

From Disaster to Development

Parliamentary debate analysis: Atomausstieg and Securitization

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Pro gradu -tutkielma

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Yhteiskuntatieteiden

ja filosofian laitos

Jyväskylän yliopisto

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Tutkimukseni tehtävänä on selvittää, mitä turvallisuusargumentteja käytettiin Saksan parlamentaarisisissa debateissa, jotka koskivat atomivoimasta luopumista vuonna 2011 maaliskuusta kesäkuuhun, jolloin keskustelu oli vilkkainta. Alkupäivämäärä määräytyi Fukushima ydinonnettomuuden mukaan ja loppupäivämäärän määritteli hetki, jolloin Saksan parlamentti, Bundestag, hyväksyi uusia lakeja liittyen ydinenergian käyttöön ja rajoittamiseen. Ydinenergian käytön rajoittamiseen ja poistamiseen viitataan termillä Atomausstieg. Taustoitin työtä keskustelemalla ensin parlamentaarisisista debateista yleensä, sitten turvallistamisesta ja energiaturvallisuudesta. Aineistossani viittaukset Fukushima ydinonnettomuuteen ovat yleisiä, mutta debatit sisältävät myös useita muita uhkia ja näkökulmia. Keskeiset asiat tutkimuksessani ovatkin turvallisuusuhat niiden eri muodoissa, jotka ydinenergian käyttö tuo mukanaan. Tutkimukseni tulokset osoittavat, kuinka laaja ja moninainen energiaturvallisuus ilmiönä on sisältäen useita eri osa-aloja ja turvallisuusuhkia alkaen energian tuotannon turvaamisesta, terrorismin ja ympäristökatastrofin uhkaan, aina valtioiden välisten suhteiden ylläpitoon asti. Aineistoni valossa tutkimani energiaturvallisuusdebatit muodostavat oman ryhmänsä erottuen aiemmista debateista.

The aim of this research is to explore what kind of safety and security arguments are used in German parliamentary debates regarding the use of nuclear energy from March 2011 till June 2011 when the discussions were most pressing. The time span begins with the nuclear disaster of Fukushima and ends with the German parliament, Bundestag, passing new bills which constrict the use of nuclear energy. The reduction and ending the use of nuclear energy is referred to by the term Atomausstieg. In the theoretical framework, I discuss parliamentary debates, securitization and energy safety and security - this section functions also as my research method. In light of the data, references to the nuclear disaster are common, but the debates also entail several other threats. Pivotal phenomena in this research, therefore, are the various energy safety and security threats posed by nuclear energy. The results show that energy safety and security issues regarding nuclear power are numerous and varied starting from a secured energy production, followed by threats of terrorism and environmental catastrophes, and continuing with concerns over foreign relations. Also, the results show that these debates comprise a particular time span among the decades when Atomausstieg has been deliberated upon.

Avainsanat:

Energy safety and security, securitization, parliamentary debates, Atomausstieg

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1 Introduction

In March 2011, there was a nuclear disaster in Fukushima Japan which shocked the world with its massive consequences to society and especially on the environment. Global energy production and consumption experienced a tough blow then as the world witnessed how Japan – the land of nuclear energy – went from success and self-sufficiency to a complete state of emergency and disaster. This change happened over one night and it was the result of an earthquake and tsunami which destroyed a nuclear power plant (Fukushima I) on the east coast in Japan and damaged the country's infrastructure severely – leaving dozens of casualties. In short, this disaster has affected the life of everyone in Japan as the living conditions in those areas were contaminated and the energy supply for the whole population was severely compromised. Since this disaster, there have been multiple national and global meetings where world leaders, politicians, experts and associations have discussed Japan's situation, what caused it and how energy safety and security can and should be improved. The concept of energy safety and security includes a wide variety of governmental, political, environmental and individual action, plans and programmes that all aim to prevent nuclear accidents and limit the consequences brought on by one. Energy safety and security does not however only refer to power plants and their build (in other words, energy production), but also to energy storage, uses (military, medical, industry) and transportation of energy materials. More importantly, energy safety and security is a reoccurring theme in international cooperation and communication between countries, associations and companies.

What makes this event even more interesting is the fact that just a few months later after the nuclear disaster a set of bills were passed in the German parliament, Bundestag. One could argue that the disaster affected especially in Germany because there the attitudes changed after the Fukushima disaster; a desire towards a national energy plan that does not include nuclear energy was expressed and supported by citizens and associations – and then, established by parties and political leaders. This resulted in an unparalleled stage or milestone of Atomausstieg. Atomausstieg is a project, or governmental program, developed by various political agencies, and implemented in the German parliament, Bundestag. This program is aimed at the radical reduction and eventually the end of use of nuclear energy, for example via the end of governmental investments in nuclear energy.

Although *Atomausstieg* has enjoyed a central position, there are also other frequently used terminology such as ‘*Energiewende*’, or the transition away from the use of fossil fuels, such as coal, oil and gas, and of other nonrenewable energy sources (such as uranium which is used to create nuclear energy) to the use of more environmentally friendly renewable energy sources¹. Both of these terms refer to the same outcome.

Atomausstieg is not, however, a new governmental program which manifests only after the Fukushima nuclear disaster; discussions about German nuclear energy policies have taken place for decades² – alongside with the use of nuclear energy. Germany’s nuclear power policies before and after Fukushima can be summarized as follows; until March 2011, that is until the nuclear disaster of Fukushima, Germany obtained about 25% of its electricity from nuclear energy, and there were altogether 17 nuclear reactors in operation (World Nuclear Association 2017). In the same article by The World Nuclear Association there is also a reference to an interesting event which took place 2011: “A coalition government formed after the 1998 federal elections had the phasing out of nuclear energy as a feature of its policy. With a new government in 2009, the phase-out was cancelled, but then reintroduced in 2011, with eight reactors shut down immediately” (ibid).

An online article, *Germany: Nuclear power plants to close by 2022*, published by BBC also depicts a quite clear picture about *Atomausstieg*’s situation. There are references to the events of 2011 and to the decisions regarding nuclear energy policies after March 2011: “Chancellor Angela Merkel set up a panel to review nuclear power following the crisis a Fukushima in Japan ... Mr. Rottgen [Environment Minister] said the seven older reactors - which were taken offline for a safety review immediately after the Japanese crisis - would never be used again. An eight plant - the Krümmel facility in northern Germany, which was already offline and has been plagued by technical problems, would also be shut down for good” (BBC 2011). Further in the article there are also other references to the changes in Germany’s nuclear energy policies which will take place in the future: “Six others would go offline by 2021 at the latest and the three newest by 2022” (ibid). A quotation from the Environment Minister, Mr. Rottgen, portrays the nature of the situation and *Atomausstieg* quite well: “It’s definite. The latest end for the last three nuclear power plants is 2022. There will be no clause for revision” (ibid). In short, the situation of

¹ Kaarkoski (2016: 120): “phasing out nuclear energy [and] move towards a ‘sustainable energy supply’ ”

² Kaarkoski (2016): ‘*Energjemix*’ versus ‘*Energiewende*’. Competing conceptualisations of nuclear energy policy in the German parliamentary debates of 1991–2001. Jyväskylä: University of Jyväskylä.

