facing individuals and societies, including lack of resources and information, cognitive and behavioral failures, missing markets and public goods, and social and economic externalities.

The quote shows that resilience policies are not directed exclusively to the so-called poor populations but to state authorities in those countries and in donor countries, as well as to development organisations and private businesses that should help in establishing markets for financial tools.

According to the organisations, resilience can be enhanced by being economically responsible in the way described above – practically by taking credit and insuring yourself and your

property. Financial tools may be remedies against risk, but they do not come without power relations. Lazzarato (2012) has proposed that what we commonly call finance is a system that practically forces us into an indefinite relation of indebtedness. As risk and insurance can produce debt, resilience policies can be seen as further enforcing this relation. The subjectivity that comes about from this relation is for Lazzarato the "indebted man" (ibid.). The indebted man is ostensibly free but in effect "his actions, his behaviour, are confined to the limits defined by the debt he has entered into" (ibid., 14). From an affirmative perspective, using financial tools enables action and "liberates man from fear" and "multiplies wealth" (Ewald 1991, 208). Nevertheless, these minor liberative voices are undermined by the stronger catastrophic tonalities of the current discourse.

So is resilience, as Duffield (2007, 218) put it, the development of a division of people into "insured" and "non-insured" life, a division that is meant to persist rather than be overcome? The insured life can be relatively worriless in terms of emergencies and instabilities. The non-insured life does not have this luxury but has to take whatever loss occurs. Resilience is then the promised cure for the non-insured people who cannot protect themselves from hardships. If we wish to be economically dynamic and realise our creativity, are we forced into debt and insurance? Resilience indisputably supports behaviour, processes and institutions that are central in advanced neoliberal economies. WEF, for example, directly draws on prominent resilience scholars when sketching national resilience indicators (WEF 2013a, 44). The relation between resilience and neoliberalism is a very compatible one; although resilience did not derive from economics, its models are suited to fit economic actors and processes (Walker & Salt 2006).

Worth noting is that although Lazzarato talks about forced indebtedness, it is an indirect enforcement. That is indeed how biopolitical governance works: not by forcing or disciplining but by working through 'technologies of the self' (Foucault 1988, 18) and by 'governing at a distance' (Miller & Rose 1990). Lemke (2013, 37) has observed that

[s]tudies of governmentality have been extremely helpful in illuminating the "soft" or "empowering" mechanisms of power, demonstrating in what ways individuals and social groups are governed by freedom and choice. They have successfully exposed the paradoxes of "controlled autonomy" in neoliberal governmentality and the intimate relationship that exists between the universal call for "self-determination" and quite specific societal expectations and institutional constraints.

If resilience has a strategy to direct people's behaviour, it is responsibilisation, a technology of power ingrained in the discourse. The discursive process of responsibilisation works by convincing the audience of both the necessity of building resilience and the fault of not doing so. The core message: resilience is required for the wellbeing of individuals, households and societies – and failing to invest in resilience now can be costly in the future (WB 2013a, 16; UNDP 2014, 3). WEF (2013b, 18) goes even further by claiming that "[t]o strengthen personal resilience requires training, reflection and a sense of duty to oneself to be healthy, productive, alert and responsible". Thus resilience's promise to give "the freedom to live a life that one values and to manage one's affairs adequately" (UNDP 2014, 7) is always a conditioned freedom. The indebted man is in a continuous debt relation, and with insurance accepts the idea of ever more risk and danger. The indebted man is a true neoliberal subject.

Making resilience a responsibility or a duty of the individual is part of the wider development of neoliberal governmentality that is moralizing and includes the transfer of responsibilities from state to people (Joseph 2013, 41; Lazzarato 2012, 3, 48). In the analysis, though, states are also given incentives and reminded of their responsibility to build national resilience so they can enhance people's preparedness, and pump in resources when in crisis. This can help individuals and communities if they do not have the necessary material means. In the end, individual resilience in terms of economic dynamism and finding opportunities in risk can truly bring a fortune (WEF 2013b, 16), for "risk-takers are, after all, the serious moneymakers" (Evans 2013, 74). It is perfectly understandable why resilience has penetrated the policies of different organisations that simply see it as the best framework for their work. It would be too expensive to build a society from scratch after a blow every couple of years.

So far, resilience in the policies has, broadly speaking, had two variations: adaptive resilience and entrepreneurial resilience. The policies indicate resilience should help in disasters and economic difficulties, but in effect the discourse functions to the contrary. Disaster and crisis have become endemic and there is no way out from their negative effects, which one can either adapt to or exploit in so far as they bring new opportunities. The current, strongly neoliberal discursive framing basically rules out the positive practical application of resilience as a policy tool.

5 Governing life globally through resilience

Even though resilience clearly functions according to a neoliberal logic, in some ways it can feel common sense. But only looking at the immediate benefits or losses from subscribing to resilience-building, or considering the wider targets of human development, poverty reduction or risk management, would be to overlook the depth of the discourse. In this chapter, some ontological features of resilience and how the policies work as part of global governance is discussed. The chapter clarifies that the discourse has effects beyond the specific contexts in which a policy is formed. What are the consequent political implications and are we ready to accept them?

5.1 The complex operating environment

As the policy discourse is examined from a biopolitical perspective, this is not asking what the world is like in reality but asking how life and politics are understood in resilience. Various disciplines, most importantly natural sciences and mathematics, have long purported an understanding of reality in non-linear, systemic terms. Complexity is an important concept which has coined both the internal behaviour and the interaction of a system with its environment. Here, the system can be any "set of inter-related elements", and "a complex system is one in which [...] the whole is greater than the sum of its parts" (Byrne & Callaghan 2014, 4). Also, the environment in question can refer to "all aspects of reality outside the system and with which it has relationships, although it is clear that the more specific usage of 'natural environment' is one which is very generally a source of external perturbation in human systems" (Byrne 1998, 30–31). These systems are continuously changing, and the change can be caused by both external factors and internal fluctuations (ibid.).

Complex systems analyses and other ideas from traditional sciences "have been presented as the basis of a conceptual tool bag for the development of a complexity-founded approach to social science" (Byrne 1998, 34), often with great success. A search into the use of complexity theory in social sciences showed that it has been "of particular importance in relation to management in all its aspects, to governance and public administration [...] and to the interface between the social and the natural considered in ecological terms" (Byrne & Callaghan 2014, 2). Complexity theory has made its way into international relations (e.g.

Hoffman 2003) and global politics (e.g. Harrison [ed.] 2006). Given that, it is hardly surprising how widely the ideas of complex systems thinking have spread in the policies of actors that were the object of this analysis. These actors are involved in management and governance, and resilience as such is never independent of these other functions.

Rather than an explanatory theory with models of causation, complexity theory in social sciences means "a framework for understanding which asserts the ontological position that much of the world and most of the social world consists of complex systems and if we want to understand it we have to understand it in those terms" (Byrne & Callaghan 2014, 8). In the mainstream resilience discourse, complexity is one of the ontological premises – one of its truths. As noted in the previous chapter, understanding "how the world really works" starts from the premise that it consists of interlinked systems of human and nature that do not function as separate realms (Walker & Salt 2006, 4). In this view, systems are difficult if not impossible to manage by means of optimisation because social-ecological systems are inherently complex, adaptive, interconnected, with changing forms and largely unpredictable behaviour (ibid., 29–32). The ideal framework for analyses of a world of complex systems is, of course, resilience (Folke 2006), or 'resilience thinking' (Walker & Salt 2006; Folke et al. 2010).

Despite different emphases of resilience (disaster, economic, environmental, climate, infrastructure or other), all organisations share these ontological premises that form the truth basis on which the policy discourse is built. The world and the times that we live in are described as complex, uncertain, and interconnected (FEMA 2012, 6; WEF 2013b, 14; UNDP 2014, ii). Crises and disturbances are regarded as a systemic feature, not an anomaly (UNDP 2011, 2). WB even refers to Greek philosopher Heraklitus to conclude that "the only thing constant is change. And with change comes uncertainty." (WB 2013a, 10.) Complexity is not only an implicit ontology but used to describe how the present and the future appear to the agencies that are supposed to manage them (EC 2013b, 1; WB 2013a, 19; WEF 2013b, 18). Understanding resilience necessitates understanding complexity.

One of the basic features of the complex systems of resilience is multifarious and dynamic interaction across temporal and spatial scales (Folke 2006, 258–259). In social sciences this kind of a system is often described as a network where its various nodes are interconnected and communicate with each other. Increased interconnectedness enhanced by the huge

developments in information technology and the consequent changes in social and economic spheres have inspired theories of the network society (Castells 2005; van Dijk 2006) where connectivity is everything. As for resilience, connectivity is an ontological feature of complex systems and connectedness a prerequisite for building the resilience of these systems. Chris Zebrowski (2009) aptly described the task of resilience as "governing the network society". FEMA (2012, 13) argues one of the essential capabilities of a resilient emergency management community is to "[p]ractice omni-directional knowledge sharing" to improve the connectivity of networks and to engage the public as an information source. In order to be resilient, the system has to maximise its connections and information; risks can be seen positively if it is thought that eliminating them "would deprive many systems of the benefits of interconnectedness" (WEF 2013b, 28). Indeed, connectivity and connectedness has usually been a question of quantity and concerned with the information gap between peoples, between "the Connected" and the rest, thus constituting subjectivity around life's connectivity (Reid 2009).

Arguing on the basis of systems' and peoples' connective properties is one expression of the biopolitics of resilience. Responsible for the radical interconnectedness that is seen to both enrich and endanger our lives is to a large extent technology. The effort of making government and international agencies resilient has been enhanced by "the development of emerging technologies that advance emergency management capabilities" (FEMA 2012, 18). Resilience is pursued by "both hard and soft technologies, such as more resilient construction materials or early warning systems" (EC 2013b, 5–6). The need to implement scenario planning, early warning, crisis monitoring, needs assessment and other tools for the Connected to gather and share information rises from a concern for the truths deriving from the complex ontology of resilience: uncertainty and unpredictability. FEMA (2012), for example, presents them as fundamental features of our "operating environments" that pose a challenge for crisis management. Yet, great technological effort is made to render knowable even a bit of what is to come, because "the unknowable is precisely that which is dangerous in a world of radically interconnected circulation" (Evans 2013, 171).

The WEF (2013b, 37) recognises that "[u]nlike an object, [...] systems are too complex for mathematical calculations to predict the stresses that might arise". In spite of advocating unpredictability of present and future, the policy discourse includes many ideas on how to mitigate uncertainty and enhance decision-making. This is most evident in FEMA's Strategic

Foresight Initiative (SFI) that is supposed to give clues on how to prepare the nation for the future, despite the assertion that "emergency management community faces increasing complexity and decreasing predictability in its operating environment" (FEMA 2012, 2). While the non-linear and emergent behaviour of complex systems deny attempts to predict future, "scenario planning offers a robust structure for thinking about alternative—and plausible—future operating environments" (ibid., 4). With knowledge of possible futures and drivers that affect their realisation, approaches like "robust decision-making" try to overcome the problem of uncertainty "by identifying decisions that are robust across a wide range of potential futures" (WB 2013b, 16).

The use of complexity in natural and social sciences should not be undermined because it has clearly "provided a fertile bed for resilience theory to flower" (Welsh 2014, 1). The relation of complexity and resilience is ambiguous, and it can be asked if the integration of complexity into the discourse is instrumental for legitimating resilience policies rather than complexity somehow preceding resilience ontologically. Also, the consequent emergence of "complex adaptive system" (CAS) as an ontological category" (ibid., 4) should be critically analysed. First, there is the problematic "presumption of the ontological soundness of 'the system' as a functionally integrated community of objects and agents" (ibid.) that is expressed also in the policies (e.g. WEF 2013b, 37) and second, "the assumptions of sufficient commonalities between economic, social and ecological 'complex systems' to justify the translation of theory and models between them" (Welsh 2014, 4).

Focusing on systems as units of analysis and resilience as their primary attribute may reduce "human life to the properties and capacities that define non-human bodies and non-human living species and systems" (Evans & Reid 2013, 87) and imbue systems "with an ontological permanence that oversimplifies the very complexity of life such research aims to capture" (Welsh 2014, 7). Systems thinking can obfuscate the effects the discourse of resilience as complexity has on the parts of the 'system'. Joseph (2013, 43) argues that "although resilience appears at first sight as a systems theory", its policy applications merely make brief reference to their social-ecological origins and in effect emphasise the unit level. Welsh (2014, 8), for his part, is concerned with the "unintended consequences arising from the totalising effects of a complex systems discourse colonising a wide range of academic disciplines". He concludes: "the inherent danger is that policy and academic analysis becomes concerned with understanding and maintaining a system shorn of political context or attention to questions of

power and inequality" (ibid., 7). Walker and Cooper observe how "[a]lmost by definition, complex systems internationalize and neutralize all external challenges to their existence" (Walker & Cooper 2011, 157) so that questions of power are excluded from the political agenda in advance.

