

Preventing Violent Conflicts

EU Early Warning Initiatives and the Role of Scenario Analysis



Master thesis Conflicts, Territories and Identities

Tessa de Waal

Student number: 0620211

Supervisor: Dr. B. Bomert

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“(o)f all policy objectives, the prevention of violent conflict is the most ambitious, the most demanding and the most thankless. It requires the imagination to see ahead to the consequences of our inaction. And it demands the political will and courage to take preventive action where this is costly, dangerous, or unpopular and where the benefits may never be seen. Address a crisis and you will be praised. Prevention is often unseen. It requires a different level of political courage”.

Javier Solana, 31 March 2004, p.2

Preface

This thesis researches to what extent scenario analysis is useful in the early warning system of the European Union. The study is partly performed at the Peace Research Institute Oslo (PRIO), where I worked from March until the end of May, 2012, in conjunction with the ETTIS-project (European Trends and Threats in Security) under supervision of J. Peter Burgess and Jonas Gräns. During my time at PRIO I was able to join the dimensions of security department and present my paper at the security workgroup and the Junior Researchers' Forum. This provided me with relevant feedback on this thesis and suggestions for improvement. The meetings I had with the staff of PRIO gave me insight in the different perceptions of security, the current state of the art in forecasting (due to a personal conversation with Philip Schrodtt) and which literature is relevant in this field of study. In addition, I wrote a couple of pages on the current themes in foresight studies, which improved my knowledge on contemporary foresight exercises and the prospects of the future. I would therefore like to thank the staff at PRIO, my supervisors Jonas Gräns and J. Peter Burgess, the members of the security workgroup and the members of the Junior Researchers' Forum for the opportunity to work in the institute and the assistance and feedback they provided. I would furthermore like to thank my office-mates Katy Edelen and Sabine Otto for showing me around and keeping me company during my time in Oslo.

Abstract

Preventing Violent Conflict: EU Early Warning Initiatives and the Role of Scenario Analysis

This thesis examines to what extent scenario analysis can improve the European Union's early warning initiatives to prevent violent conflicts. There are four reasons which made this study relevant: (1) conflict prevention is a significant part in the peace keeping process, (2) the prevention of violent conflicts reduces the financial costs and enhances the standard of living, (3) the EU committed itself to conflict prevention and is therefore obligated to improve its early warning system, and (4) the EU is considering to create a new early warning institute; it is thus necessary to research how this institute should be given shape. The study starts by discussing the shortcomings of the current EU early warning initiatives on the basis of several case studies and numerous articles and books. It continues by examining the advantages and disadvantages of foresight and the scenario method and how the scenario method would be applicable to the EU early warning system. The conclusion shows to what extent the scenario method can improve the current early warning initiatives of the European Union; an implementation of the scenario method would (1) implement more analysis in the system, (2) provide the early warning system with more long-term analysis, (3) include more local and 'weak' signals to the analysis, (4) narrow down the information that is derived from the analysis, (5) make the system adaptable to different conflict situations, (6) educate the EU staff in early warning and their specific place in the early warning chain, and (7) limit the gap between early warning and early response. Unfortunately, it would leave two shortcomings unimproved: (1) 'complicated' countries would still be excluded from the early warning system, and (2) the relation between the EU and other security organizations would still be weak. In addition, there is no remedy against the main downside of the scenario method, namely: it requires a high capacity of the European Union in the form of time and human resources.

Keywords: European Union, Conflict Prevention, Early Warning, Foresight, Scenario planning.

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List of Acronyms and Abbreviations

Aml = Ambient Intelligence
ANC = African National Congress
CCA = Country Conflict Assessment
CIA = Central Intelligence Agency
CSFP = Common Foreign and Security Policy
DCDC = Developments, Concepts and Doctrine Centre (United Kingdom)
DG Relex = Directorate-General on External Relations
ECHO = European Community Humanitarian Office
EEAS = European External Action Service
EFMN = European Foresight Monitoring Network
ENP = European Neighborhood Policy
ERA = European Research Area
ESS = European Security Strategy
EU = European Union
EUMC = European Union Military Committee
EUMS = European Union Military Staff
EUSRs = European Union Special Representatives
FP7 = Seventh Framework Programme
GDP = Gross Domestic Product
GLOBESEC = Global Security and Crisis Management
ICEWS = Integrated Crisis Early Warning System
ICISS = International Commission on Intervention and State Sovereignty
ICT = Information and Communication Technology
IT= Information Technology
IfS = Instrument for Stability
JRC = Joint Research Centre
JRC-IPTS = Joint Research Centre – Institute for Prospective Technological Studies
KfG = Knowledge for Growth
NATO = North Atlantic Treaty Organization
NGO = Non-Governmental Organization
NIC = National Intelligence Council
OSCE = Organization for Security and Co-operation in Europe
PITF = Political Instability Task Force
PMT = Politico-Military Working Group
PSC = Political and Security Committee

PRIO = Peace Research Institute Oslo
PU = Policy Unit/Policy Planning and Early Warning Unit
RCRPOs = Regional Crisis Response Planning Officers
RFID = Radio-Frequency Identification
SitCen = Joint Situation Centre
SWOT-analysis = Strengths, Weaknesses, Opportunities and Threats analysis
UN = United Nations
UNDP = United Nations Development Programme
UNIDO = United Nations Industrial Development Organization
UNO = United Nations Organization
US = United States

Projects

ACTOR = Analyzing Complex Threats for Operations and Readiness
CIVISTI = Citizen Visions on Science, Technology and Innovation
ESRIF = European Security Research and Innovation Forum
ETTIS = European Trends and Threats in Society
EU-Grasp = European Union as a Global-Regional Actor in Security and Peace
EUROFORE = Mapping Foresight Competence in Europe
FESTOS = Foresight of Evolving Security Threats Posed by Emerging Technologies
FORESEC = Europe's Evolving Security: Drivers, Trends and Scenarios
SANDARA = The Future Impact of Security and Defense Policies on the European Research Area
SWAMI = Safeguards in a World of Ambient Intelligence

Introduction

Conflict prevention, which can be defined as a set of instruments used to prevent crises before they develop into active wars¹ (Swanström & Weissmann, 2005, p.5), has been a key component in EU policy since its establishment. The EU – and its predecessor, the European Community – has been developed to decrease the chances of conflict within its region (Gross & Juncos, 2011, p.3). After the Cold War the EU's foreign policy aims were expanded with the goal of conflict prevention. It aimed not only to keep member states peaceful, but tried to establish the same for foreign countries. In 2001 the Gothenburg European Council created a *program for the prevention of violent conflicts*. The goal of this program consisted of setting political priorities for preventive actions, improving the EU's early warning, action and policy coherence, enhancing its instruments for long and short term prevention, and building effective partnerships to improve the success of prevention (Cameron 2007). At present, conflict prevention still has a significant place in the EU's discourse. The Lisbon Treaty, which is effective since December 2009, mentions conflict prevention as one of the central goals of the EU (Gross & Juncos, 2011, p.3).

The importance of conflict prevention is accurately captured by Kofi Annan in his *Prevention of Armed Conflict: Report of the Secretary-General* (2002). Annan states that the costs of violence are enormous. He thereby not only refers to financial costs, but also costs as the "opportunities that are lost" (Annan, 2002, p.1). According to Annan, it is possible to make a distinction between immediate and direct costs and distant and indirect costs. Immediate and direct costs are, for example, death, injury, destruction and displacement. Distant and indirect costs are repercussions for families, local and national institutions and economies, neighboring countries and communities. The Carnegie Commission on Preventing Deadly Conflict (1997) presented a report on the costs of conflict as well. It argued for instance that in Lebanon the GDP was 50 percent lower than it was before the fights that started in 1974, that 80 percent of Angola's land was abandoned due to the massive use of landmines during the civil war, and that, in periods of conflict, the food production in Burundi decreased with 17 percent. The Carnegie Commission furthermore made an estimation of the amount of money the international community spent on seven major interventions of the 1990s, in Bosnia-Herzegovina, Rwanda, Cambodia, Somalia, Haiti, the Persian Gulf and El Salvador. It argued that the international community spend about 200 billion dollars on these interventions. If the international community had prevented the occurrence of armed violence, it would have saved almost 130 billion dollars (Annan, 2002, p.2). Thus, conflict prevention reduces the financial costs of war and enhances the standard of living.

Although the importance of conflict prevention is widely recognized, and the EU committed itself to engage in prevention, most European attempts to prevent violent conflict keep failing. This is

¹ A full definition and explanation of conflict prevention is given in Chapter 2, paragraph 2.1.

mainly due to shortcomings in conflict early warning, the process in which decision-makers are alerted to the potential outbreak, escalation and resurgence of violent conflict (Montanoro & Schunemann, 2011, p.10-11). One case that illustrates this shortcoming is the 2010 crisis in Kyrgyzstan. While the EU was closely monitoring this region prior, during and after the crisis, there was no actual conflict early warning when the situation escalated. The main explanation of this failure was that the EU monitored the region without developing actual analysis, leading to a lack in long-term conflict forecasting. The case furthermore shows that the actors on the ground were not accurately informed on how to act when conflict was anticipated, and what their place was in the conflict early warning chain (Babaud & Judge, 2011, p.18). In addition, in cases where conflict analysis was performed, the methods appeared to be of poor quality and gave unrealistic and biased recommendations (Nyheim, 2009, p.15). Decision-makers were therefore reluctant to respond to the perceived threat, making the early warning process useless. It is therefore evident that the EU needs to improve its early warning capacity. By introducing a different method for conflict prediction, this thesis tries to contribute to this improvement.

The thesis will argue that scenario analysis, as a qualitative tool, is a suitable early warning method in EU policy. Scenario analysis started to have influence in the field of international relations due to an article by Bernstein (2000). According to Bernstein, scenario analysis constructs "different plausible stories of possible paths to the future" (Bernstein et al, 2000, p.53-54). To construct potential paths to the future, a researcher needs to identify developments of a society and structure them towards a concrete outcome in the future. After the scenario exercise researchers remain with several possible paths to the future that, depending on the attitudes and developments that actually take place in the present, will be followed or not. The method has primarily been used in business organizations, to prepare companies for potential changes and setbacks. It therefore has a practical functionality and is capable of adapting to a changing social environment (Nekkers, 2006). Due to this adaptability it is likely to give a useful prediction on the occurrence of conflict. The scenario method has been used as a reconciliation tool as well. In 1991, Adam Kahane used scenarios in his Mont Fleur Project in South Africa (Kahane, 2004). In order to negotiate a peaceful transition from an authoritarian apartheid regime to a racially egalitarian democracy, Kahane held a scenario exercise with several South African officials. The exercise showed that by talking about possible events, officials were brought together and developed a shared understanding of what was happening and should happen in order to create the targeted society.

Apart from the mentioned benefits of the scenario method there are also several downsides to the use of scenarios. First, the process of a scenario exercise can be very time consuming and therefore it can be a costly procedure (Masini & Vasquez, 2000, p.63). Second, because the analysis is based on expert judgment, the method has a tendency to lose its scientific basis and risks providing biased information (Eriksson & Weber, 2008, p.467). And third, qualitative explorations of the future cannot guarantee accuracy in their theories (Tetlock, 2005). This means that it is not self-evident that scenarios would improve the EU early warning system, and that a critical discussion is required. The

European Union already recognizes that it is necessary to reform the early warning system. During a personal conversation with Joachim Klerx, who works on the European Foresight Platform and the European Trends and Threats in Society (ETTIS) project, it was brought to my attention that the EU considers establishing a new institute that can provide improved early warning (2012). In addition, the EU encourages using foresight² in its early warning system to explore future violent struggles. However, if scenario efforts appear to have unacceptable downsides, the EU should not implement this methodology in its new early warning institute. It is thus significant to investigate to what extent scenario analysis actually can be beneficial to early warning initiatives.

The hypothesis of this thesis is twofold. First, scenario analysis is useful to predict the occurrence of conflict, for it can easily adapt to a changing environment and, since it is a foresight activity, gives long-term predictions. Second, scenario analysis is able to create a shared understanding on the problems and possible obstacles in the society; it thus contributes to early response mechanisms such as mediation and trust-building. The central question of this research is as follows: *To what extent can scenario analysis improve the European Union's early warning initiatives to prevent violent conflicts?*

Scientific and Societal Relevance

As explained in the introduction, there are three main arguments that make this research relevant for the society. First, conflict prevention reduces the financial costs and enhances the standard of living. Second, the EU has committed itself to prevent violent conflicts and therefore has the obligation to perform this task as well as possible. And third, the EU is considering creating a new institute that predicts the outbreak of violent conflicts. It is significant to research the extent to which this situation centre should make use of the scenario method in predicting the conflict potential of the future. From a scientific perspective, this research gives an overview of the current state-of-the-art in conflict prevention and early warning, and provides insight in the advantages and disadvantages of foresight and scenario analysis.

Methodology

As this research examines the extent to which scenario analysis is useful in early warning initiatives by applying it to the European Union, this work can be considered to be a case study. Connecting the scenario method to the case of the EU enables individuals to generalize what the advantages and disadvantages of the scenario method are. The case study will mainly be supported by literature that is chosen from a critical realist and human security perspective. The choice for both perspectives is obvious. Critical realism and theorists of the scenario method have overlapping basic principles; they

² Foresight encompasses all qualitative forward-looking methodologies, including the scenario method.

both share the presumption that the social world is complex and unpredictable, and that one has to deconstruct social structures and agencies of a society if one wishes to understand the social world³. The concept of human security, which, in a narrow definition, can be understood as the absence of violence on the individual level⁴, is chosen because the EU uses the same conception in its policies to achieve security⁵. Using both human security and critical realism as a perspective of this thesis is feasible because both take the individual as the ultimate object of study (Nurruzaman, 2006, p.294). Apart from literature review, several case studies that were performed under the EU's seventh framework programme⁶ will be reviewed. These case studies are the 2010 crisis in Kyrgyzstan, post-war Sri Lanka, and the monitoring of Bolivia, Colombia and Venezuela over the past few years. In addition, various experts in the field, such as Jonas Gräns and Philip Schrodtt, will be contacted for information and feedback.

Overview

The first chapter explains the meta-theoretical position of this research. It discusses the scientific outlook and the dimension of security that guides this research, namely, critical realism and a narrow conception of human security. The second chapter is employed to address various fundamental questions about the study and practice of conflict prevention. It deals with theoretical questions such as: what are the perspectives on conflict prevention and crisis management, and how do they relate to each other? And why are international communities, the European Union in particular, involved in conflict prevention both within and outside their borders? The third chapter explains the EU's commitment towards early warning and conflict prevention. It will furthermore describe the current EU early warning system and research what the shortcomings of EU early warning initiatives are. The fourth chapter serves to answer what the theoretical benefits and drawbacks of foresight are. It discusses the arguments in favor of foresight and forecast, the requirements of a valid foresight, and the workings of the scenario method. The fifth chapter discusses the scenario method, its origins, benefits and critiques. The sixth chapter combines the theories on early warning and the scenario method in order to answer how scenario analysis can be used as an early warning tool. It furthermore

³ The idea of and choice for critical realism will be discussed more extensively in Chapter 1: Theoretical Framework.

⁴ There is also a broader conception of human security that not only includes security as the absence of violence, but also the absence of other challenges such as hunger, disease and natural disasters (Tiruneh, 2010, p.7). However, as this thesis focuses on the prevention of *violent* conflict, the narrow conception of human security will be maintained.

⁵ The concept of and choice for human security will be addressed in more detail in Chapter 2, paragraph 2.5.3: Dimensions of Security.

⁶ In the Seventh Framework Programme (FP7) all research-related EU initiatives are combined under a common roof. The seventh programme is particularly aimed at increasing knowledge in four categories: cooperation, ideas, people and capacities. That knowledge lies at the heart of the EU can be seen in the Lisbon Strategy, where it is said that the Union tries to become the "most dynamic competitive knowledge-based economy in the world" (CORDIS, 2012).

discusses how the scenario method can be implemented in the EU early warning system. The conclusion that follows provides an answer to the main question of this research: to what extent can scenario analysis improve the European Union's early warning initiatives to prevent violent conflicts? In addition, it shall discuss the shortcomings of this research and give recommendations for future research.

Chapter 1: Theoretical Framework

Meta-theoretical positions and ontological, epistemological and methodological assumptions have deep consequences for the course and outcome of every research. It is therefore important to be aware of these stances and assumptions in order to be able to evaluate and understand the result of scientific research. This chapter focuses on the underlying theoretical assumptions when answering the main question of this research: *To what extent can scenario analysis improve the European Union's early warning initiatives to prevent violent conflicts?*

1.1: Schools of Thought

"If the strengths of beliefs were a hallmark of knowledge, we should have to rank some tales about demons, angels, devils, and of heaven and hell as knowledge" (Lakatos, 2002, p.1).

One of the most important aspects of scientific research is to differentiate scientific knowledge from non-scientific information. This distinction is based on certain scientific rules, such as logical consistency. As Elspeth Graham stated: *"Philosophy is to research as grammar is to language... Just as we cannot speak a language without certain grammatical rules, so we cannot conduct a successful piece of research without making certain philosophical choices"* (Elspeth Graham, 1997, p.8, cited in Aitken & Valentine, 2009, p.4). What these exact rules are, and how we should come to our knowledge, has been a prior debate in social sciences since the 19th century. This debate resulted in the existence of numerous theoretical schools that all had different views on the next three central theoretical concepts: ontology, epistemology and methodology. The definitions of these concepts are as follows: Ontology deals with the metaphysical question of being. It looks at the essence of things, researches what things are by nature. Epistemology studies the nature of knowledge. It deals with the question how scholars can know the world either through a priori or a posteriori⁷ means. Methodology finally focuses on how certain data and information can be acquired. These three concepts closely relate to each other. Ontology determines what is knowable, epistemology explains how it is knowable and methodology decides how we can acquire the knowledge systematically (Landman, 2003, p.16). All these concepts are part of a larger meta-theory, which can best be described as a theory that explores all underlying assumptions. It thereby tries to evaluate and criticize the consequences of larger assumptions when doing theoretical or empirical research (Kurki & Wight, 2007, p.14). According to Kurki and Wight, social research does not rest on a commitment to one of the schools in

⁷ A priori and a posteriori are two different ways of knowing the world. A priori means 'from the earlier'. In this form of knowledge, knowledge is *"gained independently of sense experience"*. A posteriori means 'from the later' and refers to knowledge that is *"dependent upon sense experience"* (Markie, 2008). In theoretical debates, a priori means are generally used by rationalists and a posteriori by empiricists.

social science, but to the commitment to constantly reconsider and improve the existing theories (p.15). What social sciences differentiates from other sciences is that theorists in social sciences try to determine what the appropriate theories and methodological options are for explaining social phenomena (Baert, 2005, p.1).

1.2: Theories in International Relations and Social Science: A Historical Overview

The development of social science can best be captured by discussing the four key debates that shaped international relations theory and social science⁸. The first debate was important in changing the status of science and occurred between the idealists and the realists (Kurki & Wight, 2007, p.16). The idealists were driven by the horrors of the First World War and believed it was possible to change the institutions, procedures and practices in such manner that war would be eradicated or, at least, controlled. According to the idealists, the primary source of international conflict was ignorance, and by producing a body of knowledge peace would be achieved. How this body would operate, and how peace would be achieved, was never clearly articulated. The critique that followed came from the realists who claimed that the idealists were not scientific. Rather than discussing how the world actually was, they focused too much on how the world should be. It was not that theories could not discuss things that ought to be, but normative questions should derive from how things actually are. This does not mean that theorists were not able to be critical towards reality. One of the proponents of realism, Hans Morgenthau (1947), for example believed that politics was based on the 'objective laws' present in human nature. However, he never suggested that since politics are based on human nature, and conflict derives from politics, the causes of war are to be found in natural sciences. Rather, he rejected that human activity is predetermined (Kurki & Wight, 2007, p.17).

The second debate was responsible for the development of methodological substance to accompany the 'rhetorical' arguments about science (Kurki & Wight, 2007, p.17) and took place between the behaviouralists and the English school theorists. The behaviouralists believed international relations theory should be based on positivism, a theoretical school that had dominated for quite some time in other sciences, if it wishes to be scientific. Positivists argued that knowledge is only scientific when it is derived from observable data. Based on empirical facts individuals would be able to develop laws that predict and explain behavior in terms of cause and effect (Kitchin & Tate, 2000, p.20). According to the behaviouralists, the classical realist theories were not measurable; they lacked the needed mathematical modeling of theory (Kurki & Wight, 2007, p.18). The English school criticized these theories. For example, Hedley Bull claimed that the obsession with data collection of

⁸ There has been some discussion whether there actually are three or four great debates, but since it is generally accepted that four debates have played a significant part in the development of international relations, all four will be discussed shortly.

the behaviorists was too much. International relations theory needed conceptual judgment, not systematic laws.