German nuclear energy policies and *Atomausstieg* seems quite clear; before the nuclear disaster of Fukushima, Germany relied on nuclear energy and produced quite a large portion of its electricity with nuclear power plants. All that, however, seems to have drastically changed after the events of Fukushima in March 2011.

German nuclear energy policies in different time periods have drawn interest. In her dissertation Kaarkoski (2016) explores the two terms *Energiemix* and *Energiewende* in German parliamentary debates from 1991 till 2001; Kaarkoski describes these terms as competing conceptualizations in German nuclear energy policy. Kaarkoski (2016) begins her dissertation with a reference to the Fukushima nuclear accident of March 2011 as a key event which influenced Germany's nuclear energy policy: "The Fukushima nuclear accident in March 2011 made '*die Energiewende*' the mainstream concept in German energy politics. In particular, it marked the most recent phase in a long evolving debate about the use of nuclear energy"³. In this thesis, I evaluate this statement further by looking at the securitization of nuclear energy in German parliamentary debates in the months following the nuclear accident. I will explain the two terms, *Energiemix* and *Energiewende*, in detail since they help place my thesis into a context.

During the timespan which Kaarkoski researched German parliamentary debates, that is from 1991 till 2001, the term *Energiemix* was often used making it a pivotal aspect in the German parliamentary debates concerning nuclear energy policies. The term was used also as a relatively positive term although it included the use of nuclear energy (Kaarkoski 2016: 110). This was because nuclear energy was a part of a combination of different energy sources all included into Germany's energy policy in which the goal was to find "the suitable answer for meeting the demands of economic growth and the environment" (ibid). This particular example of the conceptualization *Energiemix* dates back to 1998 when "the federal government [SPD, CDU/CSU and the Greens] and the FDP were essentially stressing the extremely negative consequences of nuclear phase-out" (ibid). In addition to *Energiemix*, the other pivotal term, or conceptualization, is *Energiewende*, and here is how it is explained in the dissertation; For the newly elected Red-Green federal government *Energiewende* from 1998 till 2001 comprised of the idea of "phasing out nuclear energy [and] move towards a 'sustainable energy supply' " (Kaarkoski 2016: 120).

³ Kaarkoski, Miina (2016): 'Energiemix' versus 'Energiewende'. Competing conceptualisations of nuclear energy policy in the German parliamentary debates of 1991–2001. Find this quote in the abstract.

Also in *Energiewende*, as with *Energiemix*, both the environmental and economic factors are taken into consideration: “it was the best way to meet the needs of sustainable development ... it would not result in climate catastrophe ... [and] release the resources and incentives necessary for industry to really kick-start the renewable energy economy” (Kaarkoski 2016: 122). These definitions and the clear division between their meaning is a useful one for this thesis and I argue that they do work as a generalization, but it must, however, be noticed that these definitions were taken from specific examples and from a specific time. In other words, as stated above, the debates about the use of nuclear energy have taken place for decades and the references – although not the terminology – have evolved over time.

In addition to the terms *Energiemix* and *Energiewende*, I also want to discuss the debates from 1991 till 2001 from Kaarkoski’s dissertation a bit further. Although the two conceptualizations are pivotal features of the debates, there are also further features which might prove useful for this thesis. First, one interesting example dates back to 1995 when the use of nuclear energy gained support as an environmentally friendly energy source: “at the same time the pronuclear lobby were starting to find support in environmental arguments ... the first conferences for the United Nations Framework Convention on Climate Change (UNFCCC) were being organised in Berlin in the very same year as these talks (1995), and nuclear energy was being considered as one way to reduce CO₂ emissions” (Kaarkoski 2016: 56). In fact, it seems that in the light of the data, Kaarkoski was able to define this aspect on nuclear energy as a pivotal one for the whole decade: “it has also been championed as an environmentally friendly form of energy production (in carbon dioxide terms). Especially, in the decade in question (1991-2001), it was seen as one answer to the demands for sustainable development and climate protection.” (Kaarkoski 2016: 105). Second, another interesting example which might prove useful for this thesis was the debate in 1999 concerning the incident of Tokaimura: “In September 1999, during Schröder’s first cabinet, one further unexpected and sudden real-world event had an impact on the discussion. There was a critical accident at the Tokaimura nuclear facility in Japan, and this was politicised in the Bundestag on 7 October 1999” (Kaarkoski 2016: 91). This incident was compared to the nuclear disaster of Chernobyl and combined with the concept of MCA (or maximum credible accident) by the Alliance 90/Greens (Kaarkoski 2016: 91–92). This comparison was not, however, generally accepted, and the situation, therefore, resulted in lack of further parliamentary action (ibid).

This situation – including the nuclear disaster of Fukushima, the set of bills which were passed in the German parliament just a few months later, the statistics on reliance on nuclear energy in Germany before and after Fukushima and the features regarding past debates – functions as the stepping stone for this thesis. What I will conduct with my thesis is a debate analysis; I analyze the parliamentary debates of the German Parliament from March 2011 till June 2011 in which Atomausstieg is deliberated upon. I gathered parliamentary documents to investigate German nuclear energy policies in general and in specific the security perceptions resulting in the end of use of nuclear energy, and these documents include official statements from the Committee for the Environment, Nature Conservation and Nuclear Safety, government bills, written questions from parliamentary groups and transcriptions of plenary sessions from the 17th Bundestag⁴. These debates and sessions took place between the 11th of March 2011 and the 31st of June 2011. This time span begins with the nuclear disaster of Fukushima and ends with the ratification of a new law that changes drastically the use of nuclear energy in Germany. In addition to this, all the parliamentary documents which are included in this research paper cover nuclear energy issues. In other words, I do not include all parliamentary documents from the above-mentioned period, just the ones that cover the theme of my research. My interest lies in parliamentary debates since they best describe and predict the changes in Germany's energy policies.