5.2 Resilience as global governance

Resilience has become a means to manage systems in uncertainty and complexity (Berkes 2007; Folke et al. 2002, 238). The popularity of resilience among the actors of the policy analysis should come as no surprise, since in a complex and contingent world, "theoretical frameworks that promise a means of capturing that complexity are seductive" (Welsh 2014, 1). Ecological resilience is strongly contributing to the idea that although social-ecological systems cannot be controlled or shielded from disturbing external influences, they can be governed if their inherent vulnerability is recognised and resilience strengthened (e.g. Chapin et al. 2010; Folke et al. 2011). Social-ecological resilience fits into the policies of both national and international organisations as they are concerned with systems of people, economy, and environment. Resilience seems to provide a way of solving problems of governing the respective systems when nothing is certain and "no one is in control" (Walker & Salt 2006, 29). The connection between resilience and governance becomes clear from the Stockholm Resilience Centre, which announces to advance "research on the governance of social-ecological systems with a special emphasis on resilience" and generate "new and elaborated insights and means for the development of management and governance practices" (SRC 2012). The question put forward in this section is: to what extent is the discourse concerned with improving international cooperation or global governance, and does resilience help in this regard?

As discussed in the introduction, "breadth of fields in which a resilience approach of some sort is now structuring government policy and practice is extensive" (Welsh 2014, 5). In this policy analysis alone, resilience is discursively connected to human development (UNDP 2014, 7), poverty reduction (EC 2013b, 3), DRR (USAID 2012, 13), humanitarian assistance (USAID 2012), sustainability (WEF 2013b, 5), environmental shocks (UNDP 2011, 3) and climate change adaptation (EC 2013a, 5). The list could be continued. We see that resilience permeates many distinct policy fields but it is noteworthy that outside of its origins in

ecology, it is rarely an intrinsic value, although it may often look like that as it gains ground from other policy concepts.

Harmonisation of policies along the dominant neoliberal resilience rhetoric risks reducing or negating positive effects of many once distinct policy arenas (see Walker & Cooper 2011, 144). Reponses to various problems, be they security concerns or questions of wellbeing stagnate if the quick-fix solution "be resilient" continues to be repeated like a mantra. Psychological resilience is gaining in importance also in contexts where social-ecological resilience has prevailed, causing a mixture of the two. Resilience as a policy concept should translate into practical solutions, tools or frameworks with which organisations or their target communities can face their problems. As a byword resilience gets huge attention but remains abstract.

What is more, resilience does not merely mark a tool for these distinct policies but affects discourses and practices of global governance. Chandler, discussing 'resilience thinking' rather than systemic resilience, has argued that "if resilience is to be defined, it would perhaps be useful to understand resilience as the discursive field through which we negotiate the emerging problem of governing complexity" (Chandler 2014b, 13). As Foucault (1981, 53, 55) noted, "discourse is the power which is to be seized" and which as a practice of truth "relies on institutional support". We need to ask if "[r]esilience is best understood as the rolling-out of neoliberal governmentality (Joseph 2013, 51) or if it is "a radical critique of the knowledge claims of actually existing neoliberalism", calling forth "a new 'resilience' agenda of governance" (Chandler 2014a, 47–48).

Academic debate goes on whether resilience is the heightening or climax of neoliberal governmentality. Recalling Foucault's ideas on governmentality, as a form of power it is not about the sovereign, disciplining and administrative state; not about "the state's takeover (étatisation) of society" but about "the "governmentalization" of the state" (Foucault 2007, 109). Governmentality studies have showed that neoliberal governmentality has meant a reduced role for the state, but not an eradication of it, and not less governance (Donzelot & Gordon 2008, 53). On the contrary, governance through economic analysis has extended to domains traditionally held outside of economy and government (Foucault 2007; 2008). Michael Hardt and Antonio Negri (2009, 205) would call it Empire: "characterised by a distribution of powers, [...] which requires the wide collaboration of dominant nation states,

major corporations, supranational economic and political institutions, various NGOs, media conglomerates, and as series of other powers". Obviously, all actors of the analysis fit this description.

To understand the meaning of resilience as part of global governance we need to look back a little. Post-cold war development was dominated by the idea that for development to occur there has to be security, and for security to last there has to be development. This development-security nexus dominated the international development agenda throughout the 1990s (Duffield 2010). The logic goes that conditions for market economy and economic growth will bring stability and security and thus consolidate neoliberalism's sphere of influence. Resilience, then, was soon understood to be a crucial aspect of sustainable development and a widely used concept in "sustainability science" (Folke et al. 2002; Brand 2009). Reid (2013a, 360) concludes that resilience lies in the interface between sustainability and neoliberal forms of governing, "conceived not simply as an inherent property of the biosphere, in need of protection from the economic development of humanity, but a property within human populations that now needed promoting through the increase of their "economic options."" Using ecological reason for installing neoliberal governance is evident from the managerial discourse of global environmentalism (Nikula 2012). It problematizes the sustainability of the global ecosystem, "the 'global' being defined according to a perception of the world shared by those who rule it" (ibid., 58), namely those invoking a future with environmental catastrophe. As briefly discussed in chapter 3.3, resilience scientists have taken on the parallel concerns for environment and governance and have come up with ideas of 'planetary' or 'ecological' stewardship, approaches claiming to both recognise planetary boundaries, sustain ecosystem services and support human well-being (Chapin et al. 2010; Folke et al. 2011).

Reflecting this critique of resilience with the policy analysis, points of contact can be seen. There seems to be a moral consensus on the need for governance at international and global levels (EC 2013b, 4; UNDP 2014, ii; UNDP 2011, 5; USAID 2012, 5; WB 2013a, 34). Klaus Schwab, the Founder and Executive Chairman of WEF, was quoted in the report: "The risks have not gone away. What we should do is develop the necessary resilience to deal with those risks in time. [...] Without a basic moral consensus on a global level, humankind cannot survive." (WEF 2013b, 19.) A clear tendency is to portray the world in such a way that it is in need of more, not less governance, meaning increased cooperation, coordination,

standardization and "multistakeholder" approaches (EC 2013a, 9; USAID 2012, 23; WB 2013a, 35). UNDP is surprisingly explicit:

Reducing vulnerability to transnational threats, whether by fixing governance architectures to reduce shocks or taking steps to enable people to cope, requires greater leadership and cooperation among states and across international organisations. It also requires a more coherent approach that sets priorities and reduces spillovers—and more-systematic engagement with civil society and the private sector. [...] Global governance tends to be organized in silos, with separate institutions focusing on such issues as trade, climate, finance and migration. This makes it very difficult to take a systems perspective on global challenges or to identify spillovers and contradictions in the actions of states and international agencies. Complete and thorough assessments of the multiple and at times overlapping architectural issues of global governance are needed to ensure that global cooperation is efficient and targeted towards the most critical areas. (UNDP 2014, 13–14.)

If this is contributing to neoliberal governmentality, then it is not neoliberalism traditionally understood as a political economy where "deregulation, privatization, and withdrawal of the state" (Harvey 2007, 2) are the spearheads of policy. It is frequently argued that resilience fits neoliberalism very well through the removal of responsibility from states to individuals. However, the studied resilience policies call for both more state and more self-reliance (WB 2013a, 3, 21; UNDP 2014, 2). States are supposed to be "brought back in" since "[m]arkets, while important, cannot provide adequate social and environmental protections on their own" (UNDP 2014, 14). Resilience ought to be "a first-order change to governance architectures" (ibid., 12) and an approach that links "climate and disaster resilience to broader development paths", occurring at different levels from individual to international (WB 2013b, viii, 16). Yet, the major concern is sometimes not biosphere or environmental wellbeing but development and the economic sector (WEF 2013a, 17; EC 2013a, 11; WB 2013b, 40). What critical accounts are right to point out is that in the end, human wellbeing is losing in importance (Evans & Reid 2014; Nikula 2012), and international institutions sometimes seem to regard "the maintenance of the system the objective of governance, the measure of success being the preservation of the system rather than the protection of citizens" (Welsh 2014, 7).

Chandler (2014b) has provided a different, yet equally critical account of resilience and neoliberalism. He approaches resilience from the point of view of systems' ontological complexity, not from that of social-ecological systems or recognition of issues (such as environmental concerns) that complicate processes of governance. Similarly to some

resilience scientists, Chandler's (ibid.) 'resilience thinking' implies a broader perspective to systemic life than 'resilience'. For Chandler (ibid., 48), "[r]esilience-thinking does not just allow us to adapt to a more complex, fluid and uncertain world" but enables the understanding that this is "a world in which everything we thought under liberal modernity needs to be reevaluated". He further notes that it is "possible to chart a rise in resilience-thinking as a governing rationality without mentioning the word 'resilience'" (ibid., 3). This is evident in approaches such as "Earth Systems governance" that obviously builds on similar assumptions as resilience-thinking but where resilience and complexity are either non-existent or merely an aside (Biermann 2014; Biermann et al. 2010).

Chandler (2014b) admits resilience and neoliberal governance are related but sees that resilience exposes the limits of neoliberal modes of governing and represents the failure of neoliberalism's aim to govern, not its climax. He differentiates between neoliberalism and resilience thinking along their understanding of complexity as simple complexity and general complexity, respectively (ibid., 27). Simple complexity describes the rationality of neoliberalism in so far as it attempts to govern complex life in closed systems from outside, instrumentally for specific goals (ibid.). In neoliberal understandings, complexity has been a problem for governance "because the emerging rationality of self-organising life, both human and non-human, can clash [...] with the simplistic and reductionist understandings of governments and markets, seeking short-term and narrow instrumentalist ends on the basis of linear understandings of mechanical causality" (ibid., 31).

On the contrary, in general complexity there is an understanding that "complex life does not have to be a problem or barrier to governance interventions" but "a resource that enables the extension of governance into new realms of 'real' complex life" (ibid., 34). This is a very positive view on both resilience and governance. It tries to get away from 'ubiquitous' uses of resilience in all manner of policies by differentiating between simple and general complexities. This is similar to what Walker and Salt (2006, 120–121) have done with 'specified' and 'general' resilience, the former meaning to instrumentally manage specific (known) threats and the latter implying an overall capacity to manage unknown shocks or disturbances.

It is difficult to reflect Chandler's ideas on the policy analysis. He seems to claim that any attempt to use resilience as a policy tool has gone wrong in thinking that it would be "possible

to intervene instrumentally to shape the outcome of these [interactive social] processes and to realign them to liberal rationalist understandings of progress and development" (Chandler 2014b, 37). Following this line of argument, policies that encourage resilience-building for complexity have understood the ontological realities of the world but prescribe totally wrong measures to govern it. Chandler does not condemn these policies but only questions their effectiveness. He criticizes the language of simple complexity – concepts that try to render predictable that which is emergent and "evades human control". (Ibid., 32–34.) Some agencies have adopted this technical and managerial language that he refers to, which is well illustrated by WEF: "Tipping points and cascading effects are features of many complex systems, which mean that the world needs better ways to measure the health of critical systems and gauge the thresholds within which it is safe to operate" (WEF 2013b, 29). Chandler's arguments point at features of resilience policies which clearly mark them as part of neoliberal governance, and yet he makes "an analytical distinction between neoliberal and resilience ontologies" (Chandler 2014b, 27), indicating an ontological difference instead of compatibility.

However, Chandler seems to agree with other critical analysts on a point: resilience is a framework used to render life and people governable (Chandler 2014b, 34–35; Joseph 2013, 41; Reid 2013a, 362). While all acknowledge the complexity thinking behind resilience, Chandler does not focus so much on the political implications different resilience theories and policies have on peoples on which they are implemented, or what is politically and philosophically at stake in resilience. While criticizing neoliberal governance, he sees resilience as a positive governance perspective, a new episteme to understand the subject and the world. From a governance perspective, if the aim of the policies of EC, FEMA, UNDP, USAID, WB, and WEF has been to strengthen governance structures and procedures, the discourse pursued is certainly doing its job. But if the idea was to include resilience to be better able to tackle problems shared by these organisations, it is hardly the case. This section first showed how the aim to govern complexity by building resilience has led these organisations to claim more and stronger international or global governance and then discussed different normative evaluations. Now we can ask what the implications of 'resilience governance' on subjectivity are, in other words, how the relation between resilient subject and governing is understood.