The third debate is known as the interparadigm debate and took place in the 1970-1980s. It moved the discussion away from methodological issues by discussing the incommensurability of differing theoretical perspectives. The debate followed on Thomas Kuhn's *The Structure of Scientific Revolutions* (1964). Kuhn claimed that there are two phases of science, namely, the revolutionary phase, in which theories were deeply fragmented, and the phase of normal science, where one theoretical school or paradigm would dominate. According to Kuhn, knowledge could only progress in the phase of normal science. In the revolutionary phase, theorists were unable to compare their findings and, more importantly, were unable to build on the research of others. Only in normal science cumulative knowledge can be created (Kuhn, 2003, 124-125). The debate that followed Kuhn's work was on how findings from different schools could be compared to each other. The effect was that philosophy of science acquired a more substantial and explicit role in social science (Kurki & Wight, 2007, p.19).

The fourth⁹ and final great debate occurred in the mid-1980s. It explicitly focused on international relations as a discipline in social science and is characterized by three debates, namely: between (1) explaining and understanding, (2) positivism and post-positivism and (3) rationalism and relativism (Kurki & Wight, 2007, p.20). The explaining and understanding distinction derives from Max Weber's *Erklären* (explaining) and *Verstehen* (understanding)¹⁰. In understanding, "*social meanings, language, and beliefs are said to constitute the most important (ontological) aspects of social existence*" (Kurki & Wight, 2007, p.20). The explanatory theorists do agree with this claim, but argue that this form is not applicable to a scientific framework. Rather, empirical justification should be possible. The second distinction derives from the debate between positivists and post-positivists. The central assumptions of the positivists can be summarized as follows: First, science should be based on appropriate methodological techniques to ensure that knowledge is grounded in correct observations; second, if one collects enough data, one should be able to reveal regularities and general laws; and third, there is no world outside of humanity, therefore, observations are the only proof of knowledge. To be is to be perceived (p.21). According to the positivists, knowledge has instrumental value. This means that knowledge has to be useful, not truthful. The post-positivists¹¹ however claim that positivism is not suitable for social science. They argue that meanings and beliefs are the most important factors when studying social processes. Social scientists should therefore focus on social inquiry rather than regularities to uncover the relations underneath the observable reality and draw

⁹ Some theorists consider the fourth great debate as the third debate in international relation theory. They leave out the debate that is here called the third great debate.

¹⁰ Max Weber's distinction between *erklären* and *verstehen* derives from the Neo-Kantian nominalism. He mostly addressed the question how knowledge is influenced by historical and cultural concept formation (Kim, 2008). More about this issue can be found in his article *Objectivity in Social Science and Social Policy* (1904/1949ed.).

¹¹ Post-positivism includes all schools that reject the epistemology of positivism, such as post-modernism and post-structuralism.

conclusions on human behavior. The post-positivists hereby take a hermeneutic perspective on social science (p.21). The last distinction, between rationalism and reflectivism, derives from Robert Keohane (1988). By trying to combine the distinctions between explaining/understanding and positivist/post-positivist he creates a division between rationalism and reflectivism. The new distinction has had some attention within the debate, but is not important enough to discuss extensively.

As a reaction to the debate between positivism and post-positivism there have been many attempts to search for a middle point between these theories (Patomäki & Wight, 2000, p.214). However, as Patomäki and Wight claim, *“A synthesis based on two problematic metaphysical systems produces only a synthesis of two problematic metaphysical positions – not an improved metaphysical position”* (p.215). According to them, critical realism is a better fit for international relations theory, for it can incorporate current epistemological developments and bring an end to the impasse in social theory due to a focus on ontological matters. The most important shortcoming of positivism and post-positivism is their denial of a ‘world out there’. Positivists claim that the real is that which we experience, and post-positivists argue that the real lies in language and discourse. However, *“‘To be’ means more than ‘to be experienced’ or ‘to be spoken’”* (p.216). Without someone to experience, experience is impossible, and without a world to be constructed, it is impossible to make a construction. Positivism and post-positivism are correct when claiming that we cannot go beyond experience, but this does not mean that there is no world out there. The key is to be critical towards that what is perceived and accept the existence of an outer reality apart from our experiences, just like critical realism does (Patomäki & Wight, 2000, p. 218).

Critical realism is not only important because it entered the debate as a solution for the discrepancy between positivism and post-positivism, it is also, as will be clear after paragraph 1.4, the theory on which the scenario method is based. This chapter will therefore provide a discussion on critical realism as a meta-theoretical position within social science.

1.3: Critical Realism

Critical realism has been an important philosophy in social sciences since its creation in the 1970s (Baert, 2005, p.6). It finds its origin in Roy Bhaskar’s *A Realist Theory of Science* (1975) and is influenced by Bhaskar’s later work, *The Possibility of Naturalism* (1979). Bhaskar’s texts are therefore considered to be the cornerstones of the critical realist doctrine (Baert, 2005, p.88). Andrew Sayer introduced critical realism to the field of human geography and is therefore an important theorist as well.

As explained in paragraph 1.2, the basic idea of the realist doctrine is that there is a real world outside the human mind. Individuals are unable to see the world directly as it is, for we always perceive the world based on our own accounts of the world and within our own discourse (Sayer, 2009, p.98). However, this does not mean that there is no world outside perception, such as positivists suggest, for there needs to be an actual perceiver to be able to perceive. As Patomäki &

Wight put it: "Every social act, event, or phenomenon is only possible insofar as the conditions for action exist as well as the agents which act; conditions which, we argue, are real and not reducible to the discourses and/or experiences of the agents" (2000, p.203). According to critical realists, theorists should acknowledge the distinction between the world as it is and the world as we perceive it, but not choose one of both.

Naturally, social phenomena are socially constructed and dependent on our ways of thinking. Constructions do however need more than one individual. A political party for example is created by a group, not by a single individual (Sayer, 2009, p.99). Social phenomena therefore exist apart from single observers, but not apart from perceptions. It is furthermore impossible to separate individual observers from structures within society, for the structures of social interaction determine the way in which individuals perceive and judge the reality (Patomäki & Wight, 2000, p.203). As Derek Layder explained, all activity is situated activity (1993, p.80-89). In order to unravel what is the reality and what is the perceived reality, theorists should decompose the social structure that is behind perception. To decompose the social structure it is important to establish who is doing the construction, view social construction as a process over time and remember that social construction has both physical as ideational aspects (Sayer, 2009, p.99). Theorists should thereby keep in mind that there are different ontological layers in the world and that those layers influence one another (Patomäki & Wight, 2000, p.232). The institutions that are established centuries ago, such as diplomacy and international law, still have a huge influence on social phenomena in present time (p.233). When something is socially constructed, individuals need to find out by whom, of what, and with what effect the construction has been made (p.100). It is important to note that concepts can be perceived differently from what they actually are. Traditions and cultural patterns are able to give a whole other meaning to standard phenomena, and influence the reaction of others. The focus should therefore lie on the question what phenomena mean for actors to be able to explain behavior (p.103).

The final important aspect of critical realism is its conception of causality. In critical realism, 'cause' means that which produces change (Sayer, 2009, p.101). It is not a constant regularity, as it is in positivism. Critical realists believe that all objects, including individuals and institutions, are able to make a change in social phenomena. All objects therefore have 'causal powers'. If and how an object decides to change depends on the circumstances, even as it depends on the circumstances what kind of consequences a change has. Causal relationships are therefore context-dependent. The result is that the same cause does not necessarily lead to the same effects. The effects will change according to context, leading to irregularities instead of regularities (p.102). It is important to keep in mind that not only the context of a specific layer has influence on the change. The different layers in the world, including ecological, biological and social, are also influencing each other causally (Patomäki & Wight, 2000, p.203). The beginning of this view is to be found in Bhaskar's *A Realist Theory of Science* (1975). In explaining his notion of causality, Bhaskar explicitly reacts against the 'Humean conception of causality' (Baert, 2005, p.91). He thereby explains Hume's vision of causality as follows: whenever x occurs, then y is likely to occur (p.92). In reaction to this, Bhaskar argues that the regularities that

Hume sees are extremely rare and can only occur in closed systems. Social phenomena are however continuously influenced by external factors, influencing the supposed regularities of Hume. The second critique Bhaskar has on the Humean conception of causality is that Hume does not go beyond the observational level in determining causal relationships, whereas he should focus on the origin of the perceived regularities as well. He should be able to explain why certain causal relationships are present. Bhaskar argues that causality in social science differs from causality in the natural world in the following respects:

“(1) Social structures, unlike natural structures, do not exist independently of the activities they govern. (2) Social structures, unlike natural structures, do not exist independently of the agents’ conceptions of what they are doing in their activity (3) Social structures, unlike natural structures, may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space-time invariant)” (Groff, 2004, p.100).

1.4: Critical Realism and Scenario Analysis

As explained in paragraph 1.3, critical realists try to understand and explain social phenomena within their complex reality. Patomäki and Wight state in their conclusion: *“Things, even social things, have to be seen in their movement and interconnections. The parts cannot be correctly understood apart from their relationship with the whole”* (2000, p.235). In these relations, all objects – including individuals and institutions – have causal powers. Because every object has causal power, and everything is intertwined, it is unpredictable which object is going to cause what effect. When using the scenario method, this unpredictability of the social world and the complexity are maintained. As predictions can be wrong, and relations and reactions can be overlooked, researchers create different stories and different paths the future might take when one or several objects (are driven to) change. In addition, by constructing different possible paths to the future, researchers are forced to understand and explain the structures and agencies that are present in the social world. It is therefore that scenario analysts not only adhere to the premises of critical realism, but also work with the structures and relations of the social world as described by critical realists¹².

¹² The scenario method, its history, usage and practices, will be discussed in more detail in Chapter 5.

Chapter 2: The Prevention of Violent Conflicts

This chapter addresses various fundamental questions relating to the study and practice of conflict prevention. It deals with theoretical questions such as: what are the perspectives on conflict prevention and crisis management? And how do conflict prevention and crisis management relate to each other? What is early warning and how does early warning relate to conflict prevention? What is a crisis and what are the different stages of a crisis? It will furthermore discuss why international communities, and the European Union in particular, are involved in conflict prevention both within and outside their borders, and whether there is a responsibility to protect civilizations. The first part of this chapter will concentrate on conflict prevention and its relation to crisis management, conflict prediction and early warning. The second part will discuss the moral, economical, legal and political reasons to be involved in the prevention of violent conflicts.

2.1: Conflict Prevention and Crisis Management: Definitions

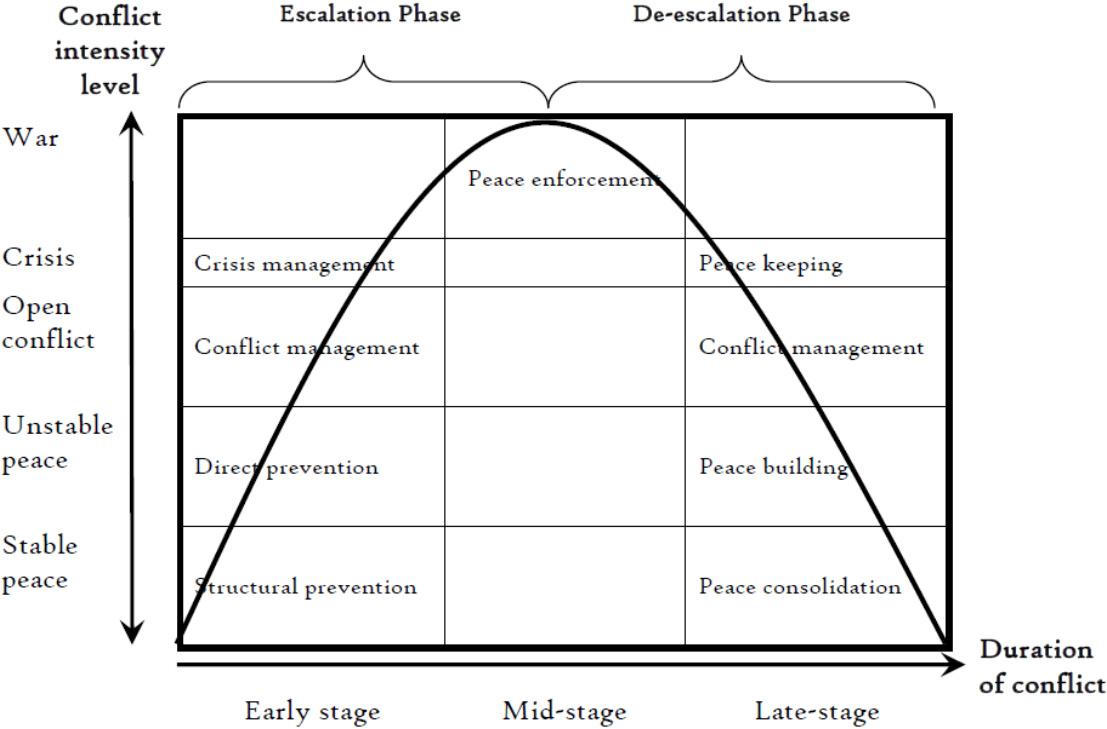
Due to the increase of international activism, the incidence of war and genocide has declined significantly (Bellamy, 2009, p.2). This demonstrates that the development of preventive actions is a successful one and should be developed further if one wishes to diminish the occurrence of conflict even more. Conflict is generally defined as "a situation in which two or more parties strive to acquire the same scarce resources at the same time" (Swanström & Weissmann, 2005, p.9). However, as Peter Wallensteen points out, it is not scarcity but resources that causes parties to struggle (2002, p.16-17). He argues that scarcity is an economic term that excludes conflicts involving human security, environment and historical issues. The terminology of resources would therefore be more applicable, because it is not necessarily the amount of resources that causes war, but the type of resources. As Swanström and Weissmann (2005) argue, this definition still does not take all conflicts into account. In this case the normative disputes, such as religion and values and beliefs, are excluded from being conflicts. They therefore suggest the following definition for conflicts: "perceived differences in issue positions between two or more parties at the same moment in time" (p.9). Naturally, violent conflicts are those conflicts in which either of the parties uses violence to acquire what they want.

Strategies for conflict prevention can be "defined not by the specific actions involved as much as by their goals and the stage of conflict when they are implemented" (Woocher, 2009, p.2). A preventive effort is an effort that has a goal to prevent violent conflict and takes place before the actual outbreak of violence. There are short- and long-term measures to prevent violent conflicts (Cameron, 2003, p.3). Long-term measures usually aim to create stability that in the long run would decrease the chance on conflict. Examples of these measures are the promotion of good governance and the assistance in economic development. Short-term measures are generally addressed as crisis

management and are defined as all activities that contribute to an immediate stop of the threat, such as police missions, monitoring missions and border assistance (Gross & Juncos, 2011, p.5). According to Drent (2011), crisis management needs to be supported by conflict prevention in order to re-establish the social and economic structures (p.3). Without stable social and economic structures the threat of violent conflict is unlikely to disappear. In addition, if conflict prevention fails in providing safety, crisis management can take over to avert the threat. This means that long-term and short-term measures are of equal importance in creating safety, and should be applied simultaneously.

2.2: The Life Cycle of a Conflict

As explained above, conflict prevention takes place prior to the outbreak of violent conflict. The image below shows the different phases of a conflict cycle.



Source: Swanström & Weissmann, 2005, p.11

There are five levels of conflict intensity, namely: stable peace, unstable peace, open conflict, crisis and war, and nine chronological phases, which can be seen along the curve. During a period of stable peace, the tensions between parties are low and there is cooperation between the different parties that are present. In an unstable peace phase, the level of tension has increased to the level in which peace no longer seems to be guaranteed. In an open conflict, there is a crucial issue on which parties disagree and take measures to deal with it. In this stage there does not have to be violence yet. The crisis phase is the phase in which the risk of violence is imminent. There may have been some

violence already, but this is not structural. In the last phase, war, there is widespread and intense violence (Ibid.). Conflict prevention is applied in the first two stages of the lifecycle of a conflict: in stable peace and unstable peace. In the stable peace stage, structural measures to prevent the occurrence of war are taken. When there is unstable peace, there will be more direct, short-term measures. It is important to note that conflict prevention is also important in the rebuilding phase after the conflict. Here the goal is to prevent a state or region to fall back into the same conflict pattern, or into a new one.

2.3: Early Warning: Definition

Preventing violent conflicts is mostly done by tackling the root causes of conflict. It is therefore important that the situations that potentially lead to violence are identified. This identification, and the prediction of what might happen in the (near) future, is done by early warning systems. It is of specific importance that the early warning system is adequate in formulating which underlying and direct factors might lead to a violent struggle, because the policy that aims to prevent violence is based on the formulation and recommendation of the early warning system. When the early warning system points at the wrong indicators, the prevention of violent conflicts will fail. There are roughly three types of early warning systems: systems that focus on political crisis, systems that predict imminent humanitarian crises and systems that give early warning for natural disasters. Several organizations are involved in early warning, such as national governments, intergovernmental organizations, supranational organizations, and non-governmental organizations (Bellamy, 2009, 107). The early warning system of the European Union mainly focuses on political crises and humanitarian crises. The different aspects of early warning and an early warning system are best described in the following citation from Montanoro and Schunemann (2011, p.10-11):

“Early warning is a process that alerts decision-makers to the potential outbreak, escalation and resurgence of violent conflict. It is a basis for informed decision-making and a tool to manage political priorities and objectives. An early warning system: (a) includes systematic monitoring, collection, ordering and analysis of information (based on qualitative and quantitative conflict analysis methods), (b) promotes a better understanding of conflict dynamics and impacts, (c) provides forecasts of potential developments; and (d) presents options for the purpose of decision-making on early and effective response through relevant instruments and mechanisms” (Montanoro & Schunemann, 2011, p.10-11).

It is important to note that an early warning system should focus on both long-term and short-term predictions, so conflict prevention as well as crisis management can follow. This means that not only monitoring, but also forecasting and foresighting are a central part of the early warning system.

2.4: Tools for Conflict Prevention

Once there is reason to believe that preventive measures are needed in a particular country or region, there are several tools available that might contribute to the prevention of violent conflicts. Naturally, it depends on the situation and the countries which measures are available, and which measures are useful to take. It is possible to distinguish roughly four categories of preventive measures, namely: political/diplomatic measures, economic/social measures, constitutional/legal measures and security sector measures. Furthermore, there are more structural or long-term measures, and direct or short-term measures. The box below (that is adapted from Evans, 2008) gives an overview of the possible preventive measures that the international community can take¹³:

Political/Diplomatic Measures	Economic/Social Measures
Structural: <ul style="list-style-type: none"> - Promote Good Governance - Promote Membership in International Organizations 	Structural: <ul style="list-style-type: none"> - Support Economic Development - Support Education for Tolerance - Community Peacebuilding
Direct: <ul style="list-style-type: none"> - Preventive Diplomacy - Threat of Political Sanctions 	Direct: <ul style="list-style-type: none"> - Aid Conditionality - Threat of Economic Sanctions - Economic Incentives
Constitutional/Legal Measures	Security Sector Measures
Structural: <ul style="list-style-type: none"> - Promote Fair Constitutional Structures - Promote Human Rights - Promote Rule of Law - Fight Corruption 	Structural: <ul style="list-style-type: none"> - Security Sector Reform - Military to Civilian Governance - Confidence-Building Measures - Small Arms and Light Weapons Control
Direct: <ul style="list-style-type: none"> - Legal Dispute Resolution - Threat of International Criminal Prosecution 	Direct: <ul style="list-style-type: none"> - Preventive Deployment - Non-territorial Show of Force - Threat of Arms Embargo or End of Military cooperation Programs

¹³ For a full explanation of these measures: see Evans (2008), pp. 87-104

2.5: The Responsibility to Prevent Violent Conflicts

One of the core questions in the debate about conflict prevention is the question why the international community has a responsibility to protect populations that are (potentially) affected by violent conflicts. This question can be answered from several perspectives. From a moral perspective it is claimed that we should prevent the outbreak of violent conflict because it enhances the standard of living. From an economic perspective it is said that conflict prevention is less costly than intervention in a war that has already started. From a legal perspective we should protect populations because we aimed at doing so in the 'Responsibility to Protect' guideline. And finally, from a political perspective it is argued that we need to protect societies in order to create security for our own countries. The introduction already touched on the moral and economic perspectives as described here, so they will not be part of this paragraph. What will be discussed are the 'Responsibility to Protect' guideline and the perspectives on security.