What this means in practice is that I do not focus on Atomausstieg in general, but only on the security aspects of it. My research questions, therefore, focus on the argumentation in these debates and in specific on those arguments which are made *for* and *against* the use of nuclear energy by referring to securitization aspects. In addition to this, I will investigate if it can be argued that after the Fukushima disaster the content of parliamentary debates in Germany resulted in an unparalleled stage or milestone of Atomausstieg. In short, my two study questions of are following:

1. What kind of securitization arguments relating to energy safety and security are used *for* and *against* the use of nuclear energy?

⁴ The 17th legislative session of the German parliament, also known as the second Merkel cabinet, took place from 2009 till 2013 and the session was led by Chancellor Angela Merkel. Merkel served as the head of government for the second time.

2. Can it be argued that the content of these debates comprises a break in German parliamentary debates regarding the use of nuclear energy?

The theoretical framework for my thesis comprises of three parts: parliamentary debates, securitization and energy safety and security. In addition to this, these parts also comprise the analytical framework for my thesis as they provide me with the aspects and points of view with which I will be reading and analyzing the data.

I began my thesis with a description of parliamentarism by referring to ideas from the book, *Parliamentary Style of Politics*, by Soininen and Turkka (2008). These ideas included conceptualizations, such as the fact of political life, freedom and rhetoric. These ideas comprise the essence of parliamentarism and with it, it was easy to begin discussing parliamentarism further; here I included ideas such as types of communication, functions and communication network, which can be found in *Das Parlament als Kommunikationsraum* by Schultz and Wirsching (2012).

The next step was to establish an idea of securitization. I began this by referring to Balzacq's (2015), Waever's (2015) and Williams's (2015) articles because with their ideas comprised securitization as a theory and method in general. Securitization in general, however, was not my goal, but more importantly I needed to connect securitization into IR and constructivism. Here I used articles by Williams (2003) and McDonald (2008). In order to get a more detailed and tailored (to suite this study) conceptualization of securitization, I referred to articles from the book by Scheffran et al (2012) which connect environmental issues and societal stability with human security.

The last step was to include a description of energy safety and security in specific. The previous theories guided the train of thought into this specific topic within securitization. Figueroa (2013), Rieu (2013) and Koyama (2013) gave insights to how energy safety and security can be viewed; Figueroa (2013) discussed what is risk communication, whereas Rieu (2013) described a way of thinking after a disaster, and Koyama (2013) offered useful insights on safety and security issues which should be taken into consideration when national and international energy policies are formed.

The data revealed interesting results. The parliamentary debates included many answers for the first research question "What kind of securitization arguments relating to energy safety

and security are used *against* and *for* the use of nuclear energy”, and especially for the first half of it, what kind of securitization arguments relating to energy safety and security are used *against* nuclear energy, or *for* Atomausstieg. First, the arguments used against nuclear energy included references to threats of nuclear disasters, such as the Fukushima nuclear disaster in Japan. These arguments also referred to another disaster, the Chernobyl nuclear disaster, and but there were also references to the possible nuclear disasters such as these two. Second, the arguments used against nuclear energy referred to the safety and security threats which are posed by the deficiencies of nuclear power plants. The deficiencies might lead to very serious problems, such as a core melt down, which in themselves might lead to nuclear disasters. Third, since use of nuclear power includes threats of nuclear disasters, the use of nuclear power poses threat to life and also on material goods which are necessary to life. Fourth, it was claimed that the use of nuclear power also includes nuclear energy related threats. These issues comprise of nuclear waste, nuclear weapons and climate change. All which in themselves include several risks and therefore, constitute as safety and security based arguments against the use of nuclear energy. The fifth and sixth category of safety and security arguments against the use of nuclear energy comprise of threats to the society in terms of secured energy production and consumption. It is argued that the use of nuclear energy threatens society because the use of nuclear energy for the production of electricity includes several risks. The seventh category of arguments made against the use of nuclear energy and for Atomausstieg comprises of threats of terrorism. Nuclear power plants are not secured against terrorist attack and therefore, constitute a major threat. Lastly, foreign relations are discussed. In order to avoid conflict between nations, there needs to be enough sources and energy for everyone. In addition to this, the energy sources should not harm the environment in such a way that it poses risks to societies. Due to this situation, it is argued that the use of nuclear energy poses threats and should instead be substituted by investing in renewable and environmentally-friendly energy sources.

The second half of the question, what safety and security based arguments are made for nuclear energy and against Atomausstieg, fall roughly under three categories; material goods necessary for life, energy supply and, energy markets and prices. One of the arguments used for nuclear energy includes the idea of nuclear energy as a necessary bridging technology. In other words, it is argued that it is simply impossible to withdraw from the use of nuclear energy because then, the securitization of energy supply would be

compromised and with that the generation of electricity. Second, there are arguments made which refer to the rising prices if the energy markets are drastically changed by removing the use of nuclear energy; it would burden citizens and especially lower-income households whose social status would deteriorate even further. In addition, Atomausstieg would also slow down the already slow and difficult economic growth. Atomausstieg threatens the stability of power generation and therefore, also the secure energy supply. Lastly, Atomausstieg in its current situation is depicted as the panic of nuclear phase out, and that there should be no Atomausstieg without a real plan which would ensure energy supply, reasonable energy prices and the wellbeing of the population.

In terms of the second research questions, “Can it be argued that the content of these debates comprises a break in German parliamentary debates regarding the use of nuclear energy”, it seems that in light of the data these debates do comprise a break in the overall debates which have been had in Germany in regard to Atomausstieg. The data showed that energy safety and security issues have been accepted and therefore, comprise a new milestone, or a particular time span of its own. The established energy safety and security threats undermine severely the arguments made for the use of nuclear energy, for example in the form of Energiemix which at least from 1991 to 2001 was still a competing concept with Energiewende.

2 Parliamentary Debates as theory and method

2.1 Parliamentary Style of Politics

First, it is first necessary to understand *why* studies on parliamentary debates have been made and why I will now strive to do so myself. Soininen and Turkka (2008: 9–14) define parliamentarism as a specific style of politics where speaking *for* and *against* issues is the means to make decisions and pass laws that will affect the whole nation – and possibly a wider constituency. This style can also be characterized as deliberative politics where individual political decisions are made based on the alternatives (ibid). In other words, these debates matter; they dictate what issues will or will not be deliberated upon and which form policies will eventually take. In addition to this, parliamentarism is not (only) debating and deliberating but entails institutionalization; these debates take place in an institutional setting which provides the framework, procedures and practices along which debates are organized (Soininen and Turkka 2008: 11). So, in short, the concept of parliamentarism not only explains why studies on parliamentary debates should be made but it also provides insights on what to look for within the data.