5.3 The subject's security and political agency

Governance of life in a biopolitical sense invokes subjectivities according to the prevailing governing rationality. As observed in the previous section, resilience policies are to a great extent compatible with neoliberal forms of governance. In addition to the governance effects of resilience "it is also necessary to attend to the forms of subjectivity it attempts to bring into being" (Reid 2013a, 355). For governance to work at the level of the individual – as self-governance – it requires a subject. Biopolitics puts the life of the subject at the centre of politics, affecting the way the subject conducts its life (Foucault 2007, 42–43). As the policy discourse is not uniform or unambiguous but consists of several overlapping dimensions, there is not necessarily only one subjectivity. We have already discovered the adaptive and the entrepreneurial subject, but we can still ask what the subject of resilience governance is like, and more importantly, what are its political implications.

The subject of resilience varies across disciplines. Mind-body disciplines such as psychology focus on individuals but social-ecological resilience where the current policy discourse mainly draws its origins is greatly systems-oriented (Welsh 2014, 1; Folke 2006; Bourbeau 2013, 9), understanding resilience as a systemic capacity that arises from its interactions, change and adaptability. As discussed in chapter 5.1, the organisations have adopted systems thinking, albeit the system or the unit that is the object of policy can be as small as the household or as big as the Earth, and anything in between (EC 2013a, 10; EC 2013b, 4; UNDP 2011, 5; USAID 2012, 13; WEF 2013a, 11). For analytical purposes it can be useful to heuristically differentiate between these operating levels, although "they are each related to each other with some areas of interdependence and others that operate in a more discreet manner" (Walklate, McGarry & Mythen 2013, 412).

Yet, the subject of resilience cannot be identified or described by merely looking at who are the addressees of policies. The resilient subject stems from the discourse and is both individualistic and generalizing. When individual resilience is concerned, it recalls both mental strength and the biological properties of human life shared by all complex adaptive systems (WEF 2013b, 18). The individual is resilient by biological nature and by belonging to a system with resilient capacity such as family or community. Part of the biopolitics of resilience is to make human life the link between social and ecological systems. Interestingly enough, Walker and Salt (2006, 5–11) consider resilience as not only a guideline for

managing social-ecological systems but also as a capacity of those systems that helps in "being more forgiving of management mistakes" (ibid., 12). This idea is reflected in some of the policies that argue for the need to build individual or community resilience along with institutional resilience so that people know how to take recourse for defending their rights and how to self-organise if institutions would fail (UNDP 2014, 11; WEF 2013a, 39).

Although the above examples can be considered exceptions taking place when resilience management fails, what is effectively happening is the production of subjects whose primary role is to take upon themselves the responsibility of their wellbeing in an uncertain world (Evans & Reid 2014, 47). Sketching the future of national resilience, FEMA (2012, 3) holds that "individuals, families, neighborhoods, communities, and the private sector will likely play an increasingly active role in meeting emergency management needs". Individual subjects are assumed a role in resilience policies that come from high levels of governance. But resilience cannot be taken to only concern individuals, because individuals make up the populations and societies on which resilience policies prescribe their measures. The main point is not about singularities but individuals as a collective. The subject is tasked to become resilient, but the reward of this hardly concerns the individual but is claimed by the policy-makers in the form of a better governable population.

As the world gets more complex and its emergent phenomena more difficult to govern – thus adding up to the landscape of possible threats – the subject should accept its status as, in Butler's terms, being vulnerable and always "at risk from the outset" (Butler 2009, 30). Even if you succeed in making your house resilient to floods, insure your family for illness and set up a firm to employ yourself, "risks are lurking everywhere" because each society will produce them according to its cultural valuations (Beck 2009, 13). Hence, you have entered a 'full-life crisis' (Evans & Reid 2014, 100). Is this understanding of the resilient subject as always vulnerable but prepared for risk just commensurate with reality? It has been argued that accepting the subject's mission to build resilience to survive in the catastrophic topography of the present is actually sacrificing the basic human desire to achieve security, security understood as being free from danger (Evans & Reid 2013, 83, 87).

If security is understood as a continuous absence of danger, or as closing the subjects off from their dangerous 'milieu' (Zebrowski 2013, 12), it is obvious that resilience discourse excludes it. For "[n]o matter how well a country is prepared and how good its policy framework is,

shocks occur, often with inevitable and highly destructive consequences. The key objective is then to rebuild while increasing social, material and institutional resilience". (UNDP 2014, 11.) And if danger is understood as threats to wellbeing and safety then surely no actor can declare security by saying that causes of endangerment are gone. It would seem foolish to believe that for example hurricanes will no longer trouble anyone and economic downturns will not affect our job markets. Resilience policies are thus likely to address crises and vulnerabilities that are said to increase in some countries or social groups (EC 2013b, 2; UNDP 2011, 8; WB 2013a, 15). All this implies that in the resilience discourse, uncertainty is not the same as danger or insecurity, and systems are secured "through their contingency" (Zebrowski 2009, emphasis in the original), not by excluding danger.

Do resilience and security, then, necessarily exclude each other? The analysis found claims "for a more secure world" (UNDP 2014, 1, 13; WB 3013a, 3) but they are few. Resilience is contributing more to special areas like food or border security (EC 2013b, 5; WEF 2013b, 29). Chandler (2012, 216) has articulated resilience as the current paradigm shift in human security – now understood as "prevention rather than intervention, empowerment rather than protection, and work upon the vulnerable rather than upon victims" – and thus a mere decline in the use of the term in policy documents does not indicate abandonment of security. While there are many understandings of human security, they all "shift the referent object of security from states to individuals, or to people collectively" (Alt 2013, 89). In this human security framework, the resilient subject is an "active" and "empowered" agent that can "positively or successfully adapt to external problems or threats" (Chandler 2012, 217). USAID (2012, 3) notes that "[w]hile we cannot stop shocks from happening, we must increase our focus on helping people and their societies withstand and recover from them". Resilience policies call for responsibility in all levels, and the role of states is to manage risks – even from the market - and to give direct support to individuals at risk (UNDP 2014, 8, 14; WB 2013a, 21). Even though the policy analysis did not consider security agencies specifically, it reflects the general shift in the subject of (human) security frameworks: resilience policies do not object to security per se but acknowledge the shift from an intervening and protecting state to the empowered individual; a "shift from a state-based to a society-based understanding of security practices" (Chandler 2012, 217).

_

¹⁰ For a critical discussion on the latest developments of human security, see e.g. Alt 2013.

While resilience policies call for arrangements that are meant to empower the subject and enable it to secure itself materially or physically, what some argue to be even more at stake in resilience is the question of security in a political and philosophical sense, not the human security Chandler connects with it. Evans and Reid (2013, 87, 90–93) point out that resilience discourses create a subject whose ontological status is vulnerability and who thus has to accept vulnerability as a truth that conditions it to thrive on its inherent resilient capacities. From this they conclude that the subject cannot even dream that things were different or that there would be less danger and more security (Evans & Reid 2013, 95; 2014, 79). The resilient subject is an adaptive subject, which is seen to fundamentally conflict with political agency understood as a capacity for political transformation (Evans & Reid 2014, 119).

Following this line of understanding, "adaptation implies a political passivity that accepts and takes for granted the inability to challenge that which demands adaptation" (Alt 2013, 101). The critical conclusion is that resilience is not only desecuritizing but depoliticizing, "closing down alternate possibilities" and political struggle (Neocleus 2012, 192). Intervention through resilience is not the liberal intervention legitimized by 'the responsibility to protect', but an effective, indirect, and dispersed form that allows the subject "a degree of autonomy" from the state (Zebrowski 2009). Thus, there is a space of autonomy for the subject but one that is constrained by structures of governance so that the empowerment resilience could bring about remains rather spurious. Joseph (2013, 46) claims that the active agency resilience should contribute to is actually undermined by resilience programmes that "work on the assumption that intervention is necessary because people lack an adequate understanding to cope with freedom and autonomy".

In some policies the governing discourse has features that confirm the relevance of this critical discussion. For example, the WEF (2013b, 13) notes that "[l]eadership in this unpredictable world is about managing expectations", implying that although change is certain, it is always unpredictable and people should suppress their expectations of being able to direct its course. And yet, when unexpected opportunities arise, the subject needs to act swiftly because in such situations the risk of inaction is the worst of all (WB 2013a, 5). It is correct to say that resilience reduces the political operating space of the subject if its only task becomes to manage risks and its only possibility of empowerment is to develop this capacity by learning from the risks that realise. Joseph (2013, 47) calls this capacity-building function

of resilience policies only a mask of their real aim which is "to use lack of capacity as the means by which to discipline states and their governments".

In the policies, there is indeed talk about "cognitive and behavioural failures" (WB 2013a, 16), "failure to address a global risk" (WEF 2013a, 36), "adverse coping strategies" (UNDP 2011, 5) and even "a false sense of security" created by short-term solutions (WB 2013b, 15) that might be the 'natural' reactions of the subject in adverse events. The quotes show a concern for the resilience of states and societies, particularly poor ones. We can see that it is not only a shift of responsibility from the state to the individual, but "a shift from Western responsibility for securing the other to enabling the other to secure itself" (Chandler 2012, 225). Here lies a problematic that those states that still have the means to protect their citizens will continue to do so while people in more insecure countries are left with a mission to secure themselves. This is in keeping with the neoliberal bottom-up governance through interventions into social relations.

While Evans and Reid (2014) conclude that the political implications of neoliberal governmentality on subjectivity are so problematic that there is a need to move beyond the resilient subject and neoliberal subjectivities in general, Chandler (2014b) sees in resilience a subject that is no longer constrained by liberal frameworks and whose subjectivity is based on post-interventionist or 'post-liberal' governance. Chandler is correct to note shifts in responsibility that resilience has brought about and the complexity of the world that lies behind it, but he ignores the possible negative implications of resilience governance. The policy analysis reflects the challenges of the organisations to conduct the work they are set up for in national emergency management, development, international economics, or environmental protection, which might be the reason why they are reaching out for resilience as a governing discourse. Looking at the resilience policies of "international organisations that fall under the influence of Anglo-Saxon ways of thinking" (Joseph 2013, 45), it is hard to comprehend a post-liberal turn having taken place, as the discourse reflects a firm intention to strengthen, not weaken, the dominant governance institutions.

We can conclude that the subject's role in resilience policies is to be a part of the joint enterprise of governance where responsibilities of actors in different levels are acknowledged. Yet, the role of the resilient subject (both at individual and societal levels) is sometimes emphasised to the extent that the responsibility of supporting institutions is indirectly

sidestepped. On the one hand, the subject gets empowered by resilience because it gets to influence its future and is given tools that can help in building resilient capacity. On the other hand, resilience policies are formulated by agencies that can use them intentionally or inadvertently in ways that in the last instance produce insecure and depoliticised subjectivities.

6 Rethinking resilience

Resilience should encourage the subject to believe in a good life despite the threats that it might face, and not to passively make it accept forms of suffering that are a consequence of the world's disastrous nature. Has the original idea of resilience as a positive capacity, and whatever useful effects it might have for instance in reducing losses from material and mental shocks, been undermined by the governance discourse? Has resilience building in a neoliberal framework shifted "the emphasis from positive adaptation despite adversity to positive adaptation to adversity" (Bottrell 2009, 334, emphasis in the original)? Providing that the current resilience policies have problematic political implications for the subject, there is a need to rethink or reformulate resilience policies and our understanding of what resilience could mean for the subject. Could resilience be an affirmative aspect of subjectivity and governance? This chapter engages in rethinking the concept and subjectivity of resilience as well as its applications in policy discourse. As we will see, some new approaches and subjectivities have already been proposed.

6.1 Beyond neoliberalism – with or without resilience?

Considering how resilience is constraining political subjectivity, there is a need to think about ways to regain the political and politics. For as much as EC, FEMA, UNDP, USAID, WB, and WEF praise resilience in their respective policy fields, attaching it with great capacity to respond to pressing global problems, under a neoliberal framework, resilience is mostly discursively constitutive of these problems and depriving those who apply it of real chances to politically respond to them. The ensuing question is: in order to provide the organisations with a policy that is effective is there a need to get rid of either the neoliberal framework or of resilience – or both? There is a tendency to draw a parallel between governmentality and neoliberalism. It is claimed that while Foucauldian governmentality does not reduce itself to neoliberalism, it is best applicable to that rationality, and furthermore resilience, in policy terms, "fits extremely well" to neoliberal governance (Joseph 2013, 41, 44). Should a conclusion be drawn, then, that all governance and policy-making organisations are held politically captive of this environment, unable to articulate resilience in any other terms? From this starting point, bringing politics to resilience can seem rather difficult a task.

Evans and Reid (2014) propose that a reinvestment in the political and the political qualities of existence is needed through what they term 'the poetic subject'. This subject implies "a new ethics towards ourselves and the earth" that is not bounded by "the sense of vulnerability that is continually promoted by contemporary regimes of power", and which "also gives over to life the political possibility that its aesthetical qualities may have both an affirmative and a resistive potential to challenge dogmatic images of thought" (ibid., 136–137, 171). The poetic subject is effectively a move beyond the resilient one. It is confident towards the future and changes, and alternative trajectories that may come it sees first and foremost as "atmospherically-aesthetically-affectively enriching" (ibid., 137).