2.5.1: The Responsibility to Protect

Early 2000 Canadian officials Don Hubert, Heidi Hulan and Jill Sinclair urged to create an International Commission on Humanitarian Intervention. The former Canadian minister of Foreign Affairs, Lloyd Axworthy, acknowledged the need for this commission and discussed its establishment with the UN Secretary-General Kofi Annan, who favored it but wanted to base the commission outside the UN for political reasons. With the encouragement of Annan and the cooperation of the UN, the Canadian government sponsored the creation of a commission that would be known as the International Commission on Intervention and State Sovereignty (ICISS) (Bellamy, 2009, p.35). The commission consisted of members from within and outside the UN organization and was formally established on January 15, 2001. The ICISS report argued that, considering the changing international environment, a rethinking on authority and responsibility was required. This opinion was inspired by an article of Francis Deng on conflict management in Africa, published in the 1990s. He stated that the essence of sovereignty should not be to control a land and its inhabitants, but to take responsibility in securing a certain life-standard for its citizens (Orford, 2011, p.13). The ICISS had an important conclusion on the responsibility of states and the international community towards safeguarding populations. It concluded that, in cases where the state does not have the opportunity to protect its citizens, the international community is obligated to take action. They formulated this principle as follows: "where a population is suffering serious harm, as a result of internal war, insurgency, repression or state failure, and the state in question is unwilling or unable to halt or avert it, the principle of non-intervention yields to the international responsibility to protect" (p. xi) (Bellamy, 2009, p.15).

The conclusion reached by the ICISS was adopted by the UN's General Assembly in the World Summit Outcome of 2005. It formulated that both the state and the international community are responsible to protect populations. According to the report, populations need to be protected against

genocide, war crimes, ethnic cleansing and crimes against humanity. Although the World Summit document is a great step towards creating a shared responsibility in conflict management, it still has several shortcomings on the political and legal level. The report mainly focused on the role of preventive action, leaving the military issues underdeveloped, and the exact commitment and responsibility of the UN to protect peoples remained vague (Orford, 2011, p.2). Some critics claim that the UN deliberately left the extent of the responsibility vague, because UN member states have no intention of committing themselves to protect peoples in foreign lands. However, because the World Summit does develop guidelines for the future development of the international community, and is a form of law that allocates jurisdiction (Ibid, p.25), it might be wrong to doubt the member-states' intentions.

What the exact status is of the responsibility to protect is still unclear. Governments tend to view the responsibility to protect as an idea, a suggestion to what eventually can turn into a norm or course of action (Bellamy, 2009, p.3). The ICISS and the UN consider the responsibility to protect to be a principle, a fundamental proposition at the basis of potential actions (Ibid., p.6). And finally, the academic world understands the responsibility to protect as a norm; a collective understanding of how one should behave properly. The fact that there is no general agreement on the function and status of the responsibility to protect shows that the guideline is still in its infancy. However, it does show great promise towards cooperation in the field of conflict management, for even if the responsibility to protect is considered to be an idea, it still promotes cooperation between actors in the field of conflict management.

At the heart of the responsibility to protect lays the responsibility to prevent. Equally to the responsibility to protect, the responsibility to prevent falls on both the nation-state and the international community. The commitment of the UN to the responsibility to prevent is formulated as follows:

138. Each individual State has the responsibility to protect its populations from genocide, war crimes, ethnic cleansing and crimes against humanity. This responsibility entails the prevention of such crimes, including their incitement, through appropriate and necessary means. We accept that responsibility and will act in accordance with it. The international community should, as appropriate, encourage and help States to exercise this responsibility and support the United Nations in establishing an early warning capability.

139. The international community, through the United Nations, also has the responsibility to use appropriate diplomatic, humanitarian and other peaceful means, in accordance with chapter VI and VIII of the Charter, to help to protect populations from genocide, war crimes, ethnic cleansing, and crimes against humanity [...]. We also intend to commit ourselves, as necessary and appropriate, to helping States build capacity to protect their populations from genocide, war crimes, ethnic cleansing and crimes against humanity and

to assisting those which are under stress before crises and conflicts break out (cited in: Evans, 2008, p.79-80)¹⁴.

The concrete measures that would contribute to the responsibility to prevent are the development of a successful early warning intelligence, and the improvement of preventive diplomacy. What remains a question is what the responsibility to prevent includes exactly. Does it have to include the prevention of violent conflict as a whole, as the ICISS suggested, or should it only focus on preventing genocide and mass atrocities? According to Bellamy, the inclusion of the responsibility to prevent represents the attention to the victims' point of view. It emphasized the importance of saving lives where lives had already been taken on a large scale, even if that would constrain the interveners rights (Bellamy, 2009, p.98). In that sense, the inclusion of the responsibility to prevent contributes to a human centered approach in the international politics.

The responsibility to protect is of specific importance for the European Union, not only because the member-states are also part of the United Nations and therefore are bound to the responsibility to protect, but also because the EU is, of all the regional organizations, by far the most capable of making the responsibility to protect a reality (Bellamy, 2009, p.183). There are several considerations that make the EU capable of making the responsibility to protect a success. First, EU membership makes it almost impossible for countries to wage war with other member-states. Second, the EU has the capacity to apply leverages, should that be needed. Third, the EU is responsible for 50% of all development assistance worldwide, which already tackles the root causes of conflict. And fourth, it develops policies that increase the soft-power of the EU and incorporates humanitarian aid conditionally, such as the establishment of the European Neighborhood Policy (Ibid., p.183-184). The EU's hard power is however limited; it rarely employs financial sanctions or provides military intervention.

2.5.2: Security

Apart from the moral, economic and legal arguments to be involved in conflict prevention, there is an important reason related to providing security as well. The main purpose of the existence of nation-states and communities is to establish safety and security for its citizens. Conflict prevention is an important tool in creating this security, for it protects individuals from threats that otherwise might have led to a loss of lives and living-conditions. However, in the modern world, providing security for your own citizens necessarily entails providing security for foreign populations as well. Due to the increased globalization, instability in another country can have a huge effect on the stability in one's own nation-state or community (European Council, 2008). In addition, there are more global challenges that affect the whole of human beings. Issues that are generally addressed as having the

¹⁴ These quotes are derived from the 2005 Summit Report of the UN.

potential to cause threats in the future are global warming, technological development, terrorism, demography, the spread of diseases and relative deprivation (see for example: James & Teichler, 2010; DCDC, 2010; Finnsight 2015, 2006; NIC, 2008; UNO, 2004; India Vision 2020, 2002; OSCE, 2010; FESTOS, 2011). A focus on more defense-oriented security reveals that there is a trend towards a multi-polar system (NATO, 2006), which has the potential to increase the political struggles between countries. In order to keep one’s own civilians safe it is thus needed to focus on the stability and security of foreign regions as well. Furthermore, because most challenges cannot be solved by a single nation-state or community, actors are required to cooperate and create a shared responsibility to protect if they want to keep their own population safe. For example, the threat of global warming can only be averted when countries and organizations start cooperating in reducing CO2 emissions.

2.5.3: Dimensions of Security

There are several views on the concept of security, which makes it necessary to position this thesis within one of these different definitions of security. The types of security are accurately captured by Roland Paris (2001), who developed the following model to indicate the main conceptions of security:

	Military	Military, Nonmilitary, or Both
States	<p>National Security Conventional realist approach to security studies</p>	<p>Redefined Security e.g., environmental and economic security</p>
Societies, Groups, and Individuals	<p>Intrastate Security e.g., civil war, ethnic conflict, and democide</p>	<p>Human Security e.g., environmental and economic threats to the survival of societies, groups, and individuals</p>

Source: Roland Paris, 2001, p.98

It is hereby assumed that the source of the security threat can either be military, non-military or both, and that the protected entities are either the states, or societies, groups and individuals (Paris, 2001, p.98). As shown in the table, national security deals with military threats and the protection of states. This perspective is mainly adopted by classical realists, who argue that security rises and falls with the state’s capability to counteract or defeat a threat (Ayoob, 1997, p.124). Although this approach used to have a lot of support, particularly in the United States, its usefulness in contemporary security

studies is deemed to be limited. The concept of redefined security is largely developed by Jessica Tuchman Mathews's article *Redefining Security* (1989). It expresses the idea that not only military threats, but also non-military threats, such as environmental and economic developments, can lead to insecurity for a nation-state. Here, the nation-state remains the object of protection, but the scope of threats is broadened to non-military threats (Paris, 2001, p.99). The third dimension of security, that of intrastate security, focuses on military threats that not only endanger states, but also societies, groups and individuals. The concept came into existence with the prevalence of intrastate violence after the Cold War. In this form of war, not states, but sub-state groups, such as ethnic minorities, are the main belligerents. Democide, the act by which the state intentionally kills its inhabitants, is also considered to be an intra-state conflict. Of all the discussed dimensions of security, human security can be considered the broadest. This type of security is concerned with both military and non-military threats towards societies, groups and individuals (Ibid.). With a narrow conception in which security is met when individuals do not experience violence in any form, and a broad definition that not only includes absence of violence, but also other challenges such as hunger, disease and natural disasters, the concept of human security is still heavily contested (Tiruneh, 2010, p.7).

Since the causes of conflict lie in both military and non-military factors, and threats towards groups as well as different individuals need to be addressed in EU early warning systems¹⁵, this research takes a human security perspective. A recent study on Europe's evolving security (FORESEC) also argues that in contemporary security studies, the European Union is focusing on the well-being of EU citizens as well as global peace and stability, and that thus the concept of human security is of relevance in the European Union (FORESEC deliverable 2.3, 2008, p. 5). Considering the focus on the prevention of *violent conflicts*, the narrow definition of human security, that security is the absence of violence on the individual level, will prevail. As Nurruzaman (2006) shows, the concept of human security fits into the critical theory perspective in the sense that critical theory deconstructs all created institutions until human perspectives and actions remain. Critical theorists consider the state to be human made, and therefore take the individual as the ultimate object of study (Nurruzaman, 2006, p.294). Therefore, taking a critical realist perspective, which is occupied with deconstructing existing institutions, and a human security approach, is highly compatible.

¹⁵ See for example the European Security Strategy (2003), in which the Council argued that, since the EU can be considered a global player, it should share the responsibility of building a better world (p.13). Further elaboration on this topic can be found in Chapter 3: EU Conflict Prevention and Early Warning.

Chapter 3: EU Conflict Prevention and Early Warning

Conflict prevention has been a component of the European Union since its establishment. However, it was only after the Cold War that it became part of the actual strategy of the Union. This chapter focuses on the role of conflict prevention and early warning by discussing the commitment, institutions and field-missions of the EU in this area. By addressing these issues it will become evident why the EU is obligated to ensure the quality of its early warning tools, what the state of the art is and what the weaknesses of the current early warning tools and methods are. The chapter will conclude by giving an overview of the shortcomings of the EU's early warning capacity.

3.1: Commitment to Conflict Prevention and Early Warning

The ambition and capacity to engage in conflict prevention is a result of two main historic events that involved the EU, namely, the Cold War and the war in former Yugoslavia (Steward, 2011, p.33-34). The Cold War gave the EU the economic and diplomatic strength to develop as a civilian actor, and the war in former Yugoslavia highlighted the limitation of the EU as a global actor, leading to an ambition to further develop itself. The EU is committed to conflict prevention and early warning by several legal and policy documents, including the Common Security and Defense Policy, the European Security Strategy (2003) and the European Neighborhood Policy (2007). This section will focus on these legal and policy documents in order to explain the EU's obligation to guarantee the quality of conflict prevention and early warning.

Conflict prevention initially appeared as a part of development policy. The idea was that countries afflicted by war are unable to develop, as war destroys economies and social structures (European Security Strategy, 2003, p.3-4). Over time, conflict prevention became part of several other policies as well, including the security policy, all to ensure the development of foreign countries. It was not until the failure to act during the Yugoslav war that it received a military component. The war emphasized that the economic and human costs of conflict were exceptionally high, and that the EU did not have the diplomacy or strength to manage these violent conflicts. As a result the EU started to increase its military capabilities in order to prevent similar experiences in the future. Until now, the distinction between the civilian and military parts of the EU are somewhat blurred, and there is a risk that the EU's military component is undermining the civilian possibilities, but it appears that the one cannot exist without the other. Indeed, civilian workers need military forces to protect them, and civilian workers can assist military forces in fulfilling their civilian tasks (Steward, 2011, p.38). In the end, conflict prevention became a component of the EU's security policy, which finds its origin in the Treaty of Maastricht (1992).

The Treaty of Maastricht was responsible for the implementation of the Common Foreign and Security Policy (CFSP). The core task of the CFSP was preserving the peace and strengthening the

international security (Treaty of Maastricht, 1992, art. J). Although the strength of the CFSP was still minor at this stage, it marked an important moment in the history of the treaties, for it introduced security as a new policy field in the EU. The next significant step was the Treaty of Amsterdam, which established more guidelines for the CFSP as to how it should fulfill its work and what the general principles would be of a common security policy (Treaty of Amsterdam, 1997, art. J.2). It furthermore increased the responsibilities and image of the EU towards security by appointing a High Representative for EU Foreign policy, a function that was first fulfilled by Javier Solana. However, an actual common security policy was not created until the Lisbon Treaty, which came into force in 2009. The Lisbon Treaty meant the establishment of the European External Action Service (EEAS) of which the High Representative became the authority (Lisbon Treaty, 2007, p.1). Despite the fact that the EEAS has to work in cooperation with the diplomatic services of member states and needs the approval of the Council before acting, the security program became more autonomous than it had ever been. The High Representative was now able to speak on behalf of the EU on agreed foreign policy matters. The High Representative adopted the function of the European Commissioner for External Relations and the responsibilities of the European Neighborhood Policy, changing the Common Foreign and Security Policy into the Foreign Affairs and Security Policy (Lisbon Treaty, 2009, p.2). After the implementation of the Lisbon Treaty, Catherine Ashton took over the function of Javier Solana. With these changes in the security policy, the role of conflict prevention changed as well. However, the first notions of conflict prevention date back to 1997, when the EU organized a conference on conflict prevention (Boerma, 1997, p. 1).

The aims of the conference in 1997 were to put an end to the ignorance the EU had towards conflict prevention, to stimulate the political debate, and to motivate the establishment of more concrete guidelines. The EU, as the former EU commissioner Bonino said, did not *"have the tools or the procedures to prevent violent conflicts and options for dealing with them"* (Boerma, 1997, p.1). The more official initiatives appeared in the Goteborg programme, or, the programme for the prevention of violent conflicts (2001). According to the Goteborg report, *"The international community has a political and moral responsibility to act to avoid the human suffering and the destruction of resources caused by violent conflicts"* (Goteborg Programme, 2001, p.1). The programme committed the EU to prioritize preventive action, improve early warning, early action and the coherence between the two, enhance the instruments for short-term and long-term prevention, and build strategic partnerships to make conflict prevention more effective. The programme does not give specific guidelines on how to prevent violent conflict in practice, but starts a systematic approach that would ultimately have to lead to effective early action.

Another important step towards a commitment to conflict prevention can be found in the European Security Strategy, which came into force in 2003. In this strategy, the European Council argued that, since the EU can be considered a global player, it should share the responsibility of building a secure and better world. The report concludes that preventive engagement is of specific importance because it can avoid security to come at a critical state (European Security Strategy, 2003,

p.13). However, the most important aspect of the European Security Strategy is that it developed guidelines to cooperate with other global players, such as NATO and the OSCE, to improve its security. Additionally, conflict prevention is an aspect of the EU's Neighborhood Policy (ENP) which was developed in 2004. The objective of this policy was to maintain a good relationship with countries outside of the EU, again, to improve security within and outside of the Union. A good relationship would create the possibility to address common security threats, such as terrorism and illegal arm exports, and would improve conflict prevention and crisis management due to a better mutual political dialogue (European Neighborhood Policy strategy paper, 2004, p.13). The latest important commitment to conflict prevention can be found in the Lisbon Treaty, which developed the Foreign Affairs and Security Policy. In this treaty, conflict prevention is mentioned as one of the central goals of the EU (Gross & Juncos, 2011, p.3).

Naturally, there are also specific accounts to early warning as a component of conflict prevention. As stated, the Goteborg programme focused on improving the EU's early warning and early response capacity. The programme also identified several challenges that the Council would face, including the development and coherence of the EU instruments in early warning, and the translation to successful early response (Monanaro & Schunemann, 2011, p.13-14). These challenges are once again emphasized in the European Security Strategy, where it is underlined that there is a need for early identification of risk factors to be able to address the underlying causes of conflict and successfully avoid a violent outbreak (European Security Strategy, 2003, p.7). In addition, it stressed the need for a strategy that promises correct preventive intervention (p.11). And finally, in the follow-up report on the implementation of the European Security Strategy (2008), it is explained that early warning is a central component in conflict prevention, and that it is a tool that still needs to be strengthened (Monanaro & Schunemann, 2011, p.14). Although most documents do not offer specific guidelines on how to act and whom to warn after a perceived threat, and are thus not yet fully functional, it is clear that the EU is indebted to improve its conflict prevention and early warning component.

3.2: EU Early Warning Initiatives: Tools and Institutions

There are both long- and short-term instruments to address violent conflicts. Long-term instruments belong to conflict prevention, where the main goal is to create stability that would help prevent the outbreak of violent conflict, whereas short-term instruments can be found in the field of crisis management, which is created as a tool to react quickly in cases of an immediate threat (Nino-Perez, 2004a, p.94). In a correct setting, long- and short-term instruments complement each other. Long-term instruments are there to tackle the root causes of conflict; to strengthen the economy and social institutions to reduce the chance of violent struggles in the future. In cases where the EU was unable or did not try to create stability, and violent conflict is at hand, there is a need for short-term measures, such as direct civilian or military intervention (Ibid. p.96). Since both measures are there to

complement each other, it is important that the institutions and strategies are closely linked to each other. In both cases it is necessary to predict whether conflict is imminent, and if so, when violent conflict is likely to occur. To cover both long- and short-term threats of violent struggles, the EU has monitoring missions to notice the direct outbreak of conflict, and predictive exercises to foresee the occurrence of conflict in the distant future.

Before the Lisbon Treaty the Commission and the Council had different tools and institutions to monitor and/or predict the outburst of violence. According to Niall Burgess (2004), the Commission's tools and institutions were arranged better for long-term conflict prevention, whereas the Council was particularly useful for short term measures. Both policies were connected via the Policy Planning and Early Warning Unit¹⁶ and the Directorate-General on External Relations (Burgess, 2004, p.29). After the implementation of the Lisbon Treaty the pillar system was abolished and all early warning institutes became part of the European External Action Service (EEAS), under the European Council. The difficulty in setting out the current tools and institutions is that the further influence of the Lisbon Treaty is not yet fully apparent. In 2011, the early-warning-related architecture and processes had not changed significantly (Babaud & Mirimanova, 2011, p.8); only the pillar-system had been abolished. It is therefore that the described tools and instruments will be from the pre-Lisbon period. Focusing on the pre-Lisbon period can also help the EU to make a successful change in its early warning component under the Lisbon Treaty.

3.2.1: Former tools and Institutions of the Commission

The early warning component of the Commission was mainly based within the Directorate-General on External Relations (DG RELEX) in component A, or, the Crisis Platform and Policy Coordination (Babaud & Mirimanova, 2011, p.11). Within this component, a central role was given to the Crisis Room, which had the task to serve the other units within the Commission. The function of the Crisis Room is to gather, process, analyze and provide information on the occurrence of conflict, and to assist on the EU Watchlist exercise¹⁷ (Ibid.). This means that the Crisis Room was mainly tasked to predict the outbreak of violent conflict on the medium- or long-term. The Crisis Room develops its own methods of early warning. They have, for instance, developed cluster analysis, which is intended to cluster countries that have similar conflict risks, and created the checklist for the root causes of conflict¹⁸ (p.13). Information sharing is increasingly done via the internet (Stauffacher, 2005), of which the newest development is the intranet platform Tariqa¹⁹.

¹⁶ More information about the Policy Planning and Early Warning Unit can be found in section 3.2.2.

¹⁷ The Watchlist exercise is performed by the EU Council. More information on this can be found in section 3.2.2.

¹⁸ The checklist for the root causes of conflict served as the basis for the Commission's Country Conflict Assessment (CCA) (Banim, 2006, p.272). The checklist listed several items that were considered to have an influence on the probability of conflict, such as economic management and the legitimacy of the state (Nino-Perez, 2004b, p.7-10). Every year, the EU would send the EU delegates a questionnaire to gain insight in the situation based on these items, and conclude which countries needed to be

A second institute for early warning could be found in the Joint Research Centre (JRC), which provided the EU Commission with technical and scientific support for its policies. In the JRC, one could find the Global Security and Crisis Management (GLOBESEC). GLOBESEC tests and creates analytical tools for early warning, conflict and natural disaster. Although GLOBESEC is mainly scientific, and therefore has no obligation to actually warn when there is a pending crisis, they do have the opportunity to do so (Babaud & Mirimanova, 2011, p.11). JRC has the following tools available to predict the occurrence of conflict: (1) The European Media Monitor²⁰, which monitors the news items that are placed around the world, (2) Conflict Risk Assessment models, to test what relation there is between armed conflict and socio-economic indicators, and (3) Satellite Technology, that provides information on present resources and therefore gains insight in resource driven conflicts (p.14).