I want to begin the theoretical part of my thesis by exploring the concept of parliamentarism in detail in order to explain further *why* and *what* I study. Parliamentarism – including parliamentary debates in particular – is what best describes political life; this is how political life operates and that is why it is an essential topic for research papers. Soininen (2008: 61–79) focuses on parliamentarism in the 20th century and assesses the different features and functions of parliaments. First, the reason to assess parliamentarism is that parliamentarism is – simply put – a fact of political life (Soininen 2008: 61–63). Moreover, the concept of freedom is attached to parliamentarism: the concept can be used to refer to equality in economics and opportunity, and as the overall standard of living rises, so does the contentment with the parliamentary system (Soininen 2008: 63–69). However, freedom can also be used to refer to the practice of free will (ibid). In other words, freedom in parliamentarism can be seen as the style of politics in parliamentary systems where policies are made under the conditions of confrontation (ibid). This leads us to the second feature of parliamentarism, namely government by discussion (also known as politics of conversation); decisions are compromises and deliberated choices, and politics is a civilized activity characterized by moderation, tolerance, conversation and persuasion

– not force (Soininen 2008: 70–75). In conclusion, in parliamentarism the results comprise the essence of politics and dictate the survival of the system – all taking place within established procedures (Soininen 2008: 76–79).

After establishing the issue of fact of political life including the aspect of freedom, it is now possible to move on to focus on the content, or rhetoric. Palonen (2008: 82–103) elaborates on the concept of speaking *pro et contra* as part of parliamentary rhetoric. The parliamentary style of politics is government by discussion, and discussions are built upon the principle of the pros and cons, meaning that the favoring and opposing views of the case in question are brought up and discussed in detail (Palonen 2008: 82–83). First, speaking *pro et contra* entails the principle that it is always possible to find opposing views – this often leading to open and public controversies – and the very procedures of parliament operate according to this mode of speaking (Palonen 2008: 83–86). Next, the procedures of the English parliament with three readings in which freedom of speech and parliamentary immunity are respected are formed in this way to ensure that there are opportunities to find, invent and imagine grounds both for and against of the bill in question (Palonen 2008: 86–88). This aims to provide a fair procedure but also to serve the interests of the parliament and the people (ibid). Third, Palonen (2008: 88–95) discusses Hamilton’s maxims on persuasive parliamentary speaking; Hamilton provides clear tactical devices on how to increase the chances to oppose the proposition at hand. Meanings of concepts can be altered by diverting the attention to the surroundings of the concept; by doing so the reasons that make the concept negative or positive can be assessed (ibid). Hamilton combines eloquence (how to express, quality of speech) with rhetoric (quality of persuasive act, to consider multiple aspects) and appeal to reason (Palonen 2008: 92–93). Lastly, Palonen (2008: 103) discusses rhetoric in the context of modern parliamentarism where parliamentary debates are rather an exception than rule. Due to tighter parliamentary calendars and also the proliferation of agendas, debates have lost their meaning as speaking *pro et contra*, and instead of striving to critically discuss bills in detail, the emphasis of the debates is on achieving consensus (ibid).

In connection with speaking *pro et contra*, there is an important phenomenon to be recognized when discussing parliamentary debates. Ihalainen and Palonen (2010) discuss the use of concepts and the way the meaning of concepts may change over time especially when the context is parliamentary debates.

“In parliamentary debates, we can identify the precise types of actual speaking situations in which the key political concepts of the time were used ... [In the] tradition of constantly speaking pro et contra in a competitive atmosphere, the distinctions between the opposite sides could be very clear, and these are reflected in conceptual choices. We can also locate intentional innovative speech acts that constituted changes in the meanings of the concepts ... In that way, we can demonstrate the range of possible meanings that could be assigned to a particular concept by the parliamentarians.”

In the above quotation, Ihalainen and Palonen (2010: 12) describe how concepts may be used by parliamentarians. If one looks at a parliamentary setting where there are roughly two sides (the government and the opposition), it is possible if not likely to find that the two sides use same conceptualizations but refer to different phenomena with them. This results in the situation where conceptualizations acquire different meanings in different times and in different settings. Also, the context of parliamentary debates may even accelerate this evolution. Ihalainen and Palonen (ibid) also add that “even if the speakers merely aimed at using a concept in a way that could be shared by their audience, doing so might involve conceptual modifications”.

Soininen and Turkka (2008: 155–229) conducted case studies on Finnish parliamentarism, and the two case studies which I decided to include into the theoretical part of this study have their focal point on parliamentary speech and representative talk – although these case studies focus on Finnish parliamentarism I have taken their topics to a more general level (the discussed features of parliamentarism do not only apply to Finnish parliamentarism). First, styles of parliamentary speech in plenary sessions of the Finnish parliament *Eduskunta* have its basis on the four traditions of parliamentary rhetoric (Turja 2008: 155–183). There are four traditions; first, the norms of the classical tradition are based on polite political rhetoric and the content is comprises of opposing views on the matter and because of this, this style of speech is used in a competitive and deliberative political culture; second, the canonical tradition has its origin in church and therefore, includes the use of allegories and narratives that are aimed to appeal to the feelings of the people often referring to common values; third, the theatrical style of speech is characterized by dramatization and satire and is used in a competitive political culture where politics is about competing for the votes of the people; lastly, the fourth style of speech is rational-legal style in which (as can be inferred from its name) scientific facts and experts have authority credibility, the form of the style of the speech is formal and

these speeches mostly aim to achieving consensus and cooperation (Turja 2008: 155–161). Although traces of all the traditions can be found in Finnish parliamentary debates, the last style of speech, the rational-legal, is most appropriate and used in modern societies; its pivotal features are factuality, formality and objectivity (Turja 2008: 178–182). Also, there are dominant phenomena that contributed to the growth in use and appearance of the rational-legal style, for example the appreciation of argumentation increased so that it became a norm that each issue would be reasonably treated (ibid). Also, the developments of institutions, public sector in general, research institutional and administrative staff resulted in prewritten speeches that are carefully and with time prepared and therefore, also the expectations grew so that is needed to show off expertise knowledge in the speeches.