For the poetic subject it makes no sense to seek plausible and powerful solutions to 'global problems'. Neither does it see the future in terms of potential problems to be solved because "we should not colonize a people-to-come by seeking to thwart the open horizon of political possibilities" (Evans & Reid 2014, 137). In these terms, policies such as CCA and DRR, or economic resilience and resilient development do not coincide with the ethics of the poetic subject that would use a whole new vocabulary, 'a poetic register' (ibid.), to constitute a different discourse on globally important issues. The poetic subject would look at the abovementioned policies – cornerstones of the agency of the organisations studied in this thesis – and ask "what do we fear that the earth may become?" (ibid.) and why do we fear transformations more than anything (ibid., 139)?

This affirmation of "new creations and worlds to come" (Evans & Reid 2014, 137) bears a resemblance to the approach of many religious communities towards the unknown and ungovernable elements of times yet to come. For religious communities – which, it is obvious, are always regimes of truth and practice of their own – the now scientifically foreseeable atmospheric and environmental change may be as true as for resilience scientists or policy-making organisations, but there is an important qualification to be addressed. Theological arguments of apocalypse and an eschatological horizon that have been especially important to the development of Christianity have had "a fundamentally positive disposition towards disasters [...] and conviction as to the power of man to triumph in their face" (ibid., 160). While the current discourse on social-ecological resilience, as also expressed in the analysis, is conditioned upon an idea of the coming catastrophe in much the same way as Christian truth-telling is conditioned, a neoliberal framing of resilience lacks an apocalypse

and an eschatology because it lacks a vision beyond the disaster "on account of the positive change it will bring" (ibid., 161, 163; Dillon 2013, 186).

Hence, one should not mix the "resilience of spirit" (USAID 2012, 24) – of adaptability and entrepreneurialism – driving the resilience policies with a positive transformative potential of religion. We should, though, consider the relation between these policies and religion. It is often thought that the reason for the popularity of religious beliefs in especially poor countries is due to a lack of other sources of hope and a need for something that helps in accepting the immanent reality, no matter how cruel it is. Now, has resilience become a new 'scientific religion', targeted towards the poor and vulnerable, and based on immanent realities rather than transcendental prophecies? Resilience in a way modifies the well-known 'serenity prayer': "resilience gives me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference". So there are things that can be changed and others that cannot; in other words, there are some rules of conduct which must be followed and equally certain domains of life which should not be trodden with aims for political transformation. In the same way as religious discourse is always concerned with not only transcendental salvation but also people's earthly conduct, resilience allows a modern, regulated freedom to act because "every account of truth is accompanied by some corresponding governmental imperative that specifies how one should be governed or exercise self-governance" (Dillon 2013, 176–177). Thus resilience might not bring serenity but the opposite: constant alertness and vigilance towards the worldly dangers.

With its catastrophic imaginary, resilience in a way corresponds to the religious ideas of the prophecy of the 'salvation' and the parrhesiastic truth of our blindness towards our present, and to a subsequent need to change our way of behaviour so that we could stand a slight chance of avoiding the coming catastrophe (Evans & Reid 2014). Although the affirmative potential of resilience is obviously undermined, political agency that now seems to be lost could make use of some of the transformative, eschatological spirit that religious communities often possess: of a way "to think, reason and act with a view to being able to bring an end to present times, with the confidence that these times will be succeeded by better times", of a way of thinking that is also "fundamental to politics" (Mezzadra, Reid & Samaddar 2013, 9).

It is clear that the poetic subject is far from the subject of the analysed resilience policies and that it does not, nor is it in any way trying to, provide a solution for how to proceed with

policy-making so that it would better respect the political agency of the subject. It does, however, urge any policy-maker to engage in a critical inquiry with the role that political agency has in the respective organisation. Chandler's (2013a; 2014a; 2014b) response to the discussion is again worth noting, for he has set forth for another kind of new global ethic that claims to solve the challenges of current neoliberal ideas and structures of governance, notably by using resilience, not rejecting it. In this account, what he has named 'resilience ethics' does not have a clear subject-object divide because it is not a question of the subject's autonomy from the world (Chandler 2014b, 121). Instead, proposed is an interrelated and associational subject that is directed by resilience ethics

[...] which works on the basis of indirect assumptions of responsibility, not the basis of legal, moral or political responsibility but on the basis of our relational embeddedness: the understanding of indirect side-effects caused by our associational connectivity in a complex and globalised world (ibid., 122).

Chandler (2013a; 2014b) frames resilience ethics as an approach to the world that will avoid the problems we have seen with liberal, linear, rationalist, top-down governmental reasoning and makes a step towards emergent, complex, self-organising, interactive, and socially embedded subjectivity. Thus, it is with resilience that we actually get (or have already gone) beyond neoliberalism. An important aspect of this ethics is its discontent with liberal linear structures of responsibility and an affirmation of a "broader and more inclusive understandings of ethical responsibility for global problems" that "operate on a different register to the traditional liberal framing of law, sovereignty, rights and intervention as [...] there is no assumption of preexisting autonomy" (Chandler 2014b, 120, 123). But since it has been demonstrated, by various authors and also by this analysis, that the current discursive framing of resilience is responsibilising, is resilience ethics not absolutely so? One becomes a political agent only in association with others and the environment, and one must assume responsibility for all potential consequences of ones actions. This kind of ethics is based on the idea that complexity is the key ontological principle of the world and its understanding requires resilience. As noted in the previous chapter, resilience policies already subscribe to the complexity discourse, which is but one reason to agree with Joseph (2013, 52) that Chandler is too hasty to conclude that with resilience, we have witnessed a fundamental paradigm shift towards a post-liberal order that is here to stay. This is not to reject or affirm resilience but to note that the reality of resilience policy-making as shown by the analysis is hardly post-liberal.

Resilience ethics does make a useful point for analysing international agencies in that it reminds how "[w]ith this new type of 'responsibility' came an imperative to ethically reconsider these institutions in the knowledge that the institutional framework shaped the possibilities and actions of others" (Chandler 2014b, 128). This is, along with the imperative truths discussed above, another aspect of acknowledging that even if resilience policies are pursued for reasons deemed righteous by the policy-makers or by the target populations, they do not come without constraints. Even if we do not want to reject resilience altogether, we have to consider its deleterious effects (ibid.). When resilience becomes a leading organising societal principle, it becomes dangerous.

The policy discourse as it is currently formulated is in many ways problematic, firstly because it has been hijacked by neoliberalism and secondly because it has biopoliticised the subject. Social-ecological resilience, the leading resilience narrative behind the policies, has an impregnable faith in science and expert knowledge which lead to a biopolitical perception of the human: human as species among other species and as part of ecosystems they inhabit. Both economic and development agencies say investments in access to rigorous science is a key to building resilience and sustainability (USAID 2012, 11; WEF 2013b, 29–30). The scientific truths, of environmental sciences in particular, have been mobilised by both the political Right and Left, thus bringing hard times for the political subject that "must learn to accept the realities of the times and disavow any strategy for the transformation or defeat of neoliberalism" (Evans & Reid 2014, 150).

Nevertheless, resilience ethics of indirect responsibility follows a logic that "if international institutional frameworks have a deleterious effect on 'quasi-states', others should be considered which could have a positive effect"; also, "threats or dangers are as inherent in this relationality as much as positive outcomes might be" (Chandler 2014b, 13, 128). Contrary to Chandler's argument, this logic is still rather paternalistic even if the responsibility laid on the 'Western states' is indirect. Yet, the idea of a change for more positive effects can still be used for the purposes of this analysis. Just as neoliberalism has proved to be a very resilient doctrine able to "adapt to the hazards of critique" (Evans & Reid 2014, 71), resilience obviously yields to the purposes of its user according to what kind of a definition is needed

(Walker & Cooper 2011; Martin-Breen & Anderies 2011, 50) and is suitable for different political or academic standpoints to "make a normative case for or against resilience" (Chandler 2014b, 47). This indicates that because resilience is a fundamentally political project and not the result of ontological embeddedness or associability, alternative formulations of it are possible to pursue politically. The question is if we can save resilience from neoliberalism. For it has been established that there is a need to reformulate resilience to the extent that it is freed from its current discursive shackles. The next section will present ideas on how, if at all, this could be possible.

6.2 Need and potential for discursive change

Why is it important to see the possibilities for discursive change? Although political implications and practical applications should be more important for critical inquiries than the discourse per se, and although it is true that "[w]e get nowhere politically by simply attempting to condemn concepts" (Reid 2012b, 162), changes in the contents of discourses and definitions of concepts do reflect our political practice, and vice versa. Thus it is important to consider past and potential changes to our understandings of resilience. For example, in the exemplary definition for resilience in UNISDR's terminology (2007, emphasis added), it meant

[t]he ability of a *system*, *community* or *society* exposed to hazards to *resist*, *absorb*, *accommodate to* and *recover from* the effects of a *hazard* in a timely and efficient manner, including through the *preservation* and *restoration* of its essential basic structures and functions.

Currently for the UNCEB (2013, 13, emphasis added), it is

the ability of a *system* to *reduce*, *prevent*, *anticipate*, *absorb* and *adapt*, or *recover from* the effects of a *hazardous event* in a timely and efficient manner, including through ensuring the *preservation*, *restoration*, or *improvement* of its essential basic structures and functions.

These definitions clearly come from the same origin in the UN system. Yet, there is a 6-year gap between them and one can see how the definition has changed. The object of the policy has been simplified from separating human entities from others to talking unequivocally about 'systems'. Furthermore, while in the former definition systems could resist hazardous effects, in the latter they would be content with reducing, in advance preventing, or adapting to the

effects, yet simultaneously thinking of improving the system's performance. Is this merely a cosmetic difference of rhetoric? In the light of the previous chapters, it reflects the allencompassing nature of discourse: resilience can solve any problem of any entity. It also reflects the idea of adaptive governance that expects subjects to thrive on no longer 'hazards' but on 'hazardous events'.

In this 'politics of the event', occurrences that display no truth or materiality at their emergence are attached with meaning so that "the world is no longer thought, perceived, or experienced the same again by the experiencing subject" (Evans 2013, 168–169). The event can concern and affect either one or a million people; what matters is their political function (ibid.). Instead of a hazard whose nature, magnitude and severity can sometimes be calculated to an extent (predicting volcanic eruptions, for example), referring the question 'resilience to what' to events locates resilience in emergent happenings that those in power tend to use to claim truths and to legitimate imperative action (ibid., 188, 190). This is one aspect of the discursive development of resilience that has affected the concept's operational usage. Thus, talking about interpretations of resilience is not contradictory to assessing its practical effects (cf. Joseph 2013, 44). As Foucault asked how the concept of security "might be reconceptualised to perform different functions in constitution of a counter-liberal politics" (Reid 2012b, 152), we can ask the same of resilience.

As noted above, the biggest problem now is the victimizing (USAID 2012, 17), biopoliticising (EC 2013a, 8), depoliticising (USAID 2012, 19), responsibilising and moralizing (WB 2013a, 14, 18) nature of resilience. Sometimes these aspects thwart otherwise beneficial uses of resilience. For example, USAID (2012, 10) recalls a project conducted among female farmers in Burkina Faso: the aim was to implement a farming strategy that would be resilient towards heavy rains, including cultivation of different vegetables to avoid the loss of all harvest in case of bad climate conditions. This practical application of resilience only seems common sense. The women went on with the proposed cultivation method because they felt more resilient with it. But one of the women is quoted saying: "I am resilient now. [...] Just like the onions." (Ibid.) Although seemingly a harmless joke, it is a straightforward equation of human with onions, and thereby human community with an agricultural plant. Here, biopoliticisation occurs in a sentence.

It is fair to note that the organisations do not start from the assumption that humans and ecosystems exhibit the exactly same capacities or function in the exactly same way. But they pursue political programs where capacities similar to those found in natural systems are to be 'build' within social systems. The narrative of 'resilience made' is more present in the studied policies than the narrative of 'resilience found' (Aranda et al. 2012), suggesting that instead of acknowledging coping mechanisms that people and communities already possess, the focus is on building mechanisms that they allegedly lack from the outset. While it is possible and sometimes desirable to 'make' resilience, this approach always risks being patronizing as the quote from WB (2013a, 23) displays:

For the most vulnerable, targeted safety nets can have a dramatic impact in preventing the coping responses that incur long-term costs—such as reducing basic consumption, withdrawing children from school, selling productive assets in distress sales, or resorting to crime.