There are furthermore several individual positions that assist in early warning initiatives. Within the Crisis Platform and Policy Coordination there are Crisis Response Planners who manage the Instrument for Stability (IfS) that was created in 2007. The Instrument for Stability provides countries under threat with necessary support, should other EU sources be unable to give timely financial help (EEAS, 2012). Among them are eight Regional Crisis Response Planning Officers (RCRPOs) that are stationed with the EC delegations. They are funded by the IfS and have the task to monitor stability on a regional level. Some EC Delegations have monitoring tasks as well, but this is not part of their regular tasks (Babaud & Mirimanova, 2011, p.12). Finally, there are institutes where the European Commission gathers relevant information on imminent conflict, such as ECHO, NGOs and EU Council bodies (Ibid.). According to Babaud and Mirimanova, the different institutes have not managed to cooperate fully together.

3.2.2: Former tools and Institutions of the Council

The central body for early warning and policy formulation in the EU Council was the Political and Security Committee (PSC). The PSC works primarily to coordinate crisis management operations, but also acts as a focal point for other relevant bodies, such as the Policy Planning and Early Warning Unit, the EU Military Staff (EUMS) and the EU Joint Situation Centre (Burgess, 2004, p.23). It is the central decision-making body of the Council, created by the Treaty of Nice in 2003 (Hemmer & Smits, 2010, p.12). The PSC exists of national representatives from all member states and is assisted by several working groups, such as the Politico-Military working group (PMT) (Burgess, 2004, 16). The real early warning initiatives are however performed by three other institutions.

watched more closely in the coming year. However, after three years of using the method, the EU decided to stop working with this questionnaire, for it would have a lack of support in the EU institutions, was difficult to process, and the information gathered from the questionnaire would not be objective enough (Babaud & Mirimanova, 2011, p.14).

¹⁹ In Arabic, Tariqa means 'path' or 'brotherhood'. Tariqa not only enables individuals to share relevant conflict related data, but also makes it possible to process information by making regressions and run the cluster analysis.

²⁰ The European Media Monitor can be found at: emm.newsbrief.eu

First, the Policy Planning and Early Warning Unit, or, the Policy Unit (PU), which is established in 1997 by the Amsterdam Treaty (Burgess, 2004, p.23). It was initially set up as a Javier Solana's "Think Tank" and monitored and analyzed developments in the international community (Hemmer & Smits, 2010, p.9). It helped him formulating priorities and policy options that contained recommendations and strategies for the Council (Bjorkdahl & Stromvik, 2008, p.17). After the growing threat of terrorism however, the PU lost much of its influence, for the EU started to enhance its capacity of early warning within the Council Secretariat (Hemmer & Smits, 2010, p.9). The second relevant institution is the EU Military Staff (EUMS), which was founded in 2001. The EUMS is the EU's only permanent military structure and provides the Council with military knowledge. One of its three main tasks is early warning; a group around 40 people are collecting, compiling and carrying out information on early warning from a military perspective (Hemmer & Smits, 2010, p.9). The EUMS also provides situation-assessment and strategic planning for crisis management operations (Burgess, 2004, p.24). The EUMS has to report to the highest military body within the Council, namely, the EU Military Committee (EUMC) (Bjorkdahl & Stromvik, 2008, p.16). The third important body is the Joint Situation Centre (SitCen), which is the civilian equivalent of the EUMS. It has more than 100 employees that are specialized intelligence analysts. They work closely with the EUMS, because the military-civilian division is mostly irrelevant in early warning initiatives. Both the EUMS and SitCen use qualitative as well as quantitative data (Hemmer & Smits, 2010, p.10). SitCen furthermore has a 24:7 monitoring function to keep the EU updated on current events (Bjorkdahl & Stromvik, 2008, p.19).

One of the more important early warning tools is the creation of the Watchlist. This list is composed of approximately 40 countries that are supposed to be more conflict prone and therefore need to be watched structurally. Initially, the Watchlist was based on the Checklist for the Root Causes of Conflict that was developed by the Commission, but the list is now mainly created by SitCen, in cooperation with the EUMS, the PU and some of the bodies of the EU Commission (Hemmer & Smits, 2010, p.10). The draft version has to be approved by the PSC before it is finalized. To prevent Member States from arguing about the list, the countries are listed in four risk groups instead of giving them an overall ranking. The list is fully confidential and is made every six months. The list was initially established as a means for crisis management, which means that this intelligence is more developed for short-term than long-term prevention (Banim, 2006, p.273).

Equally to the Commission's early warning institutes, the Council had several sources to gather information that is necessary to make strategic forecasts. These sources come, among other things, from the EU Institute for Security Studies and the EU Special Representatives (EUSRs) (Hemmer & Smits, 2010, p.10). The EU Institute for Security Studies is based in Paris and operates under the EU. The institute not only collects data, but also analyses it. The EUSRs monitor in troubled regions and act as EU representatives when needed. Another monitoring example can be found in the EU Monitoring Mission in the Western Balkans, which was one of the first monitoring missions of the EU Council (Burgess, 2004, p.24). According to Hemmer and Smits (2010), there is no clear hierarchy

between the different institutions, and Burgess (2004) points to the lack of a shared methodology (p.28). Thus, there are still ways to improve the coherence between the different bodies.

3.3: Cooperation with Other Security Organizations

The EU shares its commitment to conflict prevention with several other organizations, such as the OSCE, NATO, the UN and numerous NGO's. Cooperation between these organizations is not only necessary to improve the EU's success in conflict prevention and crisis management, but also to prevent the organizations to counteract each other's programs. There has been some cooperation between the EU and other organizations, but the collaboration between the EU and external actors has to be improved further. To give an example of the relations the EU has with other organizations, this section focuses on the EU-OSCE and the EU-NATO cooperation regarding early warning initiatives.

Former High Representative Solana described the Organization for Security and Cooperation in Europe (OSCE) and the EU as 'natural born partners', for they would have similar aims, their activities would be largely complementary and they shared a framework for consultation, cooperation and coordination (Wohlfeld & Pietrusiewicz, 2006, p.186). However, the extent of the cooperation is not always clear. The OSCE is a different sort of organization, because it is intergovernmental and therefore has a consensus-based, non-legally binding decision making procedure. It furthermore operates within its member states whereas the EU has a security policy that stretches beyond its own borders (Steward, 2011, p.41). Cooperation in the field of conflict prevention exists in those states where both the EU and the OSCE are present. However, they mainly cooperate in long-term conflict prevention and have not developed a structural dialogue to increase their information sharing and early warning capacity. Depending on the cases that the OSCE and the EU are working on, they might agree to share information and analysis, or not (Doyle, 2002). According to Steward, the OSCE is very open in sharing its information with the EU while the EU is reluctant to do the same. She blames this on the unwillingness of the PSC to create a complete strategy, notwithstanding that this would increase the EU's early warning capacity significantly. In 2003 the EU and the OSCE did attempt to create a more structured cooperation concerning early warning, which can be read in the EU-OSCE Council Conclusion for enhanced cooperation. This however made no structural changes in the everyday early warning initiatives (Steward, 2011, p.43).

The EU also made arrangements with NATO to improve the cooperation with the latter. In March 2003 the EU and NATO developed a Security Agreement that would secure the exchange of security information by the High Representative of the EU to NATO. However, it is unclear how much information NATO shares with the EU. NATO's situation center has links to SitCen, but would only agree to share information with SitCen when there were more tight security arrangements (Steward, 2011, p.39). The relation between the EU and NATO worsened after the US started its 'War on Terror', and NATO supported this war. Nowadays, the information sharing between the EU and NATO is mostly on military and terrorist activities, which is not very beneficial for the EU. The EU tries to

embrace multilateralism and has a civilian approach in early warning, whereas NATO focuses on the military aspects. Until now, there has not yet been a successful model in which NATO and the EU cooperate in early warning initiatives (Ibid, p.39-41).

Naturally, there have been more attempts by the EU to enhance the cooperation with other security organizations. Again, in 2003, the EU formulated a commitment with the UN in the EU-UN Joint Declaration on cooperation in crisis management (Wouters, 2004, p.391). In this agreement both organizations agreed to create a joint consultative mechanism, the EU-UN Steering committee (Jakobsen, 2006, p.181). However, for the purpose of this research it is not needed to go in-depth into the relations the EU has with other security organizations. It should suffice to indicate that there are attempts to cooperate, but that intelligence sharing is not yet continuously successful.

3.4: Early Warning Case-Studies

Within the Initiative for Peacebuilding²¹, several case-studies were conducted to analyze the EU's early warning capacity. These analyses are of particular significance because they research what actually went wrong in preventing violence rather than studying the EU's capacity solely from a theoretical perspective. This section will discuss three of these case-studies, namely, *Early Warning, Early Response? Learning Lessons From the 2010 Crisis in Kyrgyzstan* by Sebastien Babaud and Katya Quinn Judge (2011), *Conflict Early Warning Challenges in a Post War Context: The Case of the EU in Sri Lanka* by Mais Yacoub (2011), and *The EU's Potential and Limits for Early Warning in Bolivia, Colombia and Venezuela*, by Susanne Gratius (2011), in order to explain the practical downside of the current early warning institutions. All case-studies are based on literature as well as interviews with actors that were involved in the early warning processes.

3.4.1: Early Warning in the 2010 crisis in Kyrgyzstan

The first case that will be discussed is that of the EU early warning capacity in the 2010 crisis in Kyrgyzstan. The crisis emerged as a result of the rising energy prices and the nepotism of Bakiev who, at that time, held the presidency. Civilians started protesting in the beginning of 2010, leading to the exile of President Bakiev. The side-effect of these troubles was that the ethnic tension in the south rose again, and for three days, Uzbek neighborhoods were plundered, burned down and their inhabitants were killed (Babaud & Judge, 2011, p.10-12). Long before this violent conflict in Kyrgyzstan, the EU involved itself in the stability of this region by providing 118 million euro in grants, budgetary support and long term policy assistance to Kyrgyzstan. The assistance was aimed at creating stability for long-term conflict prevention and was based on the *EU and Central Asia: Strategy for a new partnership* (European Council, 2007) and the *Regional Strategy paper for assistance to*

²¹ www.ifp-ew.eu

Central Asia 2007-2013 (European Community, 2007). According to Babaud and Judge however, the EU could have anticipated this crisis if its monitoring and analysis apparatus had been arranged differently (2011, p.14-15).

The monitoring prior, during and after the crisis was arranged well in the case of Kyrgyzstan. Prior to the revolution, SitCen was observing the changes in the political, economic and environmental situation, as well as the changes in internal security and terrorist threats. During the revolution, SitCen placed one of its personnel within the delegation to ensure direct reporting to Brussels, and after the clashes it kept monitoring for numerous months (Babaud & Judge, 2011, p.15-16). However, it became apparent that EU institutes performed well regarding information flows, but did not contribute in actual conflict analysis. They did not take any 'weak signals'²² into account and the relationship between reporting and actual early warning was for most actors unclear. The interviewees considered this lack in streamlining information with actual early warning the result of the shortage in capacity, time, knowledge, guidance and instruction (p.18).

The conclusions of the case-study on early warning were therefore as follows. First, most actors did not know what their exact function was in the early warning chain. It is therefore necessary to create a more systematic way to address early warning. Second, although it was impossible to predict the outbreak of violence in April 2010, it was possible to anticipate it more by gaining insight in the underlying drivers of this struggle, such as the tensions in the inter-ethnic regions. Third, in addressing the drivers and tensions of violent conflict, it is needed to take the weak signals and local level problems into account. In the Kyrgyzstan case, the EU focused more on the broad level country situation. Fourth, the case study showed that it is still problematic to link early warning directly to early response. If actors identify security issues, they should be able to translate these into concrete and appropriate responses. And fifth, the long-term instruments that were used to keep Kyrgyzstan stable were primarily on an ad hoc basis and should have been streamlined more. The sixth and seventh conclusion that Babaud and Judge drew can be seen as recommendations towards the EU and the Kyrgyzstan case. First, they advise the EU to reconsider its early warning system, now that they are in an ongoing transfer to the establishment of the EEAS, and second, they claim that an effective early warning model within the government of Kyrgyzstan is of specific importance (Babaud & Judge, 2011, p.25-16).

3.4.2: The Case of the EU in Post-War Sri Lanka

The Sri Lankan case is of specific importance because the war in Sri Lanka officially ended in May 2009. Before that, it had suffered many periods of violent conflicts that mainly occurred between the Liberation Tigers of Tamil Eelam and the Government of Sri Lanka. The violence ended after a military

²² "Weak Signals" are those signals that not directly indicate an outburst of violent conflict, but that show increased tensions that, over time, might lead to violence or war.

battle in May, when the Government was able to overpower the Liberation Tigers of Tamil Eelam and regained its control over all areas in Sri Lanka. Nowadays, Sri Lanka is still subject to considerable challenges in its political settlement (Yacoub, 2011, p.8). The EU has been involved in Sri Lanka for many years, and in the 2007-2013 country strategy papers Sri Lanka is mentioned as a state where peace processes and poverty reduction are of specific importance (European Commission, 2007). Yacoub however concludes that there are still improvements to make in the EU's involvement in Sri Lanka (Yacoub, 2011, p.16).

The fragility of Sri Lanka is mainly monitored by the European Community Humanitarian Office (ECHO). ECHO is primarily employed to do the field work in Sri Lanka and therefore has close connections with other actors that operate within the region. This means that they have access to up-to-date and internal information on the state of the art. This information flows to bodies such as the Crisis Management team and the Crisis Response officer in Delhi and to Brussels (Yacoub, 2011, p.20). There are however several downsides to this form of monitoring. First, the information that is gathered derives from informal sources, so the quality of the information is not guaranteed. Second, ECHO does not have the capacity to analyze the collected data and third, in order to reduce the risk of misinterpretation, it is preferable that multiple approaches and multiple agencies are part of the monitoring (p.21). The most important critique Yacoub has towards the early warning in Sri Lanka however is the fact that, because the war officially ended in Sri Lanka, it is no longer on the list of priority countries. The presence and commitment in Sri Lanka is therefore limited, and there is no clear strategic analysis based on the information flow. In a post-war situation conflict risks are limited to long-term risks. This however does not mean that the monitoring can be reduced; it means that there should be another type of monitoring, one that tackles long-term threats (p.26). *"...early warning mechanisms are not designed to only be used at the outbreak of war, but to also verify an inclusive, legitimate and sustainable peaceful future, which is as appropriate now as ever"* (p.25).

3.4.3: Early Warning in Bolivia, Colombia and Venezuela

Although Bolivia, Colombia and Venezuela are all part of the Andean Community of Nations, the cases are very different from each other. In Bolivia the roots of violent conflict can be found in internal divisions, in Colombia the threat derives from the long history of armed struggles and Venezuela owes its risk to violent conflict to political polarization (Gratius, 2011, p.8). The involvement of the EU should therefore be different as well. Bolivia needs an approach to tackle its problems in social and political divisions, Colombia needs assistance to cancel the human rights abuses by civilians, and Venezuela needs a strengthening of its government (p.10). The EU has been involved in conflict prevention activities of Bolivia and Colombia, but remains almost absent in Venezuela. In all three cases however, there has been a lack of successful early warning and early response.

Due to the high rate of poverty (30.3% of the population lives below the poverty line), and the ethnic division between the indigenous and non-indigenous peoples (55% of the population is

indigenous), the main causes of conflict in Bolivia can be found in the economic and ethnic division of the Bolivian population (Gratius, 2011, p.12). There are furthermore struggles for the allocation of resources, the independence of the judiciary, the territorial divisions and the influence of the opposition in the Government. In the period of 1985-2003, over 200 individuals died as a result of violent encounters over economic and social policies. Bolivia has its own national early warning system, but theirs is not yet capable of successful warnings and therefore needs financial as well as logistic support. Because Bolivia is one of the poorest countries in the region, it receives a lot of aid from the EU, and is included in the EU Instrument for Stability and the Country Strategy Papers (p.16-18). Due to its own capacity in conflict analysis, the EU Special Representative, its connections with third parties such as NGO's, and official agencies such as the government, the EU is well aware of the situation in Bolivia. It acknowledges that there are multiple conflict patterns that could cause the outbreak of violent conflict. However, successful early warning has not yet been achieved, for the EU has a too narrow pro-government focus and lacks in coordination between the EU Delegation and its member states (p.19).

The struggles in Colombia date back to the 19th century, when the paramilitary groups and guerrillas started the violence in the region (Gratius, 2011, p.11-12). The roots of this conflict can be found in drugs trafficking, land disputes and social and territorial cleavages. Although the armed conflict is significantly reduced in the region, the new criminal gangs (called *Bacrim*) and the continued problems with drugs trafficking pose serious threats to the stability of the country (p.14). The EU particularly provides development assistance in the context of peace-building. Assistance in the military and security dimension are mostly covered by the external policy of the United States (p.17). The EU positioned a Human Rights Official in Colombia to monitor the region and has a good information flow from Colombia to the EU offices (p.19). Similar to Bolivia, the EU policy increasingly takes a pro-governmental approach. The consequences of this pro-governmental approach are however more severe in the Colombian case. By taking the same stance as the Colombian governance, the social demands of the guerillas will no longer be deemed legitimate. The conflict assessment of the EU is therefore no longer objective, but similar to that of the government of Colombia. To encounter any of these problems, the EU should either stimulate the re-activation of Colombia's early warning system, or focus on the development of its own early warning capacity in this region (p.20).

Venezuela's threat is mainly characterized by its widespread violence. In 2009, NGOs registered almost 200,000 homicides and over a 16,000 kidnappings for that year (Gratius, 2011, p.14). Contrary to most conflicts, it is difficult to identify the specific causes of the conflicts. It can however be argued that the main driving forces are to be found in the weak government that suffers from increasing political polarization. The current government is therefore unable to temper the social struggles and to strengthen its civil society. The crisis of political leadership, that followed the illness of President Chávez, did not improve the situation (p.15). The EU has become a main donor in Venezuela, but has little space to actually assist Venezuela due to its weak government. The

Government of Venezuela is reluctant to cooperate on political matters, which severely lowers the EU's capacity to make a conflict assessment (p.18-19). Although the EU is aware of the current insecurity of Venezuela, it did not include it in its Country Strategy Paper, and it has no reason to react when the threat is increasing (p.20). The blame for this poor involvement of the EU is however not only the weak government of Venezuela, but also the disagreement of countries on what to do with Venezuela. Unless this disagreement disappears, the EU is incapable of including Venezuela in its early warning initiatives.

Considering the separate analysis of Bolivia, Colombia and Venezuela, it can be concluded that the EU needs to make a clear decision regarding (the absence of) an early warning process (Gratius, 2011, p.20). The information flows between the countries and the EU offices appear to be fluent, but are lacking in actual analysis. Between 2000 and 2003, some member states used their own early warning instruments to make a forecast on Bolivia and Colombia. However, the EU still made no move to use this information in its conflict prevention policy. According to Gratius, the absence of early warning and early response in these three countries can be attributed to the narrow focus on development assistance, the lack of security interest, and the disagreement between member states (p.21).

3.5: Shortcomings in the EU's Early Warning Initiatives

According to Banim (2006), early warning systems are particularly important because they create political responsibility to act. When the occurrence of conflict is foreseen, politicians can no longer claim that they did not react because they did not know (p.273). However, it is not only political responsibility that leads to successful conflict prevention. As explained in this chapter, there are still a lot of shortcomings in the EU's early warning initiatives. This section will give an overview of the main weaknesses within this field.

As seen in the cases of Sri Lanka, Bolivia, Colombia and Venezuela, the information flows between the local level organizations and the EU offices are fluent. It lacks however in clear strategic (trend) analysis which is needed to anticipate potential conflicts. The explanations Yacoub and Gratius give for the missing analysis in the cases is that Sri Lanka is seen as a post-war country, and that there is a too narrow focus on development assistance, a lack of security interest and a disagreement between the member states in the cases of Bolivia, Colombia and Venezuela. However, regardless of these explanations, the EU early warning initiatives should translate information in (trend) analysis to achieve their intended success in conflict prevention. Looking at the tools and institutions the EU has for early warning, a comparable conclusion can be drawn. There are institutes and tools that are set up to analyze trends and to forecast the occurrence of conflict, such as the Council based SitCen, but these analyses are more on short-term than on long-term basis. According to Burgess (2004), the timeframe for early warning is a six to twelve month perspective (p.28). This is also the case in the 'Watchlist' analysis, which examines the stability of countries twice a year (Banim, 2006, p.273). In

addition, Steward (2011) mentions the flawed balance between the long-term and short-term analysis and policies within the EU (p.45), and Gross and Juncos concluded that the EU increasingly takes a crisis management rather than a conflict prevention approach (2011, p. 152). Thus, current early warning initiatives are more suitable for short-term crisis management than for long-term conflict prevention, while both deserve equal attention.