After having described the four traditions of parliamentary rhetoric, it is time to discuss a completely different feature of parliamentary discussions referred to as professionalism. It has been argued here that the parliament is a place where agendas are discussed by implementing the *pro et contra* principle. This view has, however, been compromised by a (new) phenomenon; most of the important work is done in committees behind closed doors (Pekonen 2008: 208–209). Pekonen (2008: 209–210) argues that the *pro et contra* rhetoric implemented in plenary sessions in a system of government by discussion fits two-party systems better than multi-party systems, and Pekonen aims to prove this by showing how difficult it is to implement that principle in multi-party systems (system where – more often than not – the important work is done in committees). Public political talk is an important part of every representative assembly, but more importantly, it is crucial to separate talking from doing (Pekonen 2008: 210–214). In multi-party systems where consensus is appreciated and necessary, committees are seen as an appropriate place for frank and professional talk, whereas public talk in assemblies are not (ibid). In other words, committees guarantee social and political consensus among opposing parties whereas the aim of the public plenary talk is completely different; it is used for criticizing the government and defending decisions (ibid). In addition to this, committees are a place for apolitical *professional* talk; the discussions are open and fair complimented with the use of experts – and more importantly, they are not aimed at conflict as party political talks in public are (Pekonen 2008: 214–224). There is a link between professionalism and trust; the professional atmosphere leaves room for solidarity and also enables effectiveness as committees are small groups (ibid). In conclusion, the parliamentary principles are strengthened in the Finnish political systems because when parties and fractions lose

power, both the parliament and committees grow stronger; speaking *pro et contra* is more or less futile in decision making in systems like this where opinions are pretty much fixed beforehand (Pekonen 2008: 224–227).

2.2 Parliament as place of communication

When the parliament is referred to as place of communication, the emphasis is on various aspects of parliamentary communication. The aspects of communication can be defined by comparing communication with the conceptualization of representation, with the possible friction between communication and action, and then, with roles and publicity.

Patzelt (2012: 45–70) looks at the functions of parliamentary communication and with what concepts can these functions be recognized. In other words, the basic idea is that communication is the key concept that legitimizes parliamentary decisions and that there are institutionalized patterns within which communication operates. The political process of communication is complex; there are various agents, such as interest groups, assemblies, NGOs and parties, and all of these agents form the communication network that revolves around the representative body, the parliament (Patzelt: 45–49). Also, media play a crucial role as they make the communication open and public (ibid). As stated above, the parliament forms the centre of the communication network, but it also holds (all) the power; it is in the parliament where various discussions, arguments for and against issues, are deliberated upon (ibid). More importantly, it is not mere communication but representation that makes the communication aspect important. There are three principles that shape communication to representation; the representatives act according to the interests of their constituencies being communication to them; second, the representatives have a free mandate, meaning that enjoy immunity when they make decisions; third, although there is always the possibility of a conflict, there will not be too severe nor too often conflicts when parliaments successfully represent their constituency (usually when successful, representatives have been able to imagine and predict possible future problems and prevent them) (Patzelt 2012: 49–51).

In addition to communication as representation and problem solving, or formation of public interests, Patzelt (2012: 51–60) lists three communicative functions that parliaments have; first, forming a government is a communicative process where possible alternative

coalitions are discussed and second, controlling the government is very much a communication act where with the help of the media interests of the public are conveyed to the government and vice a versa whether the government's policies measure up with the interests. Lastly and most importantly in terms of this thesis, is law formation as a communicative function where various interest groups, committees and ministries cooperate in numerous hearings in order to produce a bill (ibid). In addition to communication acts, Patzelt (2012: 63–70) also discusses symbolic representation which I will cover only briefly now. Symbolic representation simply means that not all representation or communication is done with discourse but also other aspects are important, for example party membership can be conveyed with where representatives sit in the plenum, or for instance, some rituals convey the principles of parliamentarism and contribute the continuity of the system such as free elections and freedom of association and freedom of speech (ibid).

Palonen (2012: 75–90) compares four different types of parliamentarism and discusses what role does debates (as an art of deliberation based on *pro et contra* speaking) have in each type. First, parliamentarism can be seen as policy-formation where the content of decisions is debated and decided (Palonen 2012: 77–78). Second, parliamentarism as a system (polity) defines the power relationship between parliament and government; the government is always accountable to the parliament and the bills proposed by the government always go through multiple hearings in the parliament (Palonen 2012: 79–81). Third, parliamentarism as political (institutionalized) process (politics) includes debates and use of rhetoric when decisions are made about whether and what kind of issues will be incorporated to programmes in (Palonen: 81–85). Fourth, parliamentarism can also be seen as agenda-setting or politization of issues when initiatives from representatives are heard (Palonen 2012: 85–88).

The focus in studies about parliamentarism is often on speeches and their forms, but Mergel (2012: 229–244) focuses on connecting speeches with action. Parliament is an institution where policies are made via discussions, in other words *talking* and *doing* are very much connected (Mergel 2012: 229–230). Mergel (2012: 230–232) identifies three different functions that speeches serve. First, talking is an extension of suffrage; in addition to voting there are other ways of communication interests (ibid). The second function which communication serves is decision-making; good decisions are based on reasonable

argumentation (ibid). Thirdly, communication is a part of the institutionalization process where representatives of various groups and organizations are included to hearings and this partly legitimizes the process (ibid). In addition to the three functions, Mergel (2012: 232–239) lists three modes, or styles, of speech – all of which serve the same purpose, namely law-formation through convincing. The first mode is rhetoric of appeal; speeches are always directed at an audience with the aim of convincing the audience, but also the speeches take place in a specific time which influences the form of the utterances and the tactics of appeal (ibid). Second mode of speech is argumentation; decision need good reasons behind them and, with successful argumentation, the desired decisions are made (ibid). The last mode of speech focuses on relationships that are built with utterances; speakers can refer to specific groups or classes and identify themselves with them (ibid).

Bösch (2012: 371–386) studies the relationship between the parliaments of Britain and Germany and the media in the late 19th century. The relationship began to develop as mass communication and mass media were established (Bösch 2012: 371–374). Representatives could communicate with and reach wide audiences, and interaction between parliaments and journalists started to form itself (ibid). In the 19th century the media mainly published the parliamentary debates or the main parts of them so the media functioned as mediator between public and parliament (Bösch 2012: 374–377). In the 20th century journalists began to briefly summarize the debates and introduce them with their own commentaries (ibid). Informal relations also began to develop as the media transformed to the ‘fourth estate’; information was exchanged freely between journalists and members of parliaments and also other interaction existed between them as many of the journalists were party members or agents for magazines that favored a certain political party over another (Bösch 2012: 377–381). In addition to this, it was practical for members of parliament to receive information from journalists about critique/questions (ibid). The relations between the parliament and the media began to break down as parliamentary debates no longer were the interest of journalist and because privacy was being demanded by members of parliament; the government and ministers had now a better relationship with the media (Bösch 2012: 381–386). In conclusion, a more modern feature of the relations between the media and members of parliament is lobbyism; members of parliament and journalists who concentrate on and promote similar issues tend to interact with each other more (Bösch 2012: 386).