To regain political subjectivity into resilience, policy discourse should reflect people's real hopes and needs. The organisations care about people taking part in formulating the policies to solve current challenges (WEF 2013b, 26), and claim that "[a]ll public policies, especially the macroeconomic, must be seen as means to an end, not as ends in themselves" (UNDP 2014, 8) – so at least on paper. For EC (2013b, 3), "actions must be [...] jointly planned by the people affected or at risk, communities, governments (at the local, sub-national and national levels) and civil society". But it is hard to say whether the cooperation is voluntary or passive acceptance of external influence. For example, USAID (2012, 17) declares to "promote ownership by strengthening the capacity of host countries to manage and lead, as no strategy imposed from the outside can bring about sustainable, positive change." The organisations' motivation to include local communities and individuals in policy planning is coupled with hopes to advance their respective particular goals; often the perception of goals and priorities is rather different within the two parties, which jeopardizes the whole idea of local ownership. WB shows a clear bias towards local priorities: "Interestingly, not all options identified by local stakeholders involve climate resilience. Many involve simple development needs, such as electrification and water supply, which can have indirect resilience benefits." (WB 2013b, 27.) It makes no sense advocating for local ownership if the direction of action is already determined.

During the last couple of decades, attempts to ensure that international policies have a 'human face' have led to so-called human-centred approaches. We have seen the rise of human rights, human security, human development, and lately also 'human resilience'. At first glance the human-centred approach is gripping:

Resilience underpins any approach to securing and sustaining human development. At its core, resilience is about ensuring that state, community and global institutions work to empower and protect people. Human development involves removing the barriers that hold people back in their freedom to act. It is about enabling the disadvantaged and excluded to realize their rights, to express their concerns openly, to be heard and to become active agents in shaping their destiny. It is about having the freedom to live a life that one values and to manage one's affairs adequately. (UNDP 2014, 7.)

This is a prime example of today's framings where "human agency is at the heart of development discourse" and where "it is the growth of human capabilities and capacities that are central" (Chandler 2013b, 67). Resilience is perfectly compatible with human-centred approaches to international development because it likewise emphasises enlarging the capabilities of individuals, in other words "the choice-making capacity necessary to adapt efficiently in today's globalized world" (ibid., 78). In much the same way as development as freedom "is a continuum, the goal of which is never reached" (ibid.), resilience is portrayed as a human capability that can be built but is always a project unfinished.

The problem with human-centred approaches is that they problematize the human rather than the social relations and institutions in which the human is embedded (Chandler 2013b, 85). Autonomy of decision does not exist in the analysed policies because in their neoliberal framing, the aim to guide our rational choice-making and ways to deal with current problems will only ever provide solutions that are conditioned by the very frame in which they are designed (Evans & Reid 2014, 200–203). As Chandler (2013b, 83) notes on choice reduced to responsibility:

Genuine sovereign choices are free from external judgement. [...] In this framing, it is alleged that Western subjects can understand postcolonial subjects on the basis of 'our' higher developed inner capacities compared to 'their' lower developed capacities for 'choice'. This discourse however is universal, as the same framing enables to understand the 'poor choice-making' of our fellow citizens and neighbours, if they happen to be unemployed, to smoke, to be teenage mothers, eat fatty food, drop litter, fail to take up higher education opportunities or to properly handle their emotions.

This passage demonstrates how the 'good' and the 'bad' choices are predetermined by the societal framework. Similarly, attempting to increase the power and rights of the subject of resilience, a 'rights-based approach to resilience' proposed by Marygold Walsh-Dilley, Wendy Wolford and James McCarthy (2013) will, while correctly addressing some problems of the dominant discourse (such as the responsibilizing local focus), be compromised by the fact that it tries to make "a dramatic revision" (ibid., 2) of the concept by criticizing the system on terms already internal to it. Posing resilience in rights terms risks thwarting the very meaning of human rights which is to be a system of intrinsic values and not an instrument to build resilience for 'adaptive governance' to work (ibid., 34). It is inevitable to ask if resilience as an operational concept is anyhow able to assist people in realising their hopes and needs instead of increasing choice-making capacity within a liberal framework.

Before trying to answer, a couple acknowledgements are needed. First, knowing 'what people really want' is always problematic. People are of course asked in many instances after their needs and preferences, but are these voices respected? For the last couple of years, the UN has been conducting the 'MY World' global survey, asking citizens all around the world which six of the 16 named issues they hold the most important. The top five preferences so far are a good education, better healthcare, better job opportunities, an honest and responsible government, and affordable and nutritious food. Interestingly enough, action taken on climate change is the last priority. It is included in the list in the first place because the survey takes place within the process of renewing the UN agenda for sustainable development. The major concern for operational action will therefore not be to focus all resources to realise the top five priorities, but to ensure that the development process is sustainable. Being an approach or a capacity rather than a measurable goal, resilience is not part of the list, but policy-makers and indeed anyone who evaluates the policies should focus on how resilience is operationally applicable to achieve these ends.

Second, if people want to become resilient, then the role of international actors – such as the ones in this analysis – is to provide them with tools for that. This leads to a more profound question of governance: do we need international organisations or institutions and their policies in the first place – to "fill both knowledge and action gaps" (EC 2013a, 2), to serve as a "supportive external environment" that individuals' own efforts require to be successful (WB 2013a, 18–19), or to address "risks that spread across and affect multiple countries or

_

¹¹ The survey is currently online at vote.myworld2015.org and the real time results can be viewed at data.myworld2015.org.

generations" (ibid., 34)? Third, the problem of agenda setting is always present in policy analysis, as problematic situations are often contested and there is a disagreement among the stakeholders in terms of what constitutes a problem (Powell, Kløcker Larsen & van Bommel 2014, 136–137.)

This forces to ask if we can genuinely talk about global challenges or problems, or about plausible policy responses to them. And yet, how can we in the wealthy parts of the world claim to critically come to the conclusion that resilience is detrimental for the poor any more than we can tell them to become resilient? How can we say building resilience as part of governance structures is something to be wary of and to politically challenge, when in many places people have never experienced governance in a functioning form, and where one of the top priorities is an honest and responsible government that might then be able to provide for good education, healthcare, and job opportunities?

6.3 Differentiating between resilience as a policy tool and social resilience

Neil Scott Powell, Rasmus Kløcker Larsen and Severine van Bommel (2014) correctly remind us that there are all the time different resilience narratives at play, something the studied policies do not address but only go with the dominant social-ecological variant that is only one part of the story. Here it is useful to remember that "[e]ven though increased conceptual vagueness can be valuable to foster communication across disciplines and between science and practice, both conceptual clarity and practical relevance of the concept of resilience are critically in danger" (Brand & Jax 2007).

Locating the practical relevance of resilience has been at the core of this analysis. Besides the conclusion that the observable policy discourse is not contributing to solutions but more to the continuous presence of problems, it has to be recognised that resilience does not work as a solution for some of the so-called global problems that the actors attempt to address. The policies try to provide local solutions (i.e. changing local behaviour) without challenging problematic underlying structures, including the "logics and implications of global capitalism and climate change", the internal workings of which "generate disturbance and instability and shape the uneven ability of communities, cities and regions to cope with crisis" (MacKinnon & Derickson 2012, 266).

It is therefore impossible that WB, WEF and UNDP that are most vocally in favour of building economic resilience would buy into some revised version of the concept that effectively tackled the economic problems of people who are the objects of their policies. Either the capitalist economic system had to be transformed completely or its conditions should be equal everywhere – as in relatively rich communities people can already 'make themselves resilient' with credit or insurance. How resilience is now posed as a solution for unstable economies is a deceit, for "resilient spaces are precisely what capitalism needs – spaces that are periodically reinvented to meet the changing demands of capital accumulation in an increasingly globalized economy" (MacKinnon & Derickson 2012, 254).

For the same reasons resilience policies do not help in reducing poverty or mitigating climate change. The logic of resilience in the EC and USAID documents, for example, is not to provide a solution to the problems but to endure them. A complex systems approach that the concept has evolved into is deeply dangerous as a societal principle. In terms of the question of governance, resilience is a paradox. As observed above, resilience has increasingly been translated into inclusive decision-making, public participation and functioning and accountable institutions. While all this "represents a welcome advance in many respects [...] [it is] underpinned by a notion of adaptive management that subordinates communities and local groups to the imperative of greater resilience as defined by external experts and policy-makers" (MacKinnon & Derickson 2012, 261).

Redefining resilience starts by analytically differentiating between resilience as a policy tool and resilience as a social capacity. To achieve this we need to get rid of the holistic approach of complex social-ecological systems that presumes resilience to work as a solution to all kinds of problems in all kinds of entities. For policy purposes resilience can be of help and of operational use in some areas, at the same time avoiding at least some of the problems detected. From the list of issues addressed by the analysis, natural disasters, environmental crises and infrastructural hazards that impact human livelihoods are issues where resilience policies can have practical relevance (e.g. WB 2013b, 23; USAID 2012, 17).

DRR, crisis response and emergency management are the related concepts where resilience as a framework, as an umbrella concept, can work to deliver positive results. To avoid conceptual problems behind the policies, it is necessary to in a way go back to the original understandings of resilience as it identified a capacity of an ecosystem to persist despite

changes in its environment (Holling 1973, 17). This does not mean to subscribe to an even more biopoliticised understanding but to divest resilience of its current conceptual power that it does not deserve and that has lead mostly to negative political implications. Recalling the separation of general and specified resilience (Walker & Salt 2006, 120–121), we need to reduce resilience from a holistic societal principle to the simple but specific question: resilience of what to what and for whom? This question helps in differentiating between narratives and definitions (Martin-Breen & Anderies 2011, 10). A more situational and technical approach can be used to address "problems relating to particular aspects of a system that might arise from a particular set of sources or shocks" (Folke et al. 2010), with the difference of rejecting the systemic language (Levin et al. 2012, 1–2) and speaking directly about the entities that are their objects.

As noted in chapter 3.1, masking any concept as merely technical is deceiving. It would also be wrong to suggest that resilience is absent from social relations. To speak of resilience as a social capacity of the individual or of the community is by no means unrealistic; community resilience is something that can be observed and analysed (e.g. Cretney & Bond 2014; Kaufmann 2013; MacKinnon & Derickson 2012). But it cannot be subject to top-down expert monitoring conducted by national or international agencies who, while undoubtedly relying on community capacity to self-organise (WB 2013b, v), appeal to local communities "to organise themselves according to a given crisis-management strategy protocol" (Kaufmann 2013, 61). Even the social-ecological version of resilience is conservative and not geared to explain contested, wicked situations of social life (MacKinnon & Derickson 2012, 254; Powell, Kløcker Larsen & van Bommel 2014, 137).

Pursued is not an analytical re-distinction of human and nature. Social resilience exhibited by individuals and communities must take into consideration the environment in which subjects are always and already embedded, for although human life should not be defined or understood by its biological features, it is also never merely social or political (Mills 2013, 83, 87). Social resilience must be analytically separated from resilience as a conceptual policy tool. In Mareile Kaufmann's (2013, 62) terms, social resilience describes the local capacity to govern without guidance through emergent behaviour and creative self-organisation: "beyond regulated, controlled kinds of self-organisation, we find self-organising practices of resilience, which are neither trained nor engineered, but self-generated or created spontaneously in times of crisis". Kaufmann (2013) is correct to note that critique has focused too much on

governmental, regulated and standard expressions of resilience and overlooked forms of spontaneous self-organisation. The recognition of resilience as local governance is crucial because the wicked problems and contested situations that social resilience deals with will ultimately shatter "all scientific and policy-oriented resilience narratives" and be "reconstituted through local practice and agency" (Powell, Kløcker Larsen & van Bommel 2014, 137). In this regard, resistance is needed towards discursive practices that directly decline autonomy of local decision-making (WB 2013a, 10; WEF 2013b, 18).

This understanding of social resilience as spontaneous self-governance also rejects the politically dangerous coupling of complexity theories with liberal environmentalism and the consequent adaptive governance configurations (see Ch. 3.3) that now underpin some policies addressing environmental concerns and climate change (EC 2013a; WEF 2013a; USAID 2012). As previously discussed, in this setting the politically hollow and ambiguous complexity discourse only serves to subordinate human needs to environmental ones or to 'economic necessity' (EC 2013a, 2), and to biopoliticise the human subject. There is no need to reject complexity as incommensurate with reality, but opting for approaches more suitable to understanding social resilience, such as intersubjectivity that recognises the coexistence and connectivity of plural non-coherent discourses, practices and performances (Powell, Kløcker Larsen & van Bommel 2014, 140–141, 145–146) but, importantly, does not derive from this an ethics of global relational embeddedness that entails an ubiquitous sense of indirect and emergent responsibility (cf. Chandler 2013a). Conflict of interests has to be allowed, and identifying resilience with social cohesion opposed; currently UNDP (2014, 11) correlates lack of resilience with lack of social cohesion that is further linked with violence and conflict.