There are furthermore several critiques on the indicators that are being used in early warning initiatives. As explained in the Kyrgyzstan case, the EU failed to focus on the weak signals and local level problems and was therefore unable to anticipate the violent outbreak in April 2010 (Babaud & Judge, 2011, p.25-26). According to the authors, the EU tends to focus on a broader country level situation instead of the local cleavages, notwithstanding that local cleavages can pose the same threat to (inter)national security. Additionally, using the correct indicators can help translate early warning signals in early response. If a perceived threat is indicated too broadly, the consequences of this threat will not be apparent, leading to an incapability to give a suitable early response (Montanaro & Schunemann, 2011, p.25). Early warning should therefore be precise, and should mention how the perceived consequences impact the interest of the EU (p.27). Thus, the indicators that are being used in early warning initiatives need further elaboration.

Another way in which the EU can improve its early warning capacity is by strengthening the relations between its own institutions and the relation with external security organizations. Both Hemmer and Smits (2010), and Babaud and Mirimanova (2011) claim that the different EU institutions do not operate fluently together (p.12). According to Hemmer and Smits, the hierarchy between the different institutions is unclear, which would prevent successful cooperation. The critiques towards the cooperation with other security organizations are that NGO signals are not included sufficiently in EU early warning (Montanaro & Schunemann, 2011, p.26), and that information sharing with security organizations such as NATO should get a permanent place rather than operate on an ad-hoc basis (Stewart, 2001, p.44). Yacoub (2011) expresses the need for multiple agencies and approaches in monitoring regions to reduce the risk of misinterpretation in Sri Lanka (p.21). By strengthening the relations between different institutions, this recommendation can be implemented. Increasing the cooperation between different institutions might also be useful in the Kyrgyzstan case, where long-term instruments to prevent violent conflicts are not implemented successfully yet due to the lack of streamlined policies (Babaud & Judge, 2011, p.25-26).

Furthermore, Montanaro and Schunemann (2011) noticed that there is a lack of knowledge within the EU staff on early warning (p.24). After conducting several interviews they concluded that the EUSRs, who promote policies in troubled regions, lack training in mediation, conflict sensitivity and early warning. This same lack of knowledge is seen in the Kyrgyzstan case where most actors were unaware of their exact function in the early warning process (Babaud & Judge, 2011, p.25-16). This means that the EU should increase its focus on the education of its staff-members, and make them aware of their role within the bigger operation of conflict prevention.

The final problem in EU early warning initiatives has already been touched upon in the introduction of this research, namely the gap between early warning and early response. Because the benefits of conflict prevention lie in the future, it is difficult to create the political will to engage in early response (Cameron, 2003, p.1). Cameron furthermore points out that early warning has no value without early response. Linking early warning to early response could overcome the gap between the two. Babaud and Mirimanova (2011) list a similar shortcoming in EU early warning initiatives. They claim that the lack of an overall strategy on what to do after a warning, and what to prioritize, is underdeveloped (p.17). Several conferences addressed the issue of early response, for instance the *European Conference on Conflict Prevention* held in 1997. However, as seen in the Kyrgyzstan case, the friction between early warning and early response remains an important shortcoming of the EU early warning initiatives (Babaud & Judge, 2011, p.25-26). The authors explain that this problem could be solved by translating security issues directly into concrete and appropriate responses. Regardless of the solution that will be found, linking early warning to early response is still important if one wishes to improve contemporary efforts to prevent violent conflicts.

To conclude, there are at least nine problems in current EU early warning initiatives, namely, (1) the early warning initiatives are more occupied with information flows than actual analysis, (2) there is more focus on short-term early warning and policies than long-term analysis, (3) the indicators that are used for early warning fail to include local and weak signals, (4) the information derived from early warning analysis is too broad, (5) 'complicated' countries are left out of the early warning system, (6) the early warning system is unable to adapt to different conflict situations, (7) the relations between the EU institutes and the relations with other security organizations needs to be strengthened, (8) the EU staff is not properly educated in early warning and they do not know their place in the early warning chain, and finally (9) there is a gap between early warning and early response.

Chapter 4: Future-Oriented Thinking

Many societal, political, technological, environmental and economic developments influence all countries as well as all the policy areas. In order to be able to deal with these challenges, national, international and supranational organizations should develop a new culture in which future-oriented thinking is included (Havas, Schartinger & Weber, 2010, p. 92). This future-oriented thinking should be part of the policymaking processes, both within and outside the early warning processes, as this is the space where one can anticipate and change possible futures. Havas, Schartinger and Weber (2010) furthermore argue that foresight can have a crucial part in early warning systems for it can be used as an instrument for creating a 'learning society', or, as they explain, a space to review existing policies and improve them where possible (p.93). Foresight encompasses all the qualitative methods to explore the events of the future, including scenario analysis. It contrasts itself with forecasting, which tries to predict the future rather than explore it. Since the discussion between forecasting and foresight is important when choosing a method to shape and debate the future, this chapter will focus on the definitions, history, benefits and disadvantages of foresight studies. Foresight will hereby be contrasted with forecasting.

4.1: Foresight and Forecast: Definitions

The future does not exist in the material or concrete sense, it is a space that resides in the mind and can only be approached through theoretical methods. Scientific approaches that try to study the world by observations, such as positivism, have no place in future studies because there is nothing to observe (yet). Although future studies reside in the human mind, it is not a field that exclusively exists in one's imagination. Since past and present actions influence the future, futurists are able to base their theories on past and present developments. Within future studies it is possible to make a distinction between forecast and foresight. In forecasting, one tries to predict the future, whereas in foresight the activity is to explore it. Forecast is therefore the predictive style and foresight the exploratory (Asselt, van 't Klooster, van Notten & Smits, 2010, p.23). The predictive style aims to produce specific statements on the likelihood that a certain event is going to happen in the future and which indicator is responsible for that specific event. The future is hereby assessed by researching current trends and prolonging these trends towards the future by using quantitative models (Ibid.). In early warning systems, the result of a prediction exists of the likelihood that a conflict is going to occur, and why. There are two types of forecasting that both have very different prospects: unconditional forecasts and contingent forecasts (Schrodt, 2002, p.3). In unconditional forecasts the future is predicted under a *ceteris paribus* condition. The future is explored as if the current trends will not be disturbed. This method of predicting the future is very problematic for social sciences because in a complex social world trends will never be linear. Contingent forecasts research the 'what if'

question. In this form of forecasting variables are manipulated in order to establish proper causal relationships (Ibid.).

Especially within the latter type of forecasting there is a lot of research on making the predictions as accurate as possible. In Sean O'Brien's *Crisis Early Warning and Decision Support: Contemporary Approaches and Thoughts on Future Research* (2010), which is considered to be one of the best books on the state-of-the-art of technical forecasting, the first phases of the U.S. integrated conflict early warning system project are reviewed. This review shows that the project produces highly accurate forecast in complex social setting by combining theories from the social sciences with statistical analysis (p.87). Contemporary technical forecasting is mostly employed by using Bayesian Model Averaging²³ to provide accurate knowledge on the conflicts that will occur (Personal communication with Schrodt, 2012). Key articles on the Bayesian model are Jacob Montgomery and Florian Hollenbach's article *Improving Predictions Using Ensemble* (2011) and Patrick Bentley, Stephen Shellman and Brian Levey's *Improving ICEWS Models: Forecasting Events of Interest Using Ensemble Methods*²⁴. Particularly the last article is employed to develop models that predict the occurrence of conflict. There are two important examples of quantitative models that were developed at the beginning of technical forecasting and therefore are less applicable to complex social settings. These are the military's *Analyzing Complex Threats for Operations and Readiness* (ACTOR)²⁵ and the *Political Instability Task Force* (PITF)²⁶.

Contrary to forecasting, foresight does not try to predict the future (UNIDO, 2005, p.9; Matveeva, 2006, p.11; Havas, Schartinger & Weber, 2010, p.92; Asselt et al., 2010, p.23). Instead, it explores the future by describing different ways in which the future might evolve. As opposed to the assumption that the future is predetermined, foresight researchers believe that the future is inherently uncertain (Havas, Schartinger & Weber, 2010, p.92), and that actors are able to shape the future that is at hand (UNIDO, 2005, p.9). They furthermore believe that the foresight process helps to create hybrid networking and assists in overcoming established geographical, institutional and disciplinary

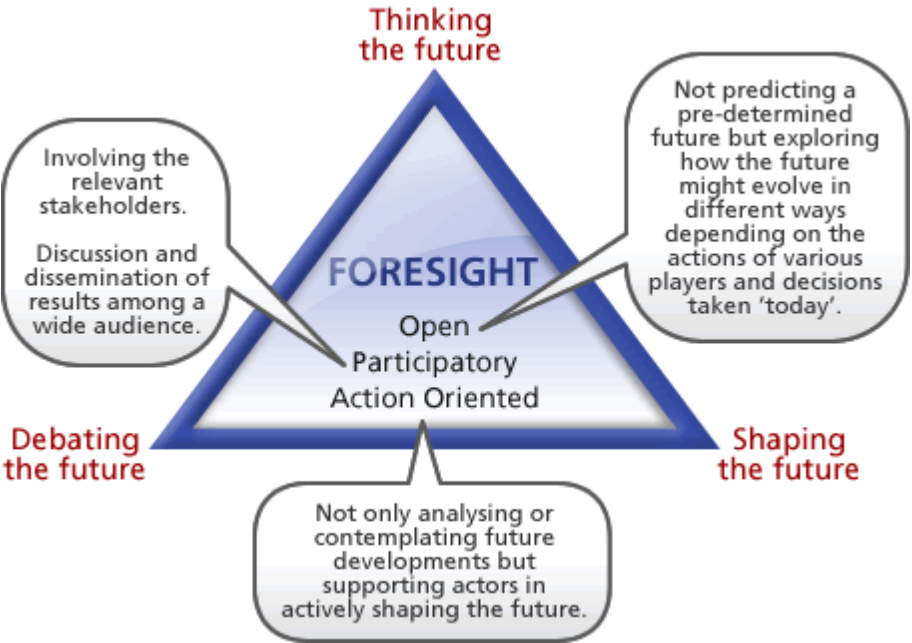
²³ Bayesian Model Averaging "offers a systematic method for analyzing specification uncertainty and checking the robustness of one's results to alternative model specifications" (Montgomery & Nyhan, 2010, p.1).

²⁴ The article by Bentley, Shellman and Levey is currently circulating for the Political Instability Task Force. It is not yet published but has a significant influence on the current discourse in forecasting.

²⁵ The ACTOR model employed a regression analysis according to the following equation: Intensity of Conflict = F (percentage history spend in state of conflict, infant mortality rate, trade-openness, youth bulge, civil liberties index, life expectancy, political rights index, democracy, religious diversity, caloric intake, GDP per capita, diversity). For each of the 13 variables, data was collected for approximately 160 countries in the years between 1975 and 1998. It consisted of almost 30.000 observations. It aimed at predicting the counties conflict level between 2001 and 2015, and research how much weight each variable had on the intensity of conflict. It is reported that the ACTOR model has an 80% accuracy level (Lofdahl, 2010, p. 185).

²⁶ The Political Instability Task Force (PITF) is funded by the US based Central Intelligence Agency (CIA) and created a list of state-failures for the period 1995-2006. They assumed that four types of conflict events were able to create state failure, namely, revolutionary wars, ethnic wars, adverse regime changes and genocides (Naude & McGillivray, 2011, p.6). For a full overview of the methodology they used, see the article: Goldstone, J.A. et al. (2010), "A Global Model for Forecasting Political Instability", in: *American Journal of Political Science*, Vol. 54, No.1, pp.190-208, or: <http://globalpolicy.gmu.edu/pitf/>

boundaries (Barre, 2001, p.73). There are roughly four characteristics that distinguish foresight from other future studies (ForLearn, 2009a)²⁷. First, foresight is action-oriented. This means that foresight activities need to be connected with possible actions that can shape the future. If there are no activities that one can take to shape the future, there is no need to perform a foresight study. Second, foresight activities are open to alternative futures. As explained above, foresight assumes that the future is inherently uncertain. It therefore explores the different ways in which the future might evolve, knowing that another future might as well be surfacing. Third, foresight studies have a participatory process. Within the foresight exercise, a group of experts or a number of actors that are connected with the issue at stake enter into a discussion on what they believe will happen in the future. The results of a foresight study will be based on the conclusions of this discussion. Fourth, foresight studies are interdisciplinary. Because the future is shaped by influences from a huge variety of disciplines, including technology, societal developments and the environment, all of these processes are included in the foresight study in order to give an adequate picture of the future²⁸. The European Foresight team²⁹ of the Joint Research Centre created the following picture to visually demonstrate the most important aspects of foresight:



Source: European Foresight Team (2009)

²⁷ The Joint Research Centre created an online foresight guide, ForLearn, which lists, among other things, these characteristics of a foresight exercise. The foresight guide can be retrieved on: http://forlearn.jrc.ec.europa.eu/guide/0_home/index.htm

²⁸ For an example of foresight studies, see paragraph 4.6: Security Foresight in the EU.

²⁹ The European Foresight team is part of the Knowledge for Growth (KfG) unit of the JRC-IPTS and applies foresight to enable the KfG to anticipate (changes in) the future. For more information, see: <http://forera.jrc.ec.europa.eu/index.html>

Because foresight discusses alternative options and brings different communities and stakeholders together, the European Commission lists the following three benefits of foresight for Europe: (1) foresight assists in making choices in complex situations, (2) the decision-making process in foresight activities is more transparent due to the inclusion of relevant actors, and (3) foresight is able to create a shared understanding and vision on the (preferred) future (European Commission, 2002, p.20).

As explained in the theoretical framework (Chapter 1), this research shares the opinion that actors are able to influence and shape the future. Obviously, without sharing this opinion, early warning initiatives would be useless. There are also examples in which timely warning for pending conflict led to a change in the future, such as the Early Warning for Violence Prevention Project in Kazakhstan. The project-members alerted the Kazakh parliament and government about potential conflicts along the Kyrgyz-Kazakh population, leading to successful preventive actions (Nyheim, 2009, p.58). But even without deliberate intervention, the course of the future might be changed due to external factors, such as changes in the environment or in the socio-economic situation, and break the linear trend towards a certain point in the future.

4.2: Foresight and Forecast: The Debate

"Qualitative scenarios can have a richness that is not bound by quantitative methods. They can explore relationships and trends for which little or no numerical data is available, including shocks and discontinuities; they can more easily incorporate motivations, values, and behaviour; they can create images that capture the imagination of those for whom they are intended." [COST 2002]

There are various arguments in favor of either foresight or forecast, and different methods that can be used to perform a future study. It is important to note that forecast and foresight methods not necessarily exclude one another. In some cases quantitative data is used to underpin the findings of a foresight study, and vice versa. Especially in studies that have a clear warning purpose, of which early warning is a part, there is a tendency to use both quantitative and qualitative methods. This part will shortly reflect on both methods and discuss the advantages and disadvantages of both.

In a personal conversation with Philip Schrodt, who works with providing statistical models to improve the success of early warning at the Peace Research Institute Oslo (PRIO), he explained that the main argument of using statistics over expert judgment is that statistical models are able to give precise and accurate knowledge about future developments. The main reference that is used to argue against human prediction is Philip Tetlock's *Expert Political Judgment* (2005). A more recent and more general work on this topic is Daniel Kahneman's *Thinking, Fast and Slow* (2011). Both argue that humans tend to think that they are accurate in predicting the future while in fact they are not. To achieve accuracy in researching what is going to happen, actors should use computer generated analysis. David Nyheim (2009) also argues that accuracy is the main strength of forecasting. Besides accuracy he lists two additional benefits of quantitative models, namely: (1) the results of a

quantitative study have immediate policy value, for the outputs are easy to read and understand, and (2) quantitative studies include a large number of indicators and can therefore provide pointers for policy programming (p.39-44). However, it is questionable whether those characteristics of quantitative future studies are of high importance to decision-makers and the early warning apparatus. Regarding accuracy, Taleb (2007) claims that *"out of close to a million papers published in politics, finance and economics, there have only been a small number of checks on the predictive quality of such knowledge"* (cited in: Nyheim, 2009, p.44). And if individuals do not check whether the predictions were correct or not, there seems to be no interest in accuracy. Furthermore, the fact that the outcome of research is highly accurate does not mean that the results of this research are useful. For example, when a country is listed as becoming unstable, it is relatively easy to bind policies to that. But when a country appears to end either in a stable or unstable state; when there is no increased likelihood for the one or the other, decision-makers have no guidance on what to do with that country. The question that will help decision-makers is what causes a country to be stable or unstable; it will not help to know that there is a 50% chance that the relevant country is going to experience instability (Goldstone, 2008, pp.3-6). In addition, quantitative models are based on average outcomes of countries and can therefore not conclude what the weights of individual factors are on the stability of a country. There is however one way in which accuracy is important, namely, if foresight studies cannot prove to be accurate, decision-makers are likely to be reluctant in responding to the perceived threats.

As for the easiness to understand the research output of a quantitative research, Campbell and Meier (2007) argue that many decision-makers do not understand statistical research and are therefore reluctant to take the outcome serious (Campbell and Meier, 2007, p.4). The usefulness of quantitative methods for policy purposes would therefore be limited. Another shortcoming of forecast is explained by Alexander Austin (2003), who argues that many causes of conflict are not measurable outside of the individual mind. For example, grievance can have a large influence on the occurrence of conflict, but cannot be measured empirically. To measure factors as grievance, qualitative methods are required. Furthermore, because grievance resides in the human mind, it is subject to an ever-changing environment (p.16-17). Consequently, quantitative research is unable to include all causes of conflicts and does not include enough indicators when predicting the incidence of conflict. Finally, when performing quantitative research, there is a focus on the results rather than the process of the study. However, the process of thinking about the future can have significant benefits to the policies that are supposed to change the future. When including relevant actors to a foresight exercise, it is possible to align the ideas of the actors, to create transparency, to stimulate individuals into shaping the future, and to create support for the policies that will be based on the foresight workshop.

The focus on the process or foresight rather than the outcome in early warning initiatives was recently developed by the Bureau for Crisis Prevention and Recovery and the UNDP. Particularly development agencies, which implement policies in conflict-affected regions, underline the importance of the process, because a participatory process has influence on consensus building, leading to a

better capacity in early response (Nyheim, 2009, p.44-45). This benefit is of specific importance in post-conflict regions, such as Indonesia and Fiji, where the trust between individuals needs to be strengthened. The other benefits of qualitative methods are as follows. First: qualitative research provides a rich contextual analysis (p.14); second: the analysis is simple enough for policy-advisors to understand and implement; third: the results provide information about planning and evaluation of policies which helps agencies to improve their programs; and fourth: they can have a participatory approach that includes stakeholders more directly (p.47). The main weakness of qualitative approaches is that it has a huge potential for subjectivity (Matveeva, 2006, p.14). Since the analysis is fundamentally based on personal judgment, there is an increased risk that the results are influenced by either a lack of knowledge, or a personal opinion on the situation. This might damage the objective outcome of the foresight study. Furthermore, the exact degree in which elites are either in harmony or conflict is difficult to determine based on qualitative information (Goldstone, 2008, p.6). Other shortcomings that are generally listed are that the analysis tends to oversimplify the complexity of conflict, that the studies vary extensively on the rigorousness in which they are performed, and that, since qualitative research does not employ trends, there is a risk that the analysis only applies to that particular moment in time (Nyheim, 2009, p. 47).

However, as Goldstone (2008) points out, the problem with biases, or insufficient data, is a concern for both quantitative and qualitative research (p.6). Nevertheless, it seems likely that qualitative research is more prone to biases, since it is fully based on expert knowledge whereas quantitative data only makes choices regarding the indicators and data they use. As for the other critiques, that the analyses tend to oversimplify reality, that the studies vary extensively on the rigorousness in which they are performed, and that there is a risk that the analysis only applies to a particular moment in time, these are problems that are true for both qualitative and quantitative research. The critique that trends are not employed in qualitative research appears untenable as well. When discussing possible futures, actors can take the past and the developments of the past towards the present into account. What remains is that there is a difficulty in measuring the exact degree in which one can speak of harmony or conflict between struggling parties, and a higher likelihood that the results are biased and based on incorrect knowledge. It is possible to fill this gap by combining both quantitative and qualitative methods, like Goldstone proposes in his article *Using Quantitative and Qualitative Models to Forecast Instability* (2008). Bearing in mind the research question, this research will build further on foresight as a method to study the future. To what extent and in what way the shortcomings of foresight will be solved when someone implements the method in an early warning system will be discussed further in Chapter 6 and in the conclusion.