2.3 Concluding remarks

The above listed conceptualizations under the two subheadings (parliamentary style of politics and parliament as place of communication) comprise the theory section on parliamentary debates. All these theories are important because they cover the essential features of parliamentary debates regarding my study. In addition to this, the gathered theories function as a method as well because they provide me with the tools I need in order to be able to assess my data. The Parliamentary-style-of-politics section includes insights with which I look for *pros* and *cons* in the debates, or for example if the principle of freedom can be found present. Also, the theories allow me to assess the rhetoric used in the debates and especially if the rational-legal style is in fact the most used and found most appropriate. I can also assess what processes are in place, such as multiple hearings which ensure opportunities for debates. Moreover, I will also be able to assess the level of professionalism in the debates, i.e. if opinions seem to be fixed beforehand or are there actual debates to be found.

The Parliament-as-place-for-communication section provides more in-depth insights on the aspects of communication which is essential since communication is always present in parliamentary debates. With these insights, I was able to define the essential features of the content of parliamentary debates, but the insights also provide me with another set of tools to assess the data. I can for example evaluate the functions the communication serves, and also which groups comprise the communication network and which ones of the four roles of communication can be seen in the data. The theories under this section allow me to connect communication with action, such as law-formation, which is essential because deliberation legitimizes the processes of decision-making in parliamentary systems. I will be able to identify certain functions with communication.

3 Securitization as theory and method

3.1 Essence of Securitization

In his essay, *The 'Essence' of securitization: Theory, ideal type, and a sociological science of security*, Balzacq (2015: 103–111) fashions the ideal type of securitization in order to improve the understanding of the concept and its internal coherence: “when the essentials of securitization are established, different theories of securitization... each relates to the ideal type” (Balzacq 2015: 103–104). Balzacq (2015: 104–105) first discusses what the ideal type is and why it is needed; concepts, or conceptions, are pivotal in sciences as with them it is possible to discuss and analyze experience about the world, and these conceptions are created by listing the unique features of phenomena. In other words, that is the *essence*: the features and traits. Then, Balzacq (2015: 105–107) moves on to list the essentials of securitization by examining numerous instances of securitization and summing up the core features and similar concepts used in relation to securitization. These features listed by Balzacq do not comprise everything relating to securitization since there were many case-specific features that are part of *a* securitization theory but for this purpose of creating the ideal type they were ignored (ibid): “an ideal type is not exhaustive [and] theories differ from the ideal type by degrees” (Balzacq 2015: 107). What is important is that the case-specific features that distinguish *a* securitization theory from another do not contradict with the ideal type (ibid). I will next present a table where the core features are listed; I will not, however, expound these features further now as they will become apparent in the analysis section. Below is the table where the ideal type of securitization is summarized:

Table 1. The seven features of an ideal type of securitization.⁵

1. Threats are social facts whose status depends on an intersubjective commitment between an audience and a securitizing actor
2. The drivers of securitizing moves are knowledge claims about an existential threat to a referent object
3. Securitizing moves and context are co-dependent
4. Power relations among stakeholders structure both the processes and outcomes of securitizing moves
5. Securitizing moves are engraved in social mechanisms (persuasion, propaganda, learning, socialization, practices, etc.)
6. Securitization instantiates policy changes – for example, ‘deontic powers’ (rights, obligations, derogations exceptional or otherwise, etc.)
7. Securitization ascribes responsibility

Then, Balzacq (2015: 107–109) connects the ideal type of securitization with sociological theories of securitization. In other words, he reviews case studies to show how theories of securitization in them refer to the essentials of securitization. First, references to the intersubjectiveness (as an essential of securitization) are made via the concept of an audience; when security issues emerge in a society there is always the possibility that they affect audiences and sociological studies more often than not analyze how ‘successful’ security measures were in preventing the consequences (Balzacq: 107–108). Second, securitization in studies is connected to politics and policies and Balzacq agrees with this view; securitization can and has been connected to ‘exceptional’ politics (meaning new policies emerging from exceptional conditions in contrast to ‘normal’ politics) but Balzacq redefines this relationship between new (unexpected) moments and politics to a more fluent one where security and politics interact with each other (Balzacq 2015: 108). Third, securitization has been strongly linked to responsibility; speech acts performed for example by a securitizing actor are accepted (or not) by the audience with the implications that certain actions such as policies are now considered obligations (Balzacq 2015: 109).

⁵ Balzacq, Thierry (2015: 106): The ‘Essence’ of securitization: Theory, ideal type, and a sociological science of security. *Electronic Journal of International Relations* 29:1.

Balzacq suggests a shared-agency relationship where, when the outcomes are not what were to be expected, all would be hold accountable (ibid).

Lastly, Balzacq discusses the epistemology of securitization; securitization as the ideal type “explain[s] the construction of threats by revealing the social actions and structures that underline them” (2015: 110). In other words, with securitization it is possible to detect the reasons *why* and *how* a security issues rose in a society and *why* certain measures were taken – the causes and effects are part of the phenomenon.

Waever (2015: 121–126), on the other hand, offers another important feature of securitization, namely the political nature of it. “A theory is here a model that does not in itself explain, but it forms a coherent system in relation to which it is possible to both compare instances and formulate specific hypotheses” (Waever 2015: 125). Waever (2015: 124) therefore, criticizes the sociological theories: “the so-called sociological version of securitization theory is problematic.” When securitization is understood as ‘mere’ practices and processes, the political nature of securitization is forgotten and with that also responsibility of the actors and the causality of speech acts. In other words, securitization is political in its nature as there is a cause-effect relation between the speech acts performed by political actors and the causes, for example policy changes. What is more, sociological theories only succeed in describing certain phenomena, but fail to create theories and explanations (ibid). The political nature of securitization is explained as follows: “politics takes place among people, in-between us, because power only emerges when people act together, it basically consists of action directed to and dependent on the reaction of others” (Waever 2015: 122). According to Waever (2015: 122): “Securitization theory was built from the start on speech act theory” where there is a cause-effect relationship between speech and effects (Waever 2015: 123).

Waever praises securitization based on speech act theory because first, it is a proper model of what a theory is (explained above), and because with that as the framework for the analysis it is possible to form explanations and also, respect the political nature of securitization (ibid). Securitization theory goes beyond discourses and rhetoric and takes into consideration “political co-production between multiple actors of social states” (ibid). “[T]he different strands of securitization theory convergence on combining multiple methods and forms of analysis...My ‘illocution focused’ version of securitization theory claims it can integrate causal explanations, social mechanisms, hypothesis testing and

political theory, by systematically organizing the different parts around securitization as specific kind of political event” (ibid). Waever (2015: 126) concludes by saying that securitization has proven to be a useful framework for analysis “On most conventional measures, ‘securitization’ is an academic success story”.