Powell, Kløcker Larsen & van Bommel (2014, 137) have suggested that rather than advocating for specific reified scientific narratives, research on resilience should foster the coexistence of multiple narratives and work to empower legitimate local perspectives and practices. They further note that

[i]n this regard, there is a need for the resilience research community to engage more actively with, learn from and support state-holders in their ongoing efforts to enact, reconstruct and hybridise multiple resilience narratives in everyday life. [...] At the end of the day, the resilience narratives of the research community can only be toolkits to support a greater cognisance of the

diversity of the peoples, perspectives and performances that jointly narrate the 'real' stories of our wicked and contested realities. (Ibid., 150.)

Concerning resilience, the role of EC, FEMA, UNDP, USAID, WB, and WEF as policy-making agencies is then to help peoples and societies in their free attempts to make their livelihoods, living environments, public spaces and infrastructure more resilient if they so wish. Resilience should be a goal by political decision, not because of accounts that claim it to be an ontological necessity of human societies or because our embeddedness in natural systems requires us to pursue it as a capacity of the (biopoliticised) human. The outcome of the biopolitical analysis of the policies is that we should not abandon the concept of resilience but also be careful of not being lulled into the idea that the currently dominant discourse on resilience is either a paradigm shift guiding us into a new world order (Chandler 2014b) or, as Evans and Reid (2014) correctly warn, something to facilitate great political transformation.

Regaining political subjectivity into resilience essentially means rejecting the invasive language of adaptation and entrepreneurialism, as they practically mean a necessity to conform to the needs of and changes in the prevailing political-economic and socio-political structure (see Alt 2013, 100–101). There is clearly a need to analytically differentiate between different types and uses of resilience. For policy purposes, resilience can be a 'technical' concept – recognising that practices which look technical from the outset often become instruments for shaping conditions for political agency. Here it is suitable to talk about systems, as resilience is a capacity of institutions or infrastructure that can be worked upon with technical improvements. The human element is there, of course, because humans design and work in these institutions. The other type is social resilience, which is a social and political capacity of human communities and individuals. Here resilience is about political agency; depending on the context, it is a capability either to adapt or to refuse adaptation if it is a demand for political correction masked as adaptation (ibid.).

The way the discourse is currently pursued in the policies is problematic for political agency in general and for the objects of those policies in particular. The goal for further research into conceptualisations of resilience should be to find ways to balance between the interests of governance and the autonomy of the subject. Some recent academic accounts have addressed how resilience is currently also being used as a concept for resistance and radical change (Cretney & Bond 2014; Nelson 2014). As Reid (2012b, 162) notes on reinventing the

(neoliberal) subject, it is "a question [...] to rethink the relations of the subject to its life differently [...] so that it might recover a more fundamentally human capacity for autonomy". Aiming for a reformulation of policy discourse is crucial because all the time more and more organisations are entering the practice of resilience policies and thus resilience will likely play an important role in the near future of international cooperation.

7 Conclusions

This thesis started from the observation that resilience, a concept that originally meant the ability of ecosystems to absorb disturbance and change, has not only been welcomed in a lot of other disciplines outside ecology, but lately become amazingly popular as a policy concept in various fields, especially among international organisations. As the scope of 'resilience science' has grown, so have the concerns that the concept is not only ambiguous but also politically questionable, even dangerous. Walker and Cooper (2011, 144) write:

[...] resilience has become a byword among agencies charged with coordinating security responses to climate change, critical infrastructure protection, natural disasters, pandemics and terrorism [...] reorienting these once distinct policy arenas toward a horizon of critical future events that (we are told) we cannot predict or prevent, but merely adapt to by 'building resilience'. Abstract and malleable enough to encompass the worlds of high finance, defence and urban infrastructure within a single analytic, the concept of resilience is becoming a pervasive idiom of global governance.

As the quote indicates, resilience has gained currency in many fields of policy; yet, it should not be seen as any other concept, but as one that has surprisingly big discursive power. Recently many authors have discussed the effects of resilience for global governance and the following political implications, yet few have analysed what this means for the policies of agencies that have promoted resilience as a tool with which to approach the problems on their agendas. The thesis looked at six of those agencies and asked: *To what extent 1) does resilience in the policies of EC, FEMA, UNDP, USAID, WB, and WEF enable these organisations to solve the problems on their agendas and 2) is there (consequently) a need to reformulate discourse on resilience?*

Using biopolitical theory and a Foucauldian discourse analysis, the thesis discussed different aspects of the policy discourse, explicating how truth, power and subjectivity are constructed in resilience. The analysis demonstrated that in the policies of EC, FEMA, UNDP, USAID, WB, and WEF, resilience is not a practical tool or a solution, but discursively constitutive of the problems it attempts to solve. The current policy discourse affects the strategies of the agencies so that it confirms pre-existing practices, and affects problem-solving so that it further problematizes issues and creates more problems. This is largely due to the prevailing

neoliberal biopolitics and governmentality into which the concept is trapped, practically ruling out its positive implications.

Chapter 3 looked at adaptive resilience, which is the part of the discourse drawing most strongly on resilience's origins in ecological and environmental sciences. Here, resilience primarily concerns adaptation to natural disasters and climate change, which is visible for example in the mainstreaming of the resilience approach into DRR and CCA. The analysis reflected how the environmental concerns have been governmentalized and the human subject biopoliticised as a consequence. Environmental scientists' emphasis on the interdependence of ecosystems and human systems and the consequent use of the concept of 'social-ecological systems' have been translated into a societal practice whereby human communities are expected to exhibit similar capacities as natural systems. Like an ecosystem is deemed vulnerable to changes in its environment, in the resilience policies, concurrent disaster and endangerment has become the defining feature of the world, vulnerability the inherent ontology of the subject, and adaptive capacity the prescribed cure. Thus, rather than reducing disaster, the resilience policies amplify it. They do not consider the possibility that there could be less disaster and crisis, or that resilience as adaptation could be an affirmative approach.

Chapter 4 critically discussed the emergence of a specifically economic type of resilience. Again, it is a capacity, but this time more explicitly attached to economic units such as the household or the national economy. Economic turbulence and crises are part of the threat landscape that also shapes policy agendas. But as resilience is attached to economics, the links and compatibility between resilience and neoliberal governmentality become clear. Following Foucault, it is recalled how the population is made governable by introducing practices and institutions that make people govern themselves. If disaster resilience is more about passive acceptance, economic resilience is an active, though not a self-generated, approach. The subject that emerges from the resilience policies is the economic man of the 21st century, the entrepreneurial subject. This subject has to actively adapt to the changing needs of the political economic environment, which means an economically responsible behaviour. Resilience, then, suddenly means for example to have access to credit and insurance, or to have entrepreneurialism taught at school.

Chapter 5 looked at resilience as part of the more explicit function of these organisations to conduct international cooperation and global governance. In this dimension, the organisations

use resilience in the wider context of the complexity discourse, complexity – along with uncertainty and unpredictability – being the most fundamental feature of the 'operating environment' of the actors. As complexity necessarily means that the world is more difficult to govern, resilience is a very fitting governance concept. The chapter joined the ongoing academic debate on whether resilience is the climax of neoliberalism or an emerging paradigm change into a post-liberal world order. The analysis demonstrates that the way the discourse now works in the policies is definitely pro-neoliberal and consolidating more than challenging existing power structures. Hence, resilience does work as a policy tool in the goal of strengthening coordination and power of governmental actors. The flipside is the negative effect on the subject's political agency, which is insidiously reduced and constrained as the depoliticising language of complexity gains ground and resilience becomes the substitute for security. In the current discourse, resilience is confident of adversity, not encouraging the subject to be confident despite adversity.

Each of the six agencies and each document had their own emphases within resilience, but they all contributed to the three dimensions of discourse: adaptive, entrepreneurial and governing resilience. Biopolitics as theory and Foucauldian discourse analysis as method worked very well to detect the political problematic of resilience within the policies. Biopolitics and governmentality helped to conceptualise how the policy discourse works in building regimes of truth, power relations, and subjectivities into resilience. Importantly, biopolitics also helped to analyse how political agency and politics are conceived and conditioned in resilience, thus providing tools to conceptualise "the conditions of possibility for political subjectivity" (Alt 2013, 88). The thesis recognised a need to reformulate resilience and thereby the policy discourse so that its biopoliticising, depoliticising and responsibilising effects are rejected, as well as the holistic language of complex systems that serves to detach the policies from political debate. In this manner, beneficial uses of resilience are not nullified from the start.

Chapter 6 explored the need for discursive change and how it could be launched. Despite its critical insights, biopolitics as a theory is not very useful in this regard. First, the chapter discussed very recent accounts of Evans and Reid (2014) and Chandler (2014b) that aim to conceptualise new subjectivities outside of neoliberal biopolitics. Whereas Evans and Reid depict the poetic subject that has an affirmative relation to its environment and uses a completely different conceptual register to express its political agency than what is now

pursued in resilience, Chandler affirms resilience as a new global ethic that can guide both governance and the individual into a post-liberal existence. Both accounts give crucial insights into the challenges that are present in (any) current usage of resilience, but neither is suitable to inform a reformulation of the concept for practical relevance. Thus, some other affirmative accounts were discussed and particularly those that call for acknowledgement of multiple effective resilience approaches.

It can be concluded that we have to reduce the policy areas in which resilience is used as a conceptual tool to those where it can have practical relevance without the problems detected. The chapter proposes a differentiation between resilience as a (technical) policy concept and social resilience, where the former refers for example to putting in place structures that ease predicting natural disasters, so that the agencies instrumentally help communities to achieve a situation where they can bring forward their political aims. The latter, social resilience, cannot be reduced to policy language or political programming, but describes – following former accounts (Adger 2000, 361) – an individual or community ability to withstand disturbance, but without losing political agency, thus enabling the use of resilience as resistance.

A decision to promote or resist resilience policies is a political one. Indeed, however dominant some discourses of resilience become, they function through us and our subjectivities, which means they can be resisted or changed if their truth, power, and subjectivity are questioned (Oksala 2013, 71). Also, how can we tell that some countries should not strive for national resilience? Resilience can be different than how it is now praised in policy literature. So if anything is dangerous in resilience, it is the potential to ignore political decisions on whether or not to be resilient or self-reliant (cf. FEMA 2012, 3). It remains to be seen if future research or local resistant practices are able to release resilience from its current discursive shackles, to detach it from the specifically neoliberal process of subjectivation, and to breathe new life into it so that it may serve as a positive, active, and self-generated concept. The developments of resilience as a global policy phenomenon are hard to predict, but the concept merits continued attention for it seems to prevail in the current global discussion on the future international development agenda. Therefore, we should remain cautious of the tendency to portray resilience as a societal principle. Although not as broadly applicable as often claimed, resilience has, overall, proven to be a very resilient concept.

Bibliography

Adger, W. Neil (2006) Vulnerability. Global Environmental Change 16:3, 268–281.

Adger, W. Neil (2000) Social and ecological resilience: are they related? *Progress in Human Geography* 24:3, 347–364.

Adger, W. Neil; Benjaminsen, Tor A.; Brown, Katrina & Svarstad, Hanne (2001) Advancing a Political Ecology of Global Environmental Discourses. *Development & Change* 32:4, 681–715.

Agamben, Giorgio (1998) *Homo Sacer: Sovereign Power and Bare Life.* Stanford: Stanford University Press.

Alt, Suvi (2013) Beyond Bricks and Mortar: Peace-Building in a Permanent State of Adaptation. In Mezzadra, Sandro; Reid, Julian & Samaddar, Ranabir (eds) *The Biopolitics of Development: Reading Michel Foucault in the Postcolonial Present*. New Delhi: Springer, 87–105.

Aradau, Claudia & van Munster, Rens (2008) Insuring Terrorism, Assuring Subjects, Ensuring Normality: The Politics of Risk after 9/11. *Alternatives: Global, Local, Political* 33:2, 191–210.

Aranda, Kay; Zeeman, Laetitia; Scholes, Julie & Morales, Arantxa Santa-María (2012) The resilient subject: Exploring subjectivity, identity and the body in narratives of resilience. *Health: An Interdisciplinary Journal for the Social Study of Health, Illness and Medicine* 16:5, 548–563.

Barbier, Edward B. (2010) Poverty, development, and environment. *Environment and Development Economics* 15:6, 635–660.

Barnett, Michael & Weiss, Thomas G. (2008) Humanitarianism: A Brief History of the Present. In Barnett, Michael & Weiss, Thomas G. (eds) *Humanitarianism in question:* politics, power, ethics. Ithaca: Cornell University Press, 1–48.

Beck, Ulrich (2009) World at Risk. Cambridge: Polity.

Berkes, Fikret & Folke, Carl (2000) Linking social and ecological systems for resilience and sustainability. In Berkes, Fikret; Folke, Carl & Colding, Johan (eds) *Linking Social and Ecological Systems: Management Practices and Social Mechanisms for Building Resilience*. Cambridge: Cambridge University Press, 1–25.