4.3: Methods to Perform a Future-Oriented Study

Apart from scenario analysis there are several additional methods to perform a future-oriented study. The online foresight guide of the JRC gives an overview of eighteen contemporary methods to carry

out a future study³⁰. Examples of these methods are SWOT analysis, Gaming and the Delphi Method. In SWOT analysis, the strengths, weaknesses, opportunities and threats (S.W.O.T.) of a particular organization or region are identified and categorized. The analysis is employed to match a firm's or region's resources and capabilities to the challenges and threats it will face in the (near) future. It is a qualitative and exploratory method and contributes to the strategic planning process (ForLearn, 2009). In Gaming, individuals reconstruct potential events of the future, mostly by performing a role play in which people have to represent one another. This process educates individuals as to how the planning process works and what the views and opinions of others are. It is therefore a methodology that both researches future developments and enhances the cooperation between different actors (Ibid.). The Delphi Method has close links with scenario planning. It is a method that combines qualitative and quantitative results and it consists of exploratory, predictive and normative elements. In order to investigate the course of the future, researchers perform structural surveys that draw on expert analysis. It thereby assists in identifying and prioritizing policy goals. The method is mainly used in Technology foresight studies, but can also be applied to other topics such as social developments (Ibid.). As this research focuses on the extent to which scenario analysis can contribute to the improvement of the European Union's early warning initiatives to prevent violent conflicts, there will be no further elaboration on these different methods. The overview, which can be found in Annex 1, exclusively serves as background information on the diverse methodologies within future studies.

4.4: Trends in Conflict Early Warning and Foresight

Foresight processes as well as early warning initiatives have acquired a prominent role in decision-making over the last decades. The historical trends related to the commitment of the EU towards conflict prevention and early warning are briefly discussed in paragraph 3.1. There are however several general trends in the development of early warning initiatives and conflict foresight exercises that not only apply to the EU, but also to other inter-governmental, governmental and non-governmental organizations. This part will shortly reflect on these general historical trends, showing the increased importance of foresight and conflict early warning. The section will firstly focus on the development of foresight, and secondly on the developments in conflict early warning.

According to Eriksson and Weber (2008), foresight is particularly important in relation to science and technology policy, but also to other long-term, uncertainty-ridden policy issues (p. 465). When describing the history of foresight, they capture three trends that have shaped contemporary foresight exercises. First, as a result of the general consensus that linear predictions are not accurate in predicting the future, there has been a broadening of the scope of forward-looking exercises (p.466). Second, with the aim to create consensus on the desired future and to create transparency in policy issues, foresight increasingly became a participatory activity. And finally, the aim of foresight

³⁰ This overview can be found in Annex 1.

has, in some cases, shifted from predicting the future towards shaping the future. Instead of creating the desired future, foresight is used to map different opinions about relevant issues, enabling actors to see what the future might look like and to anticipate to this future (Ibid.).

Prior to the actual development of conflict early warning systems, there have been attempts to apply forecast to international relations theory to predict the outbreak of violent conflicts. Two important works are Singer and Wallace's book *To Augur Well: Early Warning Indicators in World Politics* (1979), which discusses the general threats of war and interstate conflicts, and Charney and Charney's chapter *How Can We Commit the Unthinkable?* (1982), that was written to develop an early warning model for genocide prevention. However, the development of conflict early warning is mainly driven by humanitarian agencies, such as the UNHCR, that needed predictions to anticipate refugee flows, and the international failures to respond correctly to the Cold War, the war in Rwanda and the Yugoslavian war (Nyheim, 2009, p. 26-29). One of the trends that is visible in conflict early warning is accurately captured by Adelman, who states that: conflict early warning *"followed the pattern of climate and humanitarian-based early warning systems in adopting a global perspective and not looking at potential or actual violence from the perspective of the threat to one's own state"* (cited in Nyheim, 2009, p.30). Another important trend is explained by Kumar Rupesinghe. He argues that there is an increased tendency to position early warning systems inside the region that is being monitored (Matveeva, 2006, p.10). This way, information can be gathered and analyzed directly in relation to the relevant region, without relying too much on the perception of the West.

4.5: Requirements of a Valid Foresight

From the definitions discussed in section 4.1.1, it can be argued that a foresight is valid if it is (1) action-oriented, (2) open to alternative futures, (3) participatory and (4) multidisciplinary. However, several authors, such as Bobrow and Azar, discuss other requirements for a valid foresight. This section will briefly reflect on these requirements for a valid foresight study.

According to Bobrow, forecasts³¹ are useful because they enable individuals to shape their personal and collective future the way they want it to be (Bobrow, 1978, p.37). This means that the usefulness does not derive from the fact that predictions are accurate, but that the process gives individuals the opportunity to think about and work towards a preferred future. Therefore, it is not accuracy, but effectiveness that should lead a foresight exercise. Bobrow discusses six considerations that, according to him, should be taken into account when performing a forecast exercise, namely, importance, utility, timeliness, reduction of uncertainty, relevance, and durability (p.39). When

³¹ Although Bobrow uses the concept 'forecast' instead of 'foresight', it is possible to position him in the foresight tradition. Bobrow shares the opinion that the future cannot be predicted through linear analysis and draws on expert knowledge to explore the future. However, foresight was not yet distinguished from forecast when he wrote this article, making him unable to differentiate between the two.

considering importance, the forecaster should identify to what extent the forecast exercise identifies factors that are potentially manipulable. The more potentially manipulable factors can be identified, the more important the forecast exercise is (p.40). Utility deals with the direction of the potentially manipulable factors. If the forecast identifies a future that is preferable over the otherwise probable future, there is a positive utility. If the results are less preferable than a changed future, there is a negative utility. Timeliness refers to the time when the forecast is supposed to be done. A forecast is timely when, after performing the forecast, there is sufficient time left to alter the future into the preferred future. This means that timeliness is related to importance and utility in such a way that the timelier a forecast is, the more potentially manipulable factors are present, and the more likely it is that there will be a positive utility (p.41). Reduction of uncertainty refers to the fact that forecasters should reduce uncertainty as much as possible. They are supposed to do that in two ways. First, a forecaster should research the likelihood that one future is going to exist compared to the likelihood of the occurrence of other possible futures, and second, a forecaster should explain the extent in which the manipulation of one factor can lead to a preferred altered future. When considering relevance, one should identify which aspects of the future are relevant to the ones that will use the forecast, and finally, discussing durability, the forecaster should reflect on whether new information will make significant changes to the expected future (p.43). Bobrow also makes an important statement about forecasts with a warning purpose, of which early warning initiatives are a part. He states that when the purpose of a forecast is to warn for a potential event, forecasters need to provide explicit and reliable statements about what is going to happen when in the future (or in a specified range of time). Their effectiveness is increased when the forecasts can notice a change in the probability of a certain event occurring or not occurring after several forecast exercises (p.45).

In a later article, Edward E. Azar (1978) adds two additional considerations to Bobrow's list, namely, accessibility and cumulateness. With accessibility it is meant that knowledge must be present, readily usable and inter-subjectively transferable to concrete situations (Azar, 1978, p.224). Cumulateness refers to the fact that new knowledge ought to build on previous findings in order to multiply already existing knowledge. In contemporary literature, only timeliness remained as a requirement for a valid foresight. Rupesinghe (1989) underlines the need for timely predictions because only when a prediction is timely, it is possible to change an unwanted future (p.185). Considering that the usefulness of foresight and early warning initiatives are captured by the possibility to shape one's future, the possibility to shape the future should be given substantial attention. Matveeva (2006) also points at the need for timely predictions, albeit in relation to early warning. He states that, for a warning to be most effective, it should be done in the earliest stage as possible, again, to have time to alter the predicted future. In addition, Bobrow's basic perception, that not accuracy but usefulness is the guiding principle in future studies, remains important. However, modern authors increasingly refer to the requirements for a valid foresight as explained in section 4.3.1, namely, that foresight exercises need to be action-oriented, open to alternative futures,

participatory and multidisciplinary³². This research will therefore consider these four requirements, and timeliness, as the main necessities for a valid foresight. Bobrow's guiding principle, that not accuracy but usefulness should be the focus of study, will be adopted as well. As explained before, in an ever changing social world, accuracy is an unattainable requirement.

4.6: Security Foresight in the EU

The EU is not reluctant to use foresight as a method to determine which broader threats the future might bring. Some of the topics that have been addressed using foresight are the trends in ICT, Climate Change, Migration and Transportation³³. Because these studies only focus on the threats on regional and global levels, they are not (yet) suitable to institutionalize in the early warning apparatus that requires a study of more local level conflict indicators and explorations of the future in smaller geographical regions. Using foresight as a methodology in EU security studies is relatively new, which means that the experience is limited. This part will shortly reflect on the important documents and projects of the EU's security foresight exercises to provide insight in the state-of-the-art.

There have been several attempts to combine the results of foresight studies in order to determine what the future challenges for Europe are. One of the first significant efforts is the article *The Future Challenge for Europe: Providing Security and Safety to Citizens* (2008). This study examined 36 foresight reports from national and European origins and concluded that there are three foremost security and safety issues for the future: IT security, terrorism and climate change. The main concern regarding IT security is towards the protection of privacy in terms of data-loss and the use of ambient intelligence³⁴, RFID chips³⁵ and wireless networks. The threat of terrorism derives from the enlarged use of computer networks, which makes organized crime easier, and the increased proliferation of NRBC agents, ballistic missiles and small arms. Finally, climate change will most likely cause floods, storms and other weather anomalies. It is expected that this will lead to the need for new management strategies to cope with resulting migration flows and conflicts (EFMN, Foresight Brief 134, 2008). Although this study only used a restricted number of resources, its importance is far reaching because it provided a more comprehensive view on future European security challenges.

Another attempt to combine the results of foresight studies can be found in one of the papers that were written for the conference *Sharing Visions on Europe in 2030: Lessons from Comparative*

³² See for example: Havas, Schartinger & Weber, 2010; Matveeva, 2006; Eriksson and Weber, 2008.

³³ <http://ec.europa.eu/dgs/jrc/index.cfm>

³⁴ Ambient intelligence "refers to a vision of the future Information Society in Europe where people are surrounded by intelligent intuitive interfaces that are embedded in all kinds of objects and an environment that is capable of recognising and responding to the presence of different individuals in a seamless, unobtrusive and often invisible way" (Punie, Maghiros & Delaitre, 2006, p.2).

³⁵ RFID (radio-frequency identification) describes a system in which the identity of an object or person can be transmitted by using radio waves. Chips can be applied to pets or payment cards, such as the SpeedPass. Nowadays, RFID is also used in biometric technologies for security (AIM, 2012).

Approaches of Recent Foresight Exercises (2010). The authors observed a total of four common points in recent defense and foresight studies that would likely shape the future of security policy. The first observation was that the risks of the future will most likely be posed by human actions, technological change and environmental factors instead of more state-centric threats such as interstate war, which used to be relevant. The second point was that most security foresight studies expected an increase of resource based conflicts for the future. The third observation was that most reports pointed at the increased vulnerability of Europe to technology and the misuse of technology due to its growing dependence on it. The fourth and final shared vision they found addressed the risks that evolves from the changing nature of knowledge production and use (James & Teichler, 2010).

In 2002, the European Commission presented a report on the role of foresight for Europe, *Thinking, Debating and Shaping the Future: Foresight for Europe* (2002). The aim of this report was to strengthen the basis of the European Research Area (ERA), which was of particular importance due to the Lisbon Strategy, the upcoming intergovernmental conference, the reform of the European Governance and the development of the ERA (European Commission, 2002, p.8). The report concluded that foresight processes on the European level would: (1) reduce the distance between research and society, (2) improve the European Union's approach in both strategy and coordination, (3) increase the cooperation and communication between different sectors that work on EU issues, and (4), enhance the level of democratization of EU policy (p.24). As a follow up of this report, the Joint Research Centre started the EUROFORE project a year later which was aimed at mapping foresight competence in Europe (Keenan, Abbott, Scapolo & Zappacosta, 2003). The project was based on the idea that collecting all foresight experiences in Europe would stimulate the exchange of knowledge and prevent national organizations from performing the same researches. It would furthermore guide the EU in creating a European foresight community (p.5). The actual establishment of a foresight community started with the founding of the European Foresight Monitoring Network and ForLearn, which merged into the European Foresight Platform³⁶ in October 2009. The European Foresight Platform was created under the 7th Framework Programme and is aimed at providing a forum for exchanging ideas and knowledge on foresight and other future oriented studies.

In addition to this, the EU facilitated three important foresight studies to further develop the security dimension of Europe, namely: ESRIF, FORESEC and EU-GRASP. ESRIF (European Security Research and Innovation Forum) was organized by the 27 EU Member States and the European Commission and existed from 2007-2009 (ESRIF, 2009, p.11). Its aim was to define the mid- and long-term needs in the European security research and innovation sector (p.3). The ESRIF project laid the foundations for the civil security research theme in the EU's 7th Framework Programme for Research (p.45). ESRIF addressed a total of 11 thematic areas (p.46), of which the fifth, the foresight and scenarios area is the most important for this research. With a time horizon to circa 2030, the foresight and scenarios workgroup identified four general trends towards the future in the following

³⁶ See: <http://www.foresight-platform.eu/>

international issues: (1) global economy, (2) EU's wider neighborhood, (3) social cohesion in EU, and (4) global politics (p.126).

FORESEC (Cooperation in the context of Complexity: European Security in the Light of Evolving trends, Drivers, and Threats, 2011) is considered to be the EU's first real foresight activity that is related to security. According to the report, foresight activities in the field of security have been carried out almost entirely at the national level. The central aim of *FORESEC* was to streamline the views of the security concept, and to create a shared vision on current and future threats for European security. It tried to shift the national perspective of security into a shared pan-European one, since cooperation on the EU level would generate a variety of benefits. The EU would "*hold the promise of a holistic and comprehensive security policy and security research*" (p.17). The project underlined the need to further develop the EU's role in security, for there is still a lot of public support to strengthen the role of the EU, and, considering the goals of the Lisbon Treaty, security has to be seen as a comprehensive whole rather than a combination of fragmented national researches.

The most recent foresight exercise related to the security field is the *EU-GRASP* (2012) project (The EU as a Global-Regional Actor in Security and Peace). It researched the role of the Union in regional and global peace and security studies and used scenarios to give concrete policy advice as to how the EU could improve its external security relations and multilateral approaches to threats and challenges. They concluded that the EU has the appropriate desire to play an essential role in global and regional peace and security in an environment of multilateralism, and that there are three determinants that will shape the EU's influence: willingness, capacity and acceptance. In order for the EU to fulfill a central role, it should stay focused, remain flexible and react fast. The requirement of flexibility hereby refers to abolishing the one-size-fits-all strategy and to seek partnerships with international organizations; focused relates to the opinion that the EU should consider what to include in its policy, because it has limited capacities to include everything. The requirement of reacting fast comprehends to the lack of internal cohesion that leads to a passive decision-making process.

The conclusion that can be drawn is that the EU acknowledges the importance of foresight for its security department, but that it mainly focuses on broad country threats. They are therefore not applicable to the early warning system that tends to focus on the chance that in a certain region or country violent conflict is likely. Furthermore, the foresight studies that are initiated by the EU are small in number and mainly explored the possibilities to use foresight to shape the security dimension of the EU. They are not nearly as developed as national forward-looking projects, such as the Finnish *Finnsight 2015* (2006), the United States' *Global trends 2025: A transformed world* (NIC, 2008), and India's *India Vision 2020* (2002), or as the forward-looking projects of other security organizations such as NATO's *Future World Scenarios* (2006) and the United Nations' report *A more secured world: our shared responsibility* (UNO, 2004). These projects run permanently and keep revising what threats and challenges the future might bring.

Chapter 5: The Scenario Method

Of all the foresight methods, scenario planning is the most popular and most used technique in qualitative future-studies. It is therefore that foresight is often directly associated with the notion of scenarios (Asselt, 2010, p.23). The scenario method is applicable for any private or public organization that wants to examine the possible futures and additional implications (ForLearn, 2009b). Present-day scenario thinking is mainly used by decision-makers to determine what consequences different decisions will have, and thus which decision is preferable. This chapter will discuss the scenario method in five different paragraphs: (1) definition and historical background, (2) types and characteristics, (3) how to perform a scenario exercise, (4) examples of the scenario method, and (5) critics on the method.

5.1: Definition and Historical Background

Scenarios don't predict the future so much as they illuminate it, preparing us for the unexpected. Scenarios are multiple approaches to the future, stories of the inevitable and necessary [...] recombined with the unpredictable and matters of choice. The best scenarios aren't necessarily those that come true; they're the ones that subvert expectations, providing deep insights into the changes happening all around us. The better scenarios are, the more they penetrate to the deepest possible understanding of the present (P. Mc Corduck and N. Ramsey, 1996, p. 18).

The terminology 'scenario' is derived from Herman Kahn, who worked with military and strategic studies at the Rand Cooperation in the 1950s. The cooperation is a "nonprofit institution that helps improve policy and decision-making through research and analysis" (Rand Cooperation, 2012). Kahn particularly used the term related to US public policy, defense and international development. After the introduction of the term, corporations started to use the concept as a method to plan and anticipate the future of their businesses. The pioneer in this field was Shell, which became a benchmark in the field of corporate scenario planning. One of the most notable works within scenario studies is written by a former planner and manager at Shell, Kees van der Heijden (1996). In his work *Scenario's: The Art of Strategic Conversation*, he discussed not only his experience and belief in the method, but also how to use the method within the private sector. In the public sector the method is used to define planning activities and to discuss possible policy alternatives. In developing scenarios, insights are acquired in the opportunities and risks that follow certain decisions and policies (ForLearn, 2009b). For example, when a government is making a decision about public transportation, it should look at the broader consequences of this decision to determine what impacts this decision might have on the surrounding region, such as nature or living areas.

With the article *God Gave Physics the Easy Problems* (2000), Bernstein et al. introduced scenario analysis to international relations theory. In the article, they discuss the difficulty that social scientists face when creating predictive theories. Contrary to social scientists, physicists would be able to formulate theories that are highly probable and that can be tested on a large sample while controlling the environment (Bernstein, 2000, p.44). Because social scientists deal with an open world with interrelated mechanisms and human agency, and because human beings have the ability to change their environment, predicting the future would be impossible for the social sciences. In order to structure thinking about the future it would therefore be necessary to use a method that acknowledges and includes the complexity and unpredictability of a social order (p.51). The scenario method would provide in this requirement, for it takes an integral approach, including demographic, economic, socio-cultural, technological, scientific, ecologic and political development in the analysis.

The term 'scenario' is derived from the Latin 'scaena', which means scene. It was initially used by the performing arts and introduced by Herman Kahn because of his emphasis on storytelling as a way to explore the future. Kahn defined scenarios as "hypothetical sequences of events constructed for the purpose of focusing attention on causal processes and decision-points" (cited in: Asselt, 2010, p.24). Bernstein formulated that scenario analysis constructs "different plausible stories of possible paths to the future" (Bernstein et al, 2000, p.53-54). What scenario analysis differentiates from foresight is that within scenario analysis the potential paths to the future are structured towards a concrete outcome in the future. These possible outcomes of the future are formulated in usually four different scenarios with a description of the steps leading up to that future (Das Dores Guerreiro, Billquist & Manolova, 2011, p.186). Showing the patterns and trends towards the future scenarios facilitates the possibility to analyze the likelihood that the scenarios will actually occur, and which scenario is desirable to enhance the quality of life (p. 187).

A representative example of a scenario study is SANDARA (2011). In order to explore the future relation between the European Research Area (ERA) and the defense research and innovation policy, the European Union funded the scenario exercise SANDARA. Its main goal was to stimulate the dialogue between the security and defense, and science, technology and innovation policies. The project developed four possible scenarios for the future, namely: (1) ERA and defense R&I are indifferent to each other in 2030, (2) ERA and defense R&I cooperate with each other in 2030, (3) ERA and defense R&I integrate with each other in 2030, and (4) ERA and defense R&I compete with each other in 2030. In addition, they discussed what decisions and developments would lead to each of the scenarios. The main message of SANDARA was that the emergence of a defense and security dimension to the ERA is of profound importance, and that the dialogue to establish this dimension should continue after this scenario study (EFMN, brief no. 199, 2011). What this shows is that, contrary to foresight, scenario planning gives concrete possible futures as to which decision will have what effect. In addition, decision-makers are enabled to choose a preferred scenario and structure their policy towards that scenario. However, the focus on the process and dialogue remains the main

objective. As with other foresight studies, the object of SANDARA was to stimulate the dialogue rather than providing policy advice.