Williams (2015: 114–120) starts his essay, *Securitization as political theory: The politics of the extraordinary*, by confirming Waever’s view on the political nature of securitization: “securitization is above all political”. However, Williams’ focus is on a different question; he assesses whether securitization is defined by politics of emergency and exception (defined by friend-enemy distinction) or more broadly by politics of extraordinary (2015: 114). Politics of extraordinary is defined as follows: “the declaration of existential threat and (if successful) the generation of the capacity to break free of the rules of ‘normal’ politics (Williams 2015: 115). This declaration has however been used as the point of declaring one’s enemy – as done in politics of emergency/exception (ibid). Securitization as politics of extraordinary offers a more positive view and emphasizes consensus and the capability to act (ibid). Also, the people are seen as ‘the constituent power’ who have ways to participate and influence in a political system – this can be called the democratic politics of extraordinary (Williams 2015: 116). More importantly, the constituent power is not fixed; it comprises of various actors – some more influential and powerful than others – that change in time and place, and they can be changed through discourse (ibid).

The second theme assessed by Williams (2015: 117–118) is the relationship between normal politics and security practices: as proposed by the Copenhagen School, there is a strict divide between the two, but sociologically the connection between the two politics is interesting and also the question of how politics of exception (with violent practices) become to prevail. In politics of extraordinary – developed by Arendt (in Williams 2015: 118) – there might not be a divide between the two types of politics but instead, it is crucial to understand how politics of extraordinary function according to democratic principles without using violent practices.

3.2 Securitization in IR: broadening of issues and complex construction

Images, Enemies: Securitization and International Politics by Williams (2003) and *Securitization and the Construction of Security* by McDonald (2008) place securitization in the context of international politics, or international relations (IR), and provide me with a

broadened concept about securitization which includes the idea of broadening the number and type of issues in the field of securitization, but also the idea of broadening the complex process of constructing a securitized issue.

Williams (2003: 511–531) discusses securitization as developed by Copenhagen School, its influence from realism and also its relationship with International Relations (IR). Williams (2003: 513) begins by stating that securitization has experienced a broadening of its agendas from military and state conflicts to an indefinite number of possible actors, such as individuals and sub-states groups, and also, to include not only violent conflicts but also environmental issues. The Copenhagen School defines securitization as speech acts; as issues are recognized and treated as threats they become security issues or securitized – resulting in an infinite number of possible security issues (ibid). Although securitization as speech act theory does not limit agendas that might become security issues, Copenhagen School also has categorized issues according to three sectors: military sector (state conflicts over territory), political section (the legitimacy of a governmental institution being threatened by a sub-state group) and the social sector (groups and their identities being threatened by population movements or cultural flows) (ibid). In addition to the sectors, another effort by Copenhagen School to limit the number of security issues is the theory of successful speech act; not all speech acts are socially convincing enough to constitute a security issue, for example a securitizing actor must possess enough authority for their claims to be effective (Williams 2003: 514). Still, securitization is clearly on the constructivism side and places itself within IR as a constructivist theory (ibid).

Williams (2003: 515–516) then links securitization to Schmitt's realism in IR by discussing what types of issues can be securitized. For issues to become security issues, it must to be possible to intensify the issues, to make them political enough so that they can be accepted as existential threats (ibid). This type of thinking (from Schmitt) has deep roots with the politics of enmity, decision and emergency (ibid). Also, the understanding of politics along the friend-enemy division in the context of state sovereignty is an important aspect of Schmitt's realism whose influence can be seen in securitization (Williams 2003: 515–517). Politics is about making decisions that either threaten or secure state's sovereignty; when decisions threaten the political order, this situation becomes a state of emergency (ibid). "Friendship and enmity provide the foundational structure of allegiance, of solidarity, that underpin the capacity for effective decision" (Williams 2003: 517).

Copenhagen School has been criticized for its ethics of securitization; when securitizing issues is a mere speech act, then anything can be securitized with the consequence that no critical evaluation of the 'real' state of the threat is needed – the threat that justifies extreme measures (Williams 2003: 521–523). The answer to this criticism is that Copenhagen School tends to avoid *realpolitik* and to see securitization as a social process; speech acts operate in the realm of discursive legitimization where the successfulness of speech acts is judged by the audience (*ibid.*). In conclusion Williams (2003: 528) states the following: “As I have sought briefly to demonstrate, a key challenge for securitization theory is that its presentation of security as a speech-act is potentially too narrow to grasp fully the social contexts and complex communicative and institutional processes of securitization at work in contemporary politics”.

McDonald (2008: 563–582) begins his article by stating that when security issues have been studied in contemporary international politics the usage of securitization is enormous. Securitization as a conceptual framework has established its place in IR but it also has its limits, and McDonald in his article sets out to assess the limits and define where securitization needs to be wider (McDonald 2008: 568–580). McDonald (2008: 568–570) begins by addressing the designation of threat beyond speech; in Copenhagen School language is the prime source or format of doing securitization acts – state representatives' utterances include words on security and threat or the like and then the issue becomes a security issue. According to McDonald, however, language is only one way of communicating; images, for example of the burning World Trade Center Towers, and physical actions are also ways to communicate (*ibid.*). When we go beyond speech also the range of pivotal actors is wider (*ibid.*). As a consequence, security construction becomes a complex process with various actors and (routinized) practices – not just utterances of heads of state (*ibid.*).

Second, McDonald (2008: 570–573) addresses the importance of context; not only speech acts form security issues but the context where speech acts are made influences, for example previous or accepted security issues, actions/agents, and perspectives, but also the audience. According to McDonald (2008: 573): “those interested in the construction of security must pay attention to the social, political and historical contexts”. Third, as the framework for designating the enemy broadens, so do the number of dominant voices, or important actors – as already briefly mentioned above (McDonald 2008: 573–575). In securitization, the focus is on “articulations capable of leading to change in practice”

resulting in utterances from political and public leaders with vast audiences, in short institutional voices (ibid). This practice, however, neglects many voices and with that also contributes to the marginalization of voices and the preservation of specific ideas of securities which might be contested elsewhere (McDonald 2008: 574–575).