Berkes, Fikret (2007) Understanding uncertainty and reducing vulnerability: lessons from resilience thinking. *Natural Hazards* 41:2, 283–295.

Biermann, Frank (2014) The Anthropocene: A governance perspective. *The Anthropocene Review* 1:1, 57–61.

Biermann, Frank; Betsill, Michele M.; Gupta, Joyeeta; Kanie, Norichika; Lebel, Louis; Liverman, Diana; Schroeder, Heike; Siebenhüner, Bernd & Zondervan, Ruben (2010) Earth system governance: a research framework. *International Environmental Agreements: Politics, Law and Economics* 10:4, 277–298.

Bonanno, George A.; Galea, Sandro; Bucciarelli, Angela & Vlahov, David (2006) Psychological Resilience After Disaster: New York City in the Aftermath of the September 11th Terrorist Attack. *Psychological Science* 17:3, 181–186.

Bottrell, Dorothy (2009) Understanding 'Marginal' Perspectives: Towards a Social Theory of Resilience. *Qualitative Social Work* 8:3, 321–339.

Bourbeau, Philippe (2013) Resiliencism: premises and promises in securitisation research. *Resilience* 1:1, 3–17.

Brand, Fridolin (2009) Critical natural capital revisited: Ecological resilience and sustainable development. *Ecological Economics* 68:3, 605–612.

Brand, Fridolin Simon & Jax, Kurt (2007) Focusing the Meaning(s) of Resilience: Resilience as a Descriptive Concept and a Boundary Object. *Ecology and Society*, The International Online-Only Journal 12:1. http://www.ecologyandsociety.org/vol12/iss1/art23/ (last checked 3.2.2015).

Burr, Vivien (2003) Social Constructionism. London: Routledge.

Butler, Judith (2006) Precarious Life: The Powers of Mourning and Violence. London: Verso.

Butler, Judith (2009) Frames of War: When is Life Grievable? London: Verso.

Byrne, David (1998) Complexity Theory and the Social Sciences: An Introduction. London: Routledge.

Byrne, David & Callaghan, Gill (2014) Complexity Theory and the Social Sciences: The state of the art. London: Routledge.

Castells, Manuel (2005) The Network Society: from Knowledge to Policy. In Castells, Manuel & Cardoso, Gustavo (eds) *The Network Society: From Knowledge to Policy*. Washington (D.C.): Johns Hopkins Center for Transatlantic Relations, 3–21.

Chandler, David (2014a) Beyond neoliberalism: resilience, the new art of governing complexity. *Resilience* 2:1, 47–63.

Chandler, David (2014b) Resilience: The Governance of Complexity. London: Routledge.

Chandler, David (2013a) Resilience ethics: responsibility and the globally embedded subject. *Ethics & Global Politics* 6:3,175–194.

Chandler, David (2013b) Where Is the Human in Human-Centred Approaches to Development? A Critique of Amartya Sen's 'Development as Freedom'. In Mezzadra, Sandro; Reid, Julian & Samaddar, Ranabir (eds) *The Biopolitics of Development: Reading Michel Foucault in the Postcolonial Present*. New Delhi: Springer, 67–86.

Chandler, David (2012) Resilience and human security: The post-interventionist paradigm. *Security Dialogue* 43:3, 213–229.

Chapin, F. Stuart; Carpenter, Stephen R.; Kofinas, Gary P.; Folke, Carl; Abel, Nick; Clark, William C.; Olsson, Per; Stafford Smith, Mark; Walker, Brian; Young, Oran R.; Berkes, Fikret; Biggs, Reinette; Grove, J. Morgan; Naylor, Rosamond L.; Pinkerton, Evelyn; Steffen, Will & Swanson, Frederick J. (2010) Ecosystem stewardship: sustainability strategies for a rapidly changing planet. *Trends in Ecology & Evolution* 25:4, 241–249.

Clark, Helen (16.4.2012) *Putting Resilience at the Heart of the Development Agenda*. Speech as Humanitas 2012 Visiting Professor in Statecraft and Diplomacy. Cambridge, United Kingdom.

http://www.undp.org/content/undp/en/home/presscenter/speeches/2012/04/16/helen-clark-putting-resilience-at-the-heart-of-the-development-agenda.html (last checked 3.2.2015).

Cretney, Raven & Bond, Sophie (2014) 'Bouncing back' to capitalism? Grass-roots autonomous activism in shaping discourses of resilience and transformation following disaster. *Resilience* 2:1, 18–31.

Dean, Mitchell (2010) *Governmentality: Power and Rule in Modern Society*. Thousand Oaks: SAGE Publications.

Dijk, Jan A.G.M. van (2006) The Network Society: Social Aspects of New Media. London: SAGE Publications.

Dillon, Michael (2013) Politics of Truth and Pious Economies. In Mezzadra, Sandro; Reid, Julian & Samaddar, Ranabir (eds) *The Biopolitics of Development: Reading Michael Foucault in the Postcolonial Present*. New Delhi: Springer, 165–189.

Donzelot, Jacques & Gordon, Colin (2008) Governing Liberal Societies – the Foucault Effect in the English-speaking World. *Foucault Studies* No. 5, 48–62.

Duffield, Mark (2011) Total War as Environmental Terror: Linking Liberalism, Resilience, and the Bunker. *South Atlantic Quarterly* 110:3, 757–769.

Duffield, Mark (2010) The Liberal Way of Development and the Development-Security Impasse: Exploring the Global Life-Chance Divide. *Security Dialogue* 41:1, 53–76.

Duffield, Mark (2007) Development, Security and Unending War: Governing the World of Peoples. Cambridge: Polity.

Escobar, Arturo (1996) Construction nature: Elements for a post-structuralist political ecology. *Futures* 28:4, 325–343.

Esposito, Roberto (2008) Bi'os: Biopolitics and Philosophy. Minneapolis: University of Minnesota Press.

Evans, Brad (2013) Liberal Terror. Cambridge: Polity.

Evans, Brad & Reid, Julian (2014) Resilient Life: The Art of Living Dangerously. Cambridge: Polity.

Evans, Brad & Reid, Julian (2013) Dangerously exposed: the life and death of the resilient subject. *Resilience* 1:2, 83–98.

Ewald, Francois (1991) Insurance and risk. In Burchell, Graham; Gordon, Colin & Miller, Peter (eds) *The Foucault Effect: Studies in Governmentality*. Chicago: University of Chicago Press, 197–210.

Folke, Carl (2006) Resilience: The emergence of a perspective for social–ecological systems analyses. *Global Environmental Change* 16:3, 253–267.

Folke, Carl; Jansson, Åsa; Rockström, Johan; Olsson, Per; Carpenter, Stephen R.; Chapin, F. Stuart; Crépin, Anne-Sophie; Daily, Gretchen; Danell, Kjell; Ebbesson, Jonas; Elmqvist, Thomas; Galaz, Victor; Moberg, Fredrik; Nilsson, Måns; Österblom, Henrik; Ostrom, Elinor; Persson, Åsa; Peterson, Garry; Polasky, Stephen; Steffen, Will; Walker, Brian & Westley, Frances (2011) Reconnecting to the Biosphere. *Ambio* 40:7, 719–738.

Folke, Carl; Carpenter, Stephen R.; Walker, Brian; Scheffer, Marten; Chapin, Terry & Rockström, Johan (2010). Resilience Thinking: Integrating Resilience, Adaptability and Transformability. *Ecology and Society*, The International Online-Only Journal 15:4. http://www.ecologyandsociety.org/vol15/iss4/art20/ (last checked 3.2.2015).

Folke, Carl; Carpenter, Steve; Elmqvist, Thomas; Gunderson, Lance; Holling, C.S. & Walker, Brian (2002) Resilience and Sustainable Development: Building Adaptive Capacity in a World of Transformations. *Ambio* 31:5, 437–440.

Foucault, Michel (2011) The Courage of the Truth (the Government of Self and Others II): Lectures at the Collège De France, 1983-1984. Basingstoke and New York: Palgrave Macmillan.

Foucault, Michel (2008) *The Birth of Biopolitics: Lectures at the Collège De France, 1978-1979.* Basingstoke and New York: Palgrave Macmillan.

Foucault, Michel (2007) Security, Territory, Population: Lectures at the Collège De France, 1977-1978. Basingstoke and New York: Palgrave Macmillan.

Foucault, Michel (2000) The Subject and Power. In Faubion, James D. (ed.) *Power. Essential works of Foucault 1954–1984*. New York: New Press, 223–238.

Foucault, Michel (1995) Discipline and Punish: The Birth of the Prison. New York: Vintage Books.

Foucault, Michel (1991) Governmentality. In Burchell, Graham; Gordon, Colin & Miller, Peter (eds) *The Foucault Effect: Studies in Governmentality*. Chicago: University of Chicago Press, 73–86.

Foucault, Michel (1990) *The History of Sexuality. Volume 1, an Introduction.* New York: Vintage Books.

Foucault, Michel (1988) Technologies of the Self. In Martin, Luther H.; Gutman, Huck & Hutton, Patrick H. (eds) *Technologies of the Self: A Seminar with Michel Foucault*. London: Tavistock Publications, 16–49.

Foucault, Michel (1981) The Order of Discourse. In Young, Robert (ed.) *Untying the Text: A Post-Structuralist Reader*. London: Routledge & Kegan Paul, 51–78.

Foucault, Michel (1980) Truth and Power. In Gordon, Colin (ed) *Power/Knowledge: Selected Interviews and Other Writings* 1972-1977. New York: Pantheon Books, 109–133.

Foucault, Michel (1972) *The Archaeology of Knowledge & The Discourse on Language*. New York: Pantheon Books.

Gordon, Colin (2000) Introduction. In Faubion, James D. (ed.) *Power. Essential works of Foucault 1954–1984*. New York: New Press, xi–xli.

Gordon, Colin (1991) Governmental rationality: an introduction. In Burchell, Graham; Gordon, Colin & Miller, Peter (eds) *The Foucault Effect: Studies in Governmentality*. Chicago: University of Chicago Press, 1–51.

Hannigan, John (2012) Disasters Without Borders: The International Politics of Natural Disasters. Cambridge:Polity.

Hardt, Michael & Negri, Antonio (2012) *Declaration*. Allen: Argo Navis Publishing. Available at https://antonionegriinenglish.files.wordpress.com/2012/05/93152857-hardt-negri-declaration-2012.pdf (last checked 3.2.2015).

Hardt, Michael & Negri, Antonio (2009) *Commonwealth*. Cambridge, MA: Harvard University Press.

Harrison, Neil E. (ed.) (2006) *Complexity in World Politics: Concepts and Methods of a New Paradigm.* SUNY Series in Global Politics. Ithaca: State University of New York Press.

Harvey, David (2007) Neoliberalism as Creative Destruction. *The Annals of the American Academy of Political and Social Science* 610:1, 21–44.

Hoffmann, Matthew J. (2003) Constructing a complex world: The frontiers of international relations theory and foreign policy-making. *Asian Journal of Political Science* 11:2, 37–57.

Holling, C.S. (1973) Resilience and Stability of Ecological Systems. *Annual Review of Ecology & Systematics* 4, 1–23.

Joseph, Jonathan (2013) Resilience as embedded neoliberalism: a governmentality approach. *Resilience* 1:1, 38–52.

Kaufmann, Mareile (2013) Emergent self-organisation in emergencies: resilience rationales in interconnected societies. *Resilience* 1:1, 53–68.

Lazzarato, Maurizio (2012) *The Making of the Indebted Man: An Essay on the Neoliberal Condition.* Semiotext€ intervention series, No. 13. Los Angeles: Semiotext(e).

Lemke, Thomas (2013) Foucault, Politics and Failure. In Nilsson, Jakob & Wallenstein, Sven-Olov (eds) *Foucault, Biopolitics, and Governmentality*. Södertörn Philosophical Studies No. 14. Huddinge: Södertörn University, 35–52.

Lemke, Thomas (2011) *Biopolitics: An Advanced Introduction*. New York: New York University Press.

Lentzos, Filippa & Rose, Nikolas (2009) Governing insecurity: contingency planning, protection, resilience. *Economy and Society*, 38:2, 230–254.

Levine, Simon; Pain, Adam; Bailey, Sarah & Fan, Lilianne (2012) *The relevance of 'resilience'*? Humanitarian Policy Group Policy Brief No. 49. Overseas Development Institute. http://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/7818.pdf (last checked 3.2.2015).