5.2: Types and Characteristics

Many authors distinguish different types of scenarios. The most agreed on distinction is between normative and exploratory scenarios. In a normative scenario exercise one starts with a view of a preferred possible future and looks backwards to see if and how this preferred future can be realized (backcasting). An exploratory scenario starts in the present and looks at how the future might evolve considering the present-day trends and prospects (ForLearn, 2009b; Neekers, 2006, p.49; Masini & Vasquez, 2000, p.55). The downside of thinking from the present to the future is that individuals are captured in the logic of the present. It is however possible to make sensible explorations of the future if one uses analytical and causal thinking to establish the scenarios. Backcasting is more problematic in this sense: in order to establish normative future scenarios one has to be very creative. Analytical and causal thinking is only necessary after the preferred scenario is formulated. This means that the formulated scenarios can have a higher degree of 'science fiction' than scenarios that are formulated from the present (Neekers, 2006, p.54). Van der Heijden (1996) also made a distinction between external and internal scenarios. He argued that internal scenarios relate to the 'self'; they are the causal thinking that happens in the minds of individuals (If I do this, it will likely lead to that consequence, which will help me to achieve my objective). These types of scenarios tend to be normative and reflect our personal goal system (p.5). External scenarios are the shared and agreed upon models of the external world. They are the product of different views and opinions, and usually reflect the shared objective of individuals.

Eleonora Barbieri Masini and Javier Medina Vasquez (2000) developed a comprehensive overview of possible scenario methods and the schools to which these methods belong. This list is as follows (p.55)³⁷:

Types of Scenario

Extrapolative and normative scenarios: Erich Jantsch

Extrapolative scenarios use data referring to the past and present bearing in mind what is possible and probable.

Normative scenarios are projected from the future to the present, and thereafter back to the future again.

³⁷ For a full explanation of this list, see Masini, E.B. & Vasquez, J.M. (2000), "Scenarios as Seen from a Human and Social Perspective", *Technological Forecasting and Social Change*, vol. 65, pp. 49-66.

Extrapolative scenarios can also be *normative* when, in addition to what is possible and probable, they also contain what is desirable.

Probable and desirable scenarios: French school

Probable scenarios correspond to what will happen in the future, knowing the activity of the actors.

Desirable scenarios indicate the horizon to which we must direct our efforts if we want things to change significantly and if we aim to go beyond the prognostics of the probable scenario, providing a solution for the problems arising in the system.

First- and second-generation scenarios—Shell-SRI school

First-generation scenarios are usually exploratory and possess the following characteristics: help to obtain a better understanding of reality and to be able to ask better questions; do not provide further help in decision-making; strive for understanding not action.

Second-generation scenarios are based on a solid analysis of reality: they change the assumptions or suppositions of those taking decisions on how the world works and oblige them to reorganize their mental models of reality; they are thus educational tools, because they work on the inner mechanisms or the internal world of the decision makers.

Trend, Optimistic, Pessimistic, and Contrasting Scenarios—H. Kahn and Human and Social Futures Studies

Tendential-inertial or Trend scenario: described the prolongation of the present situation: that is present now. It presupposes no change, as if everything were to continue constant, exactly the same, and should be carried out in as great detail as possible, with scientific rigor, encompassing all the variables in the system. It tends to be demoralizing and produces psychological and ethical crises, because generally it reveals that things are not going well. However, it does not show structural changes. Nevertheless, it provides the basis for referring to changes. It is the “hard core” scenario, methodologically speaking. This scenario is extremely important for the decision-maker because it shows the consequences which may arise if things do not change and slowly worsen.

Utopian scenario: describes the best of possible worlds, what would be the ideal situation. Although usually unachievable, the Utopian is the most desirable scenario, and has a highly didactic purpose as it shows what is NOT achievable.

Catastrophic scenario: describes the worst of possible worlds, what is dis-topical. It worsens the trend scenario.

Normative scenario: describes a desirable and achievable situation that improves the trend scenario. It structures the objectives for the future. It is useful to set certain achievable, reasonable goals, and to define certain stages which will enable that situation to be reached.

Contrasting scenarios: describe different situations starting off from the variations of certain of the key variables. Generally they are quite the opposite of the trend scenario, and present extreme situations. They are those that are built as if those surprises presumed to be totally improbable at the time of enunciating them were to happen. Nevertheless, they are not totally arbitrary, and focus on discovering by means of a rational analysis, relationships between facts that may not be sufficiently visible.

Because scenario analysis is a foresight method it shares the four main characteristics of foresight, that is: action-oriented, open to alternative futures, participatory and multidisciplinary. However, it has some additional characteristics that foresight does not have. Since scenario analysis formulates the future in four possible stories of the future it is more concrete than foresight, which focuses on exploring the future without any concrete visions or propositions. It is therefore that scenario planning is particularly useful as a decision-making utility. The requirement of plausibility and consistency is more important because it is used as a decision-making tool. Plausibility hereby refers to the requirement that scenarios have to be within the scope of that what conceivably might happen. Scenarios furthermore need to be internally and externally consistent, meaning that the scenario has to be the product of correct logical and analytical thinking (ForLearn, 2009b). Without plausibility and consistency, decision-makers are likely to be reluctant to use the scenario method to make adequate decisions for the future.

According to Masini and Vasquez (2000), the flexibility and participatory³⁸ approach of the scenario method are of particular importance. The exercise needs to be flexible in the sense that every scenario effort has to be organized in line with the case that is being researched. This means that the methodology of a scenario effort can differentiate from case to case (p.63). The process itself needs to be flexible as well. In every part of the process, there should be an opportunity to turn back to the initial question, reconsider what has been discussed or initiate a question that is not evidently useful. There should also be space to include more or less items in the exercise, depending on the preferences of the participants (p.54). Participation has already been explained in 4.1.1. The object of including different stakeholders, experts or struggling groups to a scenario exercise is that participants are stimulated to think and debate about the future and are therefore encouraged to take action. It furthermore streamlines different ideas that are present, and enables experts to share their knowledge. There are different actors that can be part of a scenario exercise. The most common scenario study includes experts from different fields and backgrounds to gain useful insights on the topics that are being discussed. There are furthermore examples of scenario studies that included the

³⁸ The need for participation in decision-making has also been stressed by the European Union in the European Commission's White Paper on Governance (2001). In this document the commission argues that there are five principles of good governance: participation, accountability, openness, effectiveness and coherence.

leaders of struggling groups or the citizens of several countries. Since including leaders of struggling groups or civilians is still very exceptional, it might be interesting to illustrate this with two cases.

First, the Mont Fleur project was exceptional for including the leaders of struggling groups in a scenario effort. In 1991, the South African government tried to negotiate a peaceful transition from an authoritarian apartheid regime to a racially egalitarian democracy (Kahane, 2004, p.19). In order to develop a strategy that would help the opposition in this transition, Pieter Le Roux, a professor at the left-wing black University of the Western Cape in South Africa, invited Adam Kahane to facilitate a scenario exercise. Adam Kahane, an employee of the strategic planning department of Royal Dutch Shell, needed to provide the project team with methodological advice (p.20). The team consisted of a mixed group of twenty-two influential South Africans, both from the existing establishment and the establishment to be: leaders from the main left-wing groups (the ANC, the radical Pan-Africanist Congress, the National Union of Mineworkers and the South African Communist Party) and some of the adversaries from the white business community and academia. Their exercise was to discuss not what they wanted to happen, but what might happen in the future. The scenarios that they made had to be logical and plausible (p.21). The project team was able to create several scenarios that influenced the course of the events in South Africa by showing the paths that the government could follow. It helped to shift the thinking and acting of the left-wing parties and thereby avert an economic disaster (p.25). But more importantly, it helped to create a shared understanding of the problems and possible solutions between the different parties in South Africa. By adopting an open way of talking and listening individuals were able to create new realities for the future. These new realities were the project of joint consultations, which lead to the possibility for the two parties to shape the future together.

Second, CIVISTI (2011) was innovative for including citizens to a scenario study. The aim of this EU funded project was to transform the visions of citizens from seven member-countries into long-term science, technology and innovation issues for the future. The benefit of including citizens in this project is that, this way, the development of science and technology is viewed from the demand-side. Indeed, citizens are the ones that make use and are interested in developments of science and technology, so their role in the future is crucial. The project leaders did encounter several problems while including citizens to the scenario effort. It was difficult to keep citizens interested in participating in this research, it was challenging to work with multiple languages and the visions and recommendations that were expressed by citizens appeared to be of high diversity. The pilot project made clear that including citizens is a difficult task, but can be beneficial if one wants to take a perspective of the demand-side for developments.

There are some last characteristics of the scenario method that are worth noting. First, scenario analysis requires creativity and imagination within the rational process of analysis (Masini & Vasquez, 2000, p.64). In being creative individuals have to break with the conventional obsession with the present and focus on long-term future problems (ForLearn, 2009b). Creativity furthermore encompasses giving creative reflection towards the results to stimulate reflection that goes beyond

the status quo (Masini & Vasquez, 2000, p.55). A second distinctiveness of the method is that scenario planning can be considered to be a learning process. By discussing what is and what might be, individuals learn to understand their private or public enterprise and its surroundings better. Participants furthermore learn to understand and deal with the opinions of others that are part of the same organization (van der Heijden, 1996, p.7). The final point is that the scenarist's function is to stay objective and outside of the discussion at all times. His/her role is to serve as a moderator and guide, and he or she should view scenarios as being instruments for further research (Masini & Vasquez, 2000, p.55).

5.3: Designing Scenarios

In designing scenarios one ought to take medium-term trends and reflect on how these trends will continue in the future, and what effects this will have. It is important to be aware of other trends that might influence the main trend, and to be conscious of relevant historical developments regarding this trend. As explained above, it is vital to describe which factors might cause changes in the future in order for decision-makers to stimulate or avoid this change. The development of scenarios enables actors to foresee the consequences of economic, political, social and/or cultural trends and the extent to which they might have impact on the future or not (Das Dores Guerreiro, Billquist, Manolova, 2011, p.187). A scenario exists of (1) an integral description of a future situation, (2) a description of important elements or events in the present, and (3) a plausible and logic explanation of how the present results in the future (Nekkers, 2006, p.17). The single most important step in designing scenarios is to determine which elements are the main uncertainties, and which of those have the most impact on the future. According to Nekkers (2006, p.83) there are six steps in designing scenarios³⁹:

- 1: Preparation: why, how and for who do we perform this research?
- 2: Orientation: what is the main problem/the strategic question?
- 3: Explore the setting: what trends and developments are important for the future?
- 4: Determine what the main uncertainties are
- 5: Scenario building: how do the scenarios look?
- 6: Use of the scenarios: what does it teach us for the present?

These steps need to be taken by everyone that is part of the scenario exercise, being experts, citizens or leaders of belligerent groups. Finally, Das Dores Guerreiro, Billquist and Manolova (2011) point at

³⁹ Nekkers's overview of designing a scenario is one of the many ways in which scenarios can be given shape. However, since the object of this thesis is to see the value of the scenario method and not necessarily the ways in which scenarios can be build, this sections remains limited. For more information, see Nekkers, 2006 or ForLearn, 2009.

the need to be in an informal and pleasant surrounding when developing scenarios. If participants are away from their workplaces, the interaction between people and the imagination of individuals are stimulated during the process (p.188). The Mont Fleur project, led by Adam Kahane, is even named after the location where the project took place: Mont Fleur. Mont Fleur is a conference venue that expresses itself as providing a calm comfortable environment to be away from every-day life and discuss issues in a peaceful surrounding (Mont Fleur, 2012). This surrounding might have contributed to making the Mont Fleur project such a success.

5.4: Critiques on the Scenario Method

Part 4.1.2 discussed some of the critiques on foresight compared to forecast. It concluded that there are two disadvantages of foresight, namely: (1) because the information is based on expert judgment, foresight studies can easily be biased, and (2) although foresight explores which developments will likely influence the future, it cannot give information about the exact degree in which the future might be influenced. There were furthermore two critiques for both forecast and foresight: (3) future-oriented studies tend to oversimplify reality and (4) studies vary extensively on the rigorousness with which they are performed. The main critique on foresight as given by forecasters is that the information that is derived from a foresight study is not accurate. However, as argued before, when using future-oriented studies for decision-making it is not accuracy that is important but policy-usefulness. Scenarios are particularly useful in social situations in which there are a high number of factors that can influence the future and the degree of uncertainty for the future is high (ForLearn, 2009b). It furthermore stimulates strategic thinking, creativity, communication and organizational agility. Finally, it serves as a tool for actors to realize their own intended future. There are also several shortcomings that apply to the scenario method specifically. This part will shortly reflect on these.

According to Eriksson and Weber (2008) the main problem with the scenario method is that it risks losing its scientific basis, which is required if one wishes to build further on the results of the scenario workshop. They argue that, because the nature of the scenario exercises is "impressionistic", the workshop itself cannot be taken as the main source of information (p.467). Rather, there needs to be a fact-based foundation for the scenario results to guarantee the credibility of the foresight study. This fact-based foundation can be given if one combines statistical and analytical information. However, if the participants are experts in the field they are aware of scientific thinking and can include this within the developments of scenarios. This way the scenario effort does not lose its scientific basis, at least not more than if a single author would have reflected on the future. However, in cases where civilians or leaders of belligerent groups are part of the exercise this is not possible. What is possible is to view the scenarios not as an end of the foresight study, but as a means. This way the developed scenarios are not less scientific than when a researcher performs interviews with individuals to support their premises. Treating scenarios as a mean rather than a goal is exactly what makes scenario planning prevail; performing the study is more about the process than about the

actual prediction. A second critique on the scenario method is that it is very time consuming (Masini & Vasquez, 2000, p.63). In order to have a successful scenario workshop one has to mobilize a representative group of participants and organize several meetings to establish the scenarios. When exploring the potential for violent conflict the length of this process might cause a warning to be belatedly.

Chapter 6: The Scenario Method and Early Warning

As concluded in Chapters 4 and 5, foresight and scenario analysis are mainly applied to research broad country level challenges for the future. When the scenario method is implemented in an early warning system it should be able to research local level indicators and threats as well as to foresee when, where and why violent conflicts will occur. This chapter will examine how the scenario method can be made applicable to an early warning system and how it can be implemented in the early warning system of the EU.

6.1: The Scenario Method as an Early Warning Tool

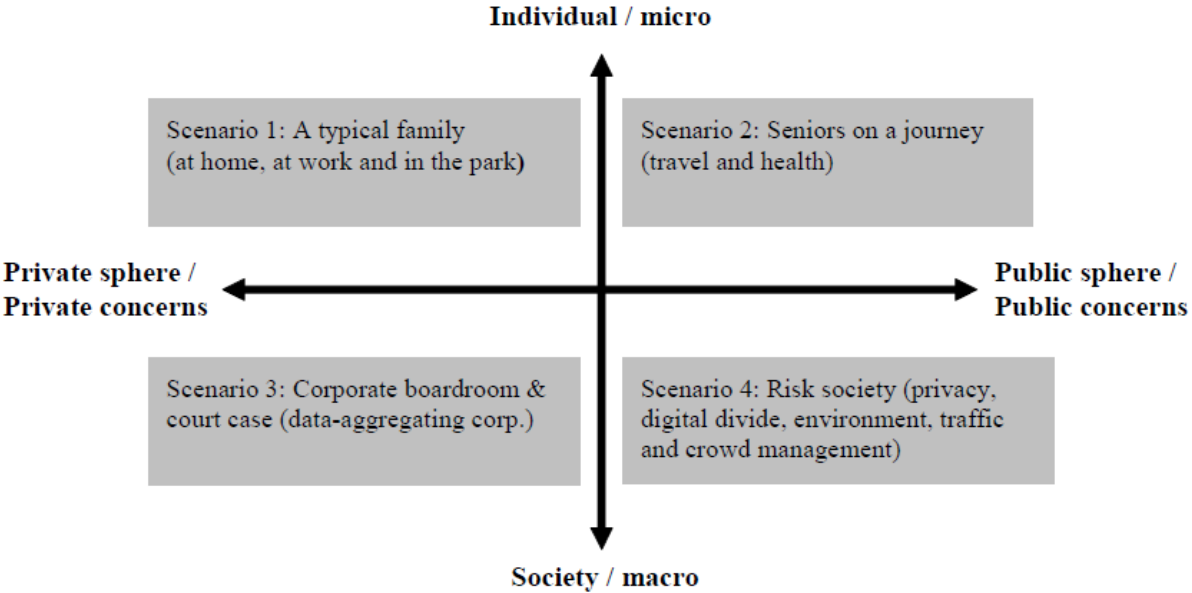
It has been argued that foresight generates visions on societal, social and technical changes and is therefore no quick fix to see all the problems. Obviously, the scenario method does not have to be the only method that is used in an early warning system, so it does not have to foresee all problems. It is however beneficial if it foretells most – if not all – violent conflicts. What differentiates classical foresight exercises from an early warning effort is that early warning is to avoid something bad whereas foresight is to create something good. In foresight studies one tries to create the best of possible worlds; early warning only strives to create a conflict free world, regardless of how this world would be. Using the scenario method as an early warning tool therefore requires a small revision to the classical methodology. In 2006 the EU funded the SWAMI project (Safeguards in a World of Ambient Intelligence) which was aimed at identifying social, legal, organizational and ethical implications of, among other things, the privacy, anonymity, identity and security in the use of Ambient Intelligence⁴⁰ (Aml.) (Punie, Maghiros & Delaitre, 2006, p.1). The project leaders used dark scenarios to realize this task, which they defined as “realistic future scenarios which highlight threats and vulnerabilities which are subsequently analysed so as to extract useful options aimed at overcoming the identified possible risks” (p.3). Since dark scenarios are aimed at overcoming risks rather than creating a preferred future, it might make them more applicable to an early warning system than the classical methodology of scenario planning.

Another reason for developing dark scenarios is that scenarios have a tendency to present the future more optimistic than it actually is. The aim of most foresight studies is to present a future that is desirable and determine how this future can be achieved. Consequently, they inherently present the future more optimistic. Focusing on the vulnerabilities and weaknesses of the future would not only make the scenario effort more realistic, but would also enable actors to determine how these

⁴⁰ As explained in footnote 32, ambient intelligence “refers to a vision of the future Information Society in Europe where people are surrounded by intelligent intuitive interfaces that are embedded in all kinds of objects and an environment that is capable of recognising and responding to the presence of different individuals in a seamless, unobtrusive and often invisible way” (Punie, Maghiros & Delaitre, 2006, p.2).

vulnerabilities and weakness can be overcome (Punie, Maghiros & Delaitre, 2006, p.4). There are two objectives when performing a dark scenario exercise. First, there needs to be an identification of potential threats and vulnerabilities that have to be mitigated, and second, the study needs to propose safeguards; items that can prevent potential threats from actually occurring. The SWAMI project-members developed four scenarios in several workshops so it would be possible to plot them on four quadrants and two axes (p.5). After identifying the four scenarios they derived the main potential issues and threats for the future and determined the safeguards (p.12). The safeguards had to address political, economic, societal, ethical, legal and technological issues and consider the strategy of stakeholders and the rules on the market. It is therefore that they have to be holistic and context-dependent. The main difficulty in determining the safeguards is that they should be developed in such a way that they have maximum impact once they are implemented.

The members of the SWAMI project took four different dimensions in which Aml could cause threats and risks, such as family and corporate life, and discussed the different implications Aml could have for these groups. The scenarios they researched were as follows:



Source: Punie, Maghiros & Delaitre, 2006, p.8

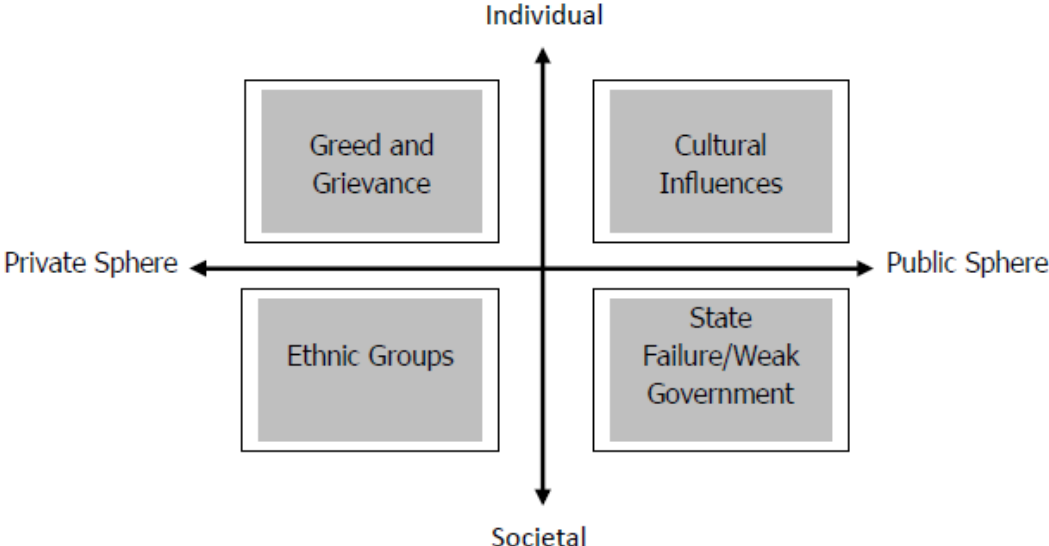
The first scenario represents the vulnerabilities on the individual level and in the private sphere: it describes the life of a typical family that moves in its different environments such as their home, their work and the park. The second scenario refers to the weaknesses on the individual level in the public sphere: it shows the story of a group seniors traveling by bus. The third scenario describes the threats on the societal level in the private sphere: it tells the story of a company that becomes victimized by theft of personal data, and ends in the courtroom two years afterwards because it tried to preserve its marked position by covering up the incident. The fourth scenario is on the societal level and in the public sphere: it portrays a studio of a morning news program and represents the risk society. It

shows the potential weaknesses of the Aml traffic systems and an activist group that is against the profiling of personal data (Punie, Maghiros & Delaitre, 2006, p.7-8). After establishing the scenarios, the project participants identified the key issues that influenced the scenarios (privacy, security, identity, trust, loss of control, dependency, exclusion and victimization) and the key future threats (surveillance, identity theft, malicious attacks, digital divide and spamming) (p.9-10). They concluded by giving the safeguards, which existed of technological safeguards to protect individual privacy (such as the technological inability to link actions to individuals), socio-economic safeguards (including the establishment of practices for protecting privacy and identity), and legal/regulatory safeguards (for instance the creation of laws for the use of Aml) (p.12).