McDonald (2008: 575–577) then moves on to address the issue of the moment: in the Copenhagen School, there is a moment or a specific point when an issue either becomes securitized or accepted by the audience or when violent measures are implemented, but this view is not unproblematic. Most issues, for instance issues on immigration or environmental issues, evolve over time and demand many efforts before becoming security issues. Also, this creates unnecessary tension between politics and security; political issue is understood differently than security issues and may result in ‘panic politics’ (ibid). Lastly, the concept of threat is problematic; in securitization always *threats* are analyzed – but there are also other security issues that are not threats (McDonald 2008: 577–580). The idea behind securitization is that there is a need for prevention and protection from threats, as mentioned earlier the friend-enemy division from Schmitt has had a big influence (ibid). However, different security discourses (other than friend-enemy and threat discourses) are needed to address security issues more accurately, for example discourses of inclusion when discussing ways to protect the environment (‘our’ rainforests, part of ‘us’) (ibid). The Copenhagen School has proposed the concept of desecuritization when removing issues from security sectors to normal politics – naturally with problems as tension between normal and security politics rise (McDonald 2008: 579).

3.3 Securitization of Climate Change

Trombetta (2012: 151–164) explores the relationship between environmental conflict discourses and security policies; the various discourses about environmental conflicts have securitized climate change in different ways, and it is interesting to see if and how discourses have affected and transformed policies. First, environmental conflict discourses have their beginning in the 80’ when environmental problems began to be recognized as security issues; they mostly concentrated on people’s needs and rights and what implications environmental issues would have on them (Trombetta 2012: 152). These discourses constituted a cooperative approach on security; global environmental problems were used to promote common global security (Trombetta 2012: 153). There were, however, difficulties in recognizing these issues as security issues because security issues

were usually categorized in military and confrontational terms, especially in the Cold War era (ibid). This resulted in the marginalization of environmental issues and it also created a gap between resource management and conflict studies (Trombetta 2012: 154).

Debates have evolved since and the topic of conflicts originating from environmental problems has been now widely accepted and used; environmental degradation has now transformed into a security issue – a result of bold statements and studies that have created a causal relationship between the scarcity of resources and conflicts (Trombetta 2012: 155). In addition to environmental issues in general transforming into securitization discourses, Trombetta (2012: 156) focuses on climate change in specific and it is necessary to bring it back into these discourses and debates. Climate change is a part of the climate system and can therefore, pose as a threat to (inter-)national security and a cause for conflict, for example through high-impact or irreversible events (Trombetta 2012: 157–158). Trombetta (2012: 158,160) states that claims have been made that climate change has now been securitized and links this view to the Copenhagen School where securitization is speech acts and where therefore, the importance of discourses have been emphasized. In conclusion, though, Trombetta (2012: 161) states that there is a division between securitization and governmentalization which allows processes and transformation of issues.

Where Trombetta (2012: 155–164) explained how environmental issues (including climate change) were transformed into security issues, Brzoska (2012: 165–175) explains the next step of how particularly climate change instigates security policies: “Climate change has, within a few years, become one of the top items on the security agenda of many states and international organizations” (Brzoska 2012: 165). Although the topic of my thesis is not climate change in specific, Brzoska (2012: 165–175) offers important insights and policies also within environmental security in general that relate to my topic, for example how disaster management and preparedness are pivotal issues and actions in security policies (Brzoska 2012: 175). Brzoska (2012: 166) begins by reviewing studies on security discourses; environmental security is defined as follows: it includes a broad range of threats and vulnerabilities within the context of environmental change focusing on the negative effects to human populations and providing a wide range of policy solution. Brzoska (2012: 167–170) then moves on to focus on national strategy documents and the issues and solutions reported in them. Overall, the discourse in these studies includes mentioning of environmental security and threat, environmental disasters – both man made

and ‘natural’ – are considered a major threat as they have negative consequences on the security of population and state (ibid). Solutions comprise of various disaster management strategies, such as international cooperation, mitigation (reduction of fossil fuel, carbon footprint) and also conflict prevention and strengthening of military capability (ibid).

Brzoska (2012: 170–173) then reviews National Defence Documents with somewhat similar results; although defence documents focus on analyzing threats and the uses of military forces (and there are documents in which discourses on environmental threat or conflict are not considered), the importance of disaster preparation is (surprisingly) emphasized and disaster management pops as an important part of defence planning, for instance during environmental disasters there are many functions fashioned for the military forces on how they can help the population and improve the situation. Lastly, Brzoska (2012: 173–175) focuses on factors that influence the security discourses. There are several factors that contribute to the divergence between security rhetoric and security actions; security actions are not implemented for example when the effects are unknown or disputed or when the agendas have very little to do with security strategies and defence planning (ibid). Also, new challenges which include many uncertainties are difficult to connect with conflict management (ibid).

Wallbott (2012: 223–237) discusses how environmental threats in general and climate change in particular has been received and dealt with in international climate policies, and also how these discourses have affected relation to international climate policies; warming of the climate system is produced mainly by man-made emissions such as greenhouse gases (GHG), and this has significant environmental implications (disasters such as severe floods and storms) which further affect human security negatively. Therefore, policies need to be implemented internationally, for example policies that include mitigation or reduction of the use of fossil fuels in order to reduce gas emissions (ibid). The emphasis is on the international and institutional aspect: “The required institutionalized and coordinated political activities aimed at strengthening the resilience of individual and community units need to anticipate and prevent possible negative (side-)effects on intermediate conflict-promoting factors” (Wallbott 2012: 224).

Wallbott (2012: 225–226) begins by politicizing environmental issues. Before ‘nature’ and natural phenomena were considered as uncertainties, something *external* to human knowledge and activity (ibid). This view has then been changed by intertwining the human

world with the natural world; violations and interruptions in the order of the human world are sometimes caused by natural phenomena and vice a versa, human activity affects the biological conditions and physical processes (ibid). With this new understanding, it is possible to reduce the uncertainty by producing knowledge with scientific methods (ibid). As a consequence, environmental issues become part of politics, for example political economy and ecology; natural disasters are a part of the political (and economic and social) environment, or in other words, vulnerabilities in (international) societies are the result of certain political processes (ibid).

Wallbott (2012: 226–228) then discusses the political effects of natural events; “natural disasters lead to significant changes within the affected societies”, such as material loss or political unrest. However, Wallbott (ibid) also mentions the concept ‘disaster diplomacy’; it refers to the *positive* effects of environmental politics, for example reduction of emissions, international cooperation or environmental policies that aim to sustainable development.

Lastly, Wallbott (2012: 229–234) discusses international policies, its goals and achievements. The international community has expressed its will to recognize environmental issues, their severity and also their implication on security, for example Wallbott mentions the UN Framework Convention on Climate Change from 1992 whose goal was to reduce to increase of greenhouse gases in the atmosphere so that its dangerous