Levin, Simon A.; Barrett, Scott; Aniyar, Sara; Baumol, William; Bliss, Christopher; Bolin, Bert; Dasgupta, Partha; Ehrlich, Paul; Folke, Carl; Gren, Ing-Marie; Holling, C.S; Jansson, Annmari; Jansson, Bengt-Owe; Mäler, Karl-Göran; Martin, Dan; Perrings, Charles & Sheshinski, Eytan (1998) Resilience in natural and socioeconomic systems. *Environment and Development Economics* 3:2, 221–262.

MacKinnon, Danny & Derickson, Kate Driscoll (2012) From resilience to resourcefulness: A critique of resilience policy and activism. *Progress in Human Geography* 37:2, 253–270.

Martin-Breen, Patrick & Anderies, J. Marty (2011) 'Resilience: A Literature Review'. Report for the Rockefeller Foundation. http://www.rockefellerfoundation.org/blog/resilience-literature-review (last checked 3.2.2015).

Massumi, Brian (2009) National Enterprise Emergency: Steps Toward an Ecology of Powers. *Theory, Culture & Society* 26:6, 153–185.

McCarthy, James & Prudham, Scott (2004) Neoliberal nature and the nature of neoliberalism. *Geoforum* 35:3, 275–283.

McVeigh, Ryan (2013) The question of belonging: Towards an affirmative biopolitics. *Thesis Eleven* 119:1, 78–90.

Mezzadra, Sandro; Reid, Julian & Samaddar, Ranabir (2013) Introduction: Reading Foucault in the Postcolonial Present. In Mezzadra, Sandro; Reid, Julian & Samaddar, Ranabir (eds) *The Biopolitics of Development: Reading Michel Foucault in the Postcolonial Present*. New Delhi: Springer, 1–14.

Miller, Peter & Rose, Nikolas (1990) Governing economic life. *Economy and Society* 19:1, 1–31.

Mills, Catherine (2013) Biopolitical Life. In Nilsson, Jakob & Wallenstein, Sven-Olov (eds) *Foucault, Biopolitics, and Governmentality*. Södertörn Philosophical Studies No. 14. Huddinge: Södertörn University, 73–90.

Nelson, Sara Holiday (2014) Resilience and the neoliberal counter-revolution: from ecologies of control to production of the common. *Resilience* 2:1, 1–17.

Neocleous, Mark (2012) "Don't Be Scared, Be Prepared": Trauma-Anxiety-Resilience. *Alternatives: Global, Local, Political* 37:3, 188–198.

Nikula, Ilari (2012) From human well-being to the well-being of the biosphere: political implications of biopolitical environmentalism. MA Thesis. Rovaniemi: University of Lapland.

Oksala, Johanna (2013) Neoliberalism and Biopolitical Governmentality. In Nilsson, Jakob & Wallenstein, Sven-Olov (eds) *Foucault, Biopolitics, and Governmentality*. Södertörn Philosophical Studies No. 14. Huddinge: Södertörn University, 53–71.

O'Malley, Pat (2013) Uncertain Governance and Resilient Subjects in the Risk Society. *Oñati Socio-legal Series* 3:2, 180–195.

O'Malley, Pat (2010) Resilient subjects: Uncertainty, warfare and liberalism. *Economy and Society* 39:4, 488–509.

Owen, David (1995) Genealogy as exemplary critique: reflections on Foucault and the imagination of the political. *Economy and Society* 24:4, 489–506.

Perrings, Charles (2006) Resilience and sustainable development. *Environment and Development Economics* 11:4, 417–427.

Powell, Neil Scott; Larsen, Rasmus Kløcker & van Bommel, Severine (2014) Meeting the 'Anthropocene' in the context of intractability and complexity: infusing resilience narratives with intersubjectivity. *Resilience* 2:3, 135–150.

Read, Jason (2009) A Genealogy of Homo-Economicus: Neoliberalism and the Production of Subjectivity. *Foucault Studies* No. 6, 25–36.

Reich, John W. (2006) Three psychological principles of resilience in natural disasters. *Disaster Prevention and Management* 15:5, 793–798.

Reid, Julian (2013a) Interrogating the Neoliberal Biopolitics of the Sustainable Development-Resilience Nexus. *International Political Sociology* 7:4, 353–367.

Reid, Julian (2013b) Towards an Affirmative Biopolitics. In Nilsson, Jakob & Wallenstein, Sven-Olov (eds) *Foucault, Biopolitics, and Governmentality*. Södertörn Philosophical Studies No. 14. Huddinge: Södertörn University, 91–104.

Reid, Julian (2012a) The Disastrous and Politically Debased Subject of Resilience. *Development Dialogue* No. 58, 67–79.

Reid, Julian (2012b) The Neoliberal Subject: Resilience and the Art of Living Dangerously. *Révista Pleyade* No. 10, 143–165.

Reid, Julian (2009) Politicizing connectivity: beyond the biopolitics of information technology in international relations. *Cambridge Review of International Affairs* 22:4, 607–623.

Resilience Alliance (RA) (2004) *About*. http://www.resalliance.org/index.php/about_ra (last checked 3.2.2015).

Robertson, Morgan M. (2004) The neoliberalization of ecosystem services: wetland mitigation banking and problems in environmental governance. *Geoforum* 35:3, 361–373.

Rose, Adam (2004) Defining and measuring economic resilience to disasters. *Disaster Prevention and Management* 13:4, 307–314.

Smith, Neil (11.6.2006) *There's No Such Thing as a Natural Disaster*. http://understandingkatrina.ssrc.org/Smith/ (last checked 3.2.2015).

Stockholm Resilience Centre (SRC) (2012) *About Stockholm Resilience Centre*. http://www.stockholmresilience.org/21/test-av-ny-banner/startsida/about-us.html (last checked 3.2.2015).

United Nations Chief Executives Board (UNCEB) (2013) *United Nations Plan of Action on Disaster Risk Reduction for Resilience*.

http://www.undg.org/docs/13347/UN%20Action%20Plan%20on%20Disaster%20Risk%20Reduction%20for%20Resilience.pdf (last checked 3.2.2015).

United Nations Office for Disaster Risk Reduction (UNISDR) (2013) *Disaster Risk Reduction in the United Nations: Roles, mandates and results of key UN entities*. http://www.unisdr.org/files/32918_drrintheun2013.pdf (last checked 3.2.2015).

United Nations Office for Disaster Risk Reduction (UNISDR) (2007) *Terminology*. http://www.unisdr.org/we/inform/terminology#letter-r (last checked 3.2.2015).

Urry, John (2005) The Complexity Turn. Theory, Culture & Society 22:5, 1–14.

Walklate, Sandra; McGarry, Ross & Mythen, Gabe (2013) Searching for Resilience: A Conceptual Excavation. *Armed Forces & Society* 40:3, 408–427.

Walker, Brian; Holling, C.S., Carpenter, Stephen R. & Kinzig, Ann (2004) Resilience, Adaptability and Transformability in Social-ecological Systems. *Ecology and Society*, The International Online-Only Journal 9:2. http://www.ecologyandsociety.org/vol9/iss2/art5/ (last checked 3.2.2015).

Walker, Brian & Salt, David (2006) Resilience Thinking: Sustaining Ecosystems and People in a Changing World. Washington (D.C.): Island Press.

Walker, Jeremy & Cooper, Melinda (2011) Genealogies of resilience: From systems ecology to the political economy of crisis adaptation. *Security Dialogue* 42:2, 143–160.

Walsh-Dilley, Marygold; Wolford, Wendy & McCarthy, James (2013) *Rights for Resilience:* Bringing Power, Rights and Agency into the Resilience Framework. Report for the Strategic Initiative of Oxfam America.

 $http://www.acsf.cornell.edu/Assets/ACSF/docs/collaborations/oxfam/R4R\%20Conceptual\%2\ OFramework.pdf\ (last checked 3.2.2015).$

Welsh, Marc (2014) Resilience and responsibility: governing uncertainty in a complex world. *Geographical Journal* 180:1, 15–26.

World Commission on Environment and Development (WCED) (1987) *Our Common Future*. http://www.un-documents.net/our-common-future.pdf (last checked 3.2.2015).

Young, Oran R. (1994) *International Governance: Protecting the Environment in a Stateless Society*. Ithaca: Cornell University Press.

Zebrowski, Chris (2013) The nature of resilience. Resilience 1:3, 159–173.

Zebrowski, Chris (2009) Governing the network society: a biopolitical critique of resilience. *Political Perspectives* 3:1, 1–38.

Appendices

Appendix 1: List of the documents used for the discourse analysis

- European Commission (EC 2013a) Communication from the commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of regions: An EU strategy on adaptation to climate change. http://ec.europa.eu/clima/policies/adaptation/what/docs/com_2013_216_en.pdf (last checked 3.2.2015).
- 2. European Commission (EC 2013b) *COMMISSION STAFF WORKING DOCUMENT: Action Plan for Resilience in Crisis Prone Countries 2013-2020 June 2013*. http://ec.europa.eu/echo/files/policies/resilience/com_2013_227_ap_crisis_prone_countries_en.pd f (last checked 3.2.2015).
- 3. Federal Emergency Management Agency (FEMA 2012) *Crisis response and disaster resilience* 2030: Forging Strategic Action in an Age of Uncertainty. http://www.fema.gov/media-library-data/20130726-1816-25045-5167/sfi_report_13.jan.2012_final.docx.pdf (last checked 3.2.2015).
- 4. United Nations Development Programme (UNDP 2014) *Human Development Report 2014*. http://hdr.undp.org/sites/default/files/hdr14-report-en-1.pdf (last checked 3.2.2015).
- United Nations Development Programme (UNDP 2011) Towards Human Resilience: Sustaining MDG Progress in an Age of Economic uncertainty. http://www.undp.org/content/dam/undp/library/Poverty%20Reduction/Towards_SustainingMDG_ Web1005.pdf (last checked 3.2.2015).
- 6. United States Agency for International Development (USAID 2012) *Building Resilience to Recurrent Crisis: USAID policy and program guidance*. http://www.usaid.gov/sites/default/files/documents/1870/USAIDResiliencePolicyGuidanceDocument.pdf (last checked 3.2.2015).
- 7. World Bank (WB 2013a) *World Development Report 2014: Risk and opportunity*. https://openknowledge.worldbank.org/handle/10986/16092 (last checked 3.2.2015).
- World Bank (WB 2013b) Building Resilience: Integrating Climate and Disaster Risk into Development.
 http://www.worldbank.org/content/dam/Worldbank/document/SDN/Full_Report_Building_Resilie nce_Integrating_Climate_Disaster_Risk_Development.pdf (last checked 3.2.2015).
- 9. World Economic Forum (WEF 2013a) *Global Risks 2013*. http://www3.weforum.org/docs/WEF_GlobalRisks_Report_2013.pdf (last checked 3.2.2015).
- 10. World Economic Forum (WEF 2013b) *Report from the annual meeting in Davos: Resilient Dynamism*. http://www3.weforum.org/docs/AM13/WEF_AM13_Report.pdf (last checked 3.2.2015).

Appendix 2: List of the analysis questions

1 Knowledge of life and living beings (regimes of truth behind a biopolitical practice)

- 1. What knowledge of life and resilience is held socially relevant and what viewpoints are devalued or marginalised?
- 2. Which experts and disciplines have authority to tell truth about life, health, population?
- 3. In what vocabulary is resilience described, measured, evaluated and criticized?
- 4. What cognitive and intellectual instruments and technological procedures stand ready to produce truth about resilience?
- 5. What proposals and definitions of problems and objectives regarding resilience are given social recognition?

2 Regimes of power and power relations (how power generates knowledge of life and mobilises that knowledge)

- 6. Are there structures of inequality or vulnerability, hierarchies of value and asymmetries that are produced by resilience?
- 7. What forms of life considered socially valuable, what are "not worth of living"?
- 8. What existential hardships or forms of physical or psychic suffering attract political, medical, scientific and social attention and are regarded as intolerable, which are neglected or ignored?
- 9. Who profits and how from the regulation and improvement of resilience (in terms of political reputation, financial gain, scientific reputation, social prestige)?
- 10. Who bears the costs and suffers poverty, illness, premature death because of these resilience-promoting processes?
- 11. What forms of commercialisation of human and non-human life can be observed?

3 Forms of subjectivation (the manner in which subjects are brought to work on themselves guided by scientific, moral, medical, religious and other authorities and on the basis of socially accepted arrangements of bodies and sexes)

- 12. How is the resilient subject described in each document?
- 13. How are people called on, in the name of (individual or collective) life and health (one's own and that of family, race, nation), in view of defined goals (health improvement, life extension, higher quality of life, better gene pool, population increase/decrease), to act in a certain way (even to die for such goals)?
- 14. How are subjects brought to experience their life as worthy or not worthy of living?
- 15. How do subjects adopt scientific interpretations of life for their own conduct (self-regulation) and conceive of themselves as biological organisms?
- 16. How can this process be viewed as an active appropriation and not as passive acceptance?