There is one important difference between the SWAMI project and classical scenario studies. In classical scenario studies the trends towards the future are explored whereas dark scenarios have a pre-given trend towards the future and research what the consequences of this trend are. In case of the SWAMI project this trend was the increased use of Ambient Intelligence. This means that if one implements the use of dark scenarios to an early warning system, there needs to be an additional methodology that identifies what the current trends towards the future are. This is the space where quantitative and qualitative methodologies can complement each other, and where the benefits of both can prevail. By using quantitative methods to determine what the trends towards the future are, there is a high accuracy in the exploration of the future which encourages decision-makers to respond to the perceived threats. The scenario method will provide the exercise with clear policy direction as to how to respond to the potential threats and how to overcome them. For example, many quantitative studies identify the trend of climate change and they can provide 80% accuracy in the prediction that this trend will continue. Based on this trend, actors within the early warning system can formulate different dark scenarios that can result from this trend and provide safeguards as to how the threats deriving from climate change can be diminished. For instance, one of the side effects of climate change is that populations are forced to migrate to other areas. This will only lead to conflict if (1) there are not enough resources in the area where they flee to, or (2) if there is unwillingness to accept the migrants in the other region. A scenario exercise can help developing safeguards to prevent one of these two struggles from happening.

The SWAMI exercise used the quadrants and axes to differentiate between dissimilar spheres and levels in which threats might occur. Obviously, the same can be done if one implements dark scenarios as a methodology in an early warning system. However, it also might be interesting to use dark scenarios to foresee whether there are causes of conflict appearing in different settings. For example, global warming can pose a threat for individuals because they might be forced to migrate to another region. The same individual can also pose a threat if she starts experiencing grievance because some individuals get the chance to keep living in their own environment whereas she cannot. There are different levels in which causes of conflict might occur, such as personal-, societal- and state level (Cramer, 2006), and on each level individuals have different arguments to engage in war (Kalyvas, 2003). Using scenarios to tell the story of how individuals and groups might cause violence,

and developing safeguards that apply to these potential causes of conflict, can assist in overcoming these different arguments to engage in war. This thinking encouraged the development of a model that illustrates which causes of conflict can occur in the different quadrants as used in the SWAMI project. The individual and societal levels hereby refer to the levels in which the stories transpire; the private and public spheres indicate in which surrounding the individual or the societal are present:



The stories that might emerge in these different quadrants are as follows. A scenario that sets on the individual level in a private surrounding might demonstrate someone's human agency⁴¹, which is considered to be the frame where individuals can develop motivations to participate in conflict (Richards, 2005). These individual motivations to turn to violence can exist of, among other things, greed or grievance. Greed hereby represents the economic motivations to engage in conflict; in order to have (more) economic welfare, individuals start (to participate in) violent struggles. Within this field, Collier and Hoeffler (2004) showed that the presence of economic resources and scarcity has a high correlation with the incidence of civil war. The grievance argument mainly concerns relative deprivation: the difference between what people believe they ought to have and what individuals actually possess. Here, Gurr (1970) argued that relative deprivation can lead to frustration, which is the basis for aggression which can, eventually, lead to violence. This grievance-centered theory is supplemented by Shock (1996), who advocated a theory that not only addresses economic inequality, but also other forms of inequality, such as identity. Thus, a scenario that sets on the individual level and in a private surrounding might reveal which causes of conflict are emerging on the individual level.

A scenario story that transpires on the individual level in the public sphere can indicate how individuals are influenced by cultural perceptions. Some theorists see arguments like greed and

⁴¹ Human Agency is individual, thoughtfully decision-making (Richards, 2005).

grievances not as mere individual motivations to get involved in war. Le Billon (2001) for example mentions that scarcity in itself is not a cause of conflict. He argues that it is not the mere presence of resources, but the way in which resources are seen and used that determine the chance that scarcity leads to conflict. According to Le Billon, the values of these resources are determined by history and are therefore the products of the institutions in a particular society. If and how an individual is influenced by the public sphere, and what causes of conflict might appear with that, can be determined in the second quadrant of this overview. A scenario study that proceeds on the societal level in the private sphere can tell the story of a group of individuals with another ethnicity. Individual identity exists in the private sphere, but becomes part of the societal level once similar individuals start to cooperate together and form groups. This cooperation on group level can have significant influence on the incidence of war. At one point, the group as a whole decides how the individual members are reacting, rendering out their individual human agency.

Finally, a scenario exercise that befalls on the societal level and in the public sphere can illustrate how the state influences the war-potential. According to Hegre, Ellingsen, Gates and Gleditsch (2001), the level of repressiveness and the degree of democracy determine whether a state has a higher probability to result in conflict or not. In addition, periods of transition can influence the conflict potential of a state: Mansfield and Snyder (1995) argued that state formation involves some risks that enhance the chance on conflict. These risks are, among other things, political competition, weak democratic institutions and the role of the elites, that are potentially threatened. Consequently, a scenario story that sets on the societal level and in the public sphere can be useful in determining which conflict potential derives from the government.

This adapted form of dark scenarios can be applied to specific local level cases as well as on country level issues. However, because the development of these scenarios involves taking cultural perceptions into account, it does not provide a solution for determining global challenges. Indeed, without any cultural elements and perceptions of the country that is being researched, it is impossible to describe the lives of individuals and groups. It is therefore necessary to keep using the standard form of the scenario analysis, which explores the general trends for society, as well. This standard form can also be used to complement quantitative methods in determining what the main trends towards the future are. Finally, it remains important to keep the requirements of a valid foresight exercise into account when performing a scenario study. As concluded in Chapter 4, foresight needs to be (1) action-oriented, (2) open to alternative futures, (3) participatory, (4) multidisciplinary, and (5) timely.

6.2: The Scenario Method: Implementation

In contemporary EU early warning efforts the scenario method is mainly used in studies to support the permanent monitoring and analysis in the different early warning bodies. The Joint Research Centre and the EU Institute for Security Studies can for example use foresight to investigate the broader

challenges of the future. For the benefits as described in Chapter 4 and 5 it is of high importance that these practices will be continued. In addition, it might be beneficial to implement scenarios in the bodies that permanently monitor and analyze the conflict potential of countries. This can be done by implementing the adapted form of dark scenarios as explained in paragraph 6.1. In cases where a certain trend is visible that may accommodate additional causes of conflict, dark scenarios can provide systematic policy advice on how these problems can be resolved. Indeed, dark scenarios give clarity on possible threats, potential causes of conflict and give insight as to how these threats can be surmounted.

In the current EU early warning system the Joint Situation Centre (SitCen) is the largest and most important body for gathering and analyzing information on the civilian conflict potential. For the military perspective the EU Military Staff (EUMS) is the foremost important institution (Hemmer & Smits, 2010, p.10). Because civilian and military aspects are equally important in determining whether conflict is emerging, both should be part of a scenario effort. Indeed, both civilian and military struggles can count as violent conflicts, and both clashes should be prevented. This means that the ideal dark scenarios exercise comes to pass in a joint initiative from the EUMS and SitCen. The additional benefit of implementing the scenario method as a joint initiative between these two large bodies is that the workload can be divided between the two institutions when organizing a scenario workshop, which limits the large amount of time that is needed for a successful scenario study. Unfortunately, this does require intensive cooperation between the EUMS and SitCen, which might not be beneficial. A better option is to implement the scenario method in a new situation centre that combines both military and civilian perspectives. In a personal conversation with Joachim Klerx, who works on the European Foresight Platform and the European Trends and Threats in Society (ETTIS) projects, it became clear that the EU is planning to create a new situation centre. It is unclear how this situation centre would operate, who would be part of it and when it will start functioning, but if one implements the scenario method in this institution, the benefits of scenarios can be guaranteed.

Conclusion

The main question of this research was: to what extent can scenario analysis improve the European Union's early warning initiatives to prevent violent conflicts? The hypothesis of this thesis was twofold. First, scenario analysis is useful to predict the occurrence of conflict, for it can easily adapt to a changing environment and, since it is a foresight activity, gives long-term predictions, and second, scenario analysis is able to create a shared understanding on the problems and possible obstacles in the society; it thus contributes to early response mechanisms such as mediation and trust-building. Chapter 3 presented a list of nine shortcomings of the current EU early warning system. This part will examine if and how an implementation of the scenario method will improve these shortcomings, and thus what the added value of the scenario method is for the EU's early warning system. The list was based on numerous articles and the case studies of Kyrgyzstan, Sri Lanka, Bolivia, Colombia and Venezuela, and consisted of the following nine items:

- There is more information flow than actual (trend) analysis
- There is more short-term than long-term analysis
- There is a failure to include local and 'weak' signals
- The information derived from the analysis is too broad
- 'Complicated' countries are left out of the early warning system
- The early warning system is unable to adapt to different conflict situations
- The relation between the EU and other security organizations is too weak
- The EU staff is not properly educated in early warning, and they do not know their specific role in the early warning chain
- There is a gap between early warning and early response

First, the case studies showed that there is perfect information flow between the various institutions and the conflict regions, but that there is insufficient (trend) analysis that explores the potential future conflicts. The explanations for the lack in analysis varied: in the Sri Lankan case the argument was that Sri Lanka is considered a post-war country and is therefore no longer on the priority list; in the cases of Bolivia, Colombia and Venezuela there appeared to be a lack of security interest and disagreement between EU member-states as to how to deal with these countries. Analysis is necessary in an early warning system for two reasons: (1) without analysis, individuals are unable to foresee pending crises and to anticipate and overcome these imminent threats, and (2) without analysis, the existing policies are not reviewed and cannot be changed if required. The scenario method is useful in providing analysis for both reasons: it is a method to perform analysis, which assists in creating the opportunity to anticipate and overcome potential threats, and it is a method that enables the creation of a learning society. The learning society is an environment in which actors

can learn all the whereabouts of their organization and its policies. In this learning process, existing policies can be revised, if necessary (Eriksson & Weber, 2008, p.436; Nekkers, 2006, p.47). Consequently, an implementation of the scenario method will improve the frequency in which potential future threats are explored and will create a space in which existing policies can be reviewed and revised.

Second, critical analysis of the EU early warning structure showed an emphasis on short-term crisis management instead of long-term conflict prevention. For instance, the Watchlist exercise has a timeframe of six months, which is an insufficient amount of time if one wants to prevent violence on the longer term. As explained by Havas, Schartinger and Weber (2010), foresight actors are inclined to think in the long-term future to improve their internal strategic planning (p.95). Implementing foresight would thus inherit this focus on the long-term future, and complement the current short-term focus of the EU early warning system with a long-term orientation.

Third, particularly the Kyrgyzstan case indicated that there is a failure to include local and weak signals in the early warning analysis. The EU has a tendency to focus on broad country level indicators, leaving aside the regional and individual factors that can also be significant causes of conflict. As one of the features of the scenario method is that it provides a rich contextual analysis (Nyheim, 2009, p.14), and because scenario analysis has the flexibility to include all indicators that are deemed relevant, this shortcoming of the current EU early warning system will be limited after an implementation of the scenario method.

The fourth critique has a strong relation with the abovementioned failure to include local and weak signals: the information that is derived from the analysis is too broad. The main problem herewith is that there can be no immediate policy guidance, leading to an inability to give a suitable response to the warnings. Once local and weak signals are included in the analysis, which would be the case if one implements scenario analysis to the early warning system, this problem can be solved. Indeed, including local and weak signals to the analysis makes the information derived from the analysis more detailed.

Fifth, especially the case of Venezuela showed that 'complicated' countries are left out of the early warning system. The reason for this is that EU member-states are unable to agree upon an overarching strategy for these countries. There are two ways in which foresight might contribute to solving this problem. First, because foresight stimulates decision-makers to keep rethinking their existing policies, there is a continuous process of reviewing ideas and visions of a specific issue, which might speed up the time in which an agreement on an overarching strategy is made. Furthermore, because the process of foresight streamlines different ideas of participants, the method can provide in achieving consensus between the member states. However, this requires member-states to be part of the foresight process, which might be a complicated and comprehensive – if not impossible task. The extent to which the scenario method will benefit the early warning system in this regard is therefore limited.

Sixth, a comparison between the cases Venezuela, Colombia and Bolivia showed that the EU is unable to adapt its early warning system to different conflict situations. The causes of violence in the three countries differed significantly from each other: in Bolivia, the main cause of conflict is poverty; in Venezuela the weak government is causing the threat and in Colombia violence is mainly present due to the existence of criminal gangs. Therefore, the cases require different approaches and perspectives as to how to manage these threats. For instance, in Venezuela, where the weak government facilitates violence, it would be ineffective to take a perspective from the government. As the government is the one that poses the threat, the government should be part of the researched objects. The early warning system should therefore take a perspective from outside the country. As argued by Monanaro and Schunemann (2011), scenarios relate to different dynamics of conflicts and fragility (p.26). In addition, one of the key features of the scenario method is that it provides the flexibility to include different variables to the analysis which can lead to an inclusion of all case-relevant indicators (Masini & Vasquez, 2000, p.63). Consequently, the scenario method would endow the EU early warning system with the ability to warn and respond adequately, regardless of the different cases and causes of conflict.

Seventh, a study on the relations between the EU and NATO, the EU and the OSCE, and the EU and the UN showed that the cooperation between these institutions is still too weak. Creating a good relation with other security organizations would not only help them share their knowledge, but also prevent them from counteracting each other's program. Unfortunately, implementing scenario analysis in the EU early warning system would not foster the relationship the EU has with other security organizations. Only when actors from the different security organizations are included in a scenario effort, different views can be streamlined and cooperation can be enhanced. However, prior to a joint scenario effort there has to be an intention to cooperate, otherwise the scenario workshop would never be organized. It is therefore that not the scenario method, but other factors should enhance the cooperation between the various security organizations.

Eight, the Kyrgyzstan case showed that the EU staff is uneducated in early warning and that the staff is unaware of their position in the early warning chain. In addition, several interviews with the special representatives indicated that the representatives lacked training in mediation and early warning. This problem can be resolved if the EU includes all relevant actors and special representatives in the scenario workshop. As explained before, the process of the scenario method can create a learning society in which actors become aware of the policies of their organization. This would simultaneously educate them about the way things work and what their place is in the early warning chain. This means that implementing the scenario method, and including the relevant actors into the scenario effort, would educate the EU staff and make the current early warning system more successful.

Ninth, the most addressed problem of the EU early warning system is the gap between early warning and early response. Because there is no overall strategy on what to do after a warning, and what to prioritize, decision-makers are reluctant to react to a perceived threat. Another problem is

that the benefits of conflict prevention lie in the future whereas the costs are for the present. This makes it difficult to find political will to respond to the early warnings. However, this problem will be minimized once the scenario method is implemented in the early warning system. Particularly development agencies underline the importance of the scenario method as its participatory process has influence on consensus building, leading to a better capacity in early response (Nyheim, 2009, p.44-45). Because the different ideas of individuals are streamlined in the process, the scenario method can be considered to be an early response mechanism in itself. Indeed, the streamlining of different ideas is a form of mediation, which is often used as an early response option. And if early action is present in the early warning process, early warning and early response are in some way combined. Furthermore, the scenario method allows for a good calculation of the costs (financial, material, technical and human resources) and the possibilities of early actions (diplomacy, mediation, development aid, and trade agreement) (Monanaro & Schunemann, 2011, p.26), which can assist in creating the political will to respond to the alleged threats.

Apart from these benefits there are additional advantages for the EU early warning system if one adopts the in Chapter 6 presented form of the scenario method. If qualitative and quantitative methods are combined, there is no longer a problem regarding the accuracy of the research. Considering that quantitative models can predict trends from occurring with an accuracy level that is above 80%, the validity of the process can be partly guaranteed, encouraging decision-makers to respond to the analyses. A combination of qualitative and quantitative methods furthermore minimizes the degree in which the analysis is based on personal judgment, limiting the potential for subjectivity. It also tackles the problem of qualitative research, that there is a risk that the analysis only applies to a particular moment in time. What remains is the problem that the scenario method requires a large amount of time if it is performed correctly (Masini & Vasquez, 2000, p.63). Obviously, if quantitative and qualitative methods are combined, the amount of time that is needed for the research is halved, but even then there is a lot of time and human resources necessary if one wants to perform scenario analysis structurally.

To sum up, the scenario method would: (1) implement more analysis in the system, (2) provide the early warning system with more long-term analysis, (3) include local and 'weak' signals to the analysis, (4) narrow down the information that is derived from the analyses, (5) be able to adapt to different conflict situations, (6) educate the EU staff in early warning and their specific place in the early warning chain, and (7) limit the gap between early warning and early response. Unfortunately, it would leave two shortcomings unimproved: (1) 'complicated' countries would still be excluded from the early warning system, and (2) the relation between the EU and other security organizations would still be too weak. In addition, there is no remedy against the main downside of the scenario method: that it is extremely time consuming. As for the two hypothesis of this thesis: (1) scenario analysis is useful to explore the occurrence of conflict because it can easily adapt to a changing environment and gives long-term predictions, and (2) scenario analysis is able to create a shared understanding on the

problems and possible obstacles in the society; it thus contributes to early response mechanisms such as mediation and trust-building, they both appeared to be correct.

Further Research

This research made a start with examining the role and benefits of the scenario method for the EU's early warning system. It investigated the current shortcomings in the EU early warning system and discussed to what extent these shortcomings would be limited after an implementation of scenario analysis. The conclusion was that seven of the nine shortcomings would be improved if one implements the scenario method in the EU's early warning system. Unfortunately, two problems will remain unimproved. In addition, implementing the scenario method would require a lot of time and human resources; it would thus require an increase in the capacity of the EU's early warning system. In further research it would be interesting to see how the problem of capacity can be limited, and how the last two shortcomings of the early warning system can be resolved. Moreover, several international organizations and non-governmental organizations already have a fairly successful early warning system, with or without a form of scenario analysis. It would be useful to review how these organizations have given shape to their early warning system, how they perform compared to each other, and how we can learn from their experiences. If this comparison was added to this research, it would have enhanced the quality of this study and its conclusion as well.

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Appendix

Annex 1: Methods to Perform a Future-Oriented Study

A single cross signifies that the feature is present in the method; two crosses indicate that the feature is dominant.

Methods and Tools	Diagnosis		Prescription		Qualitative		Exploratory		Open
		Prognosis		Quantitative		Normative		Predictive	
Environmental Scanning and Monitoring	XX			X	X				
System Dynamics	XX			X	X		X	X	
Structural Analysis (e.g. MICMAC)	XX			X	X		X	X	
Agent Modelling (e.g. MACTOR)	XX				X		X	X	
SWOT Analysis	XX	X			X		X	X	
Trend Intra and Extrapolation	X	XX		X	X		X	X	
Modelling and Simulation	X	XX		X			X	X	
Gaming	X	XX			X		X		X
Creativity Methods (Brainstorming, Mindmapping...)	X	XX	X		X	X	X		X
Expert Panels		XX	X		X	X	X		X
Delphi survey	X	X	X	X	X	X	X X	X	
Backcasting		X	X X	X	X	X		X	
S&T Roadmapping		X	X		X	XX	X	X	
Critical and Key Technology Study	X	X	X X	X	X	X		X	

Scenario Building		XX			X	X	X		X
Morphological Analysis and Relevance Trees		XX	X		X	X			X
Cross-Impact Analysis (e.g. SMIC)		XX		X	X		X		X
Multi-Criteria Analysis (e.g. MULTIPOL)			X X	X	X	X		X	

Source: JRC Online Foresight Guide. Available at:
http://forlearn.jrc.ec.europa.eu/guide/4_methodology/methods.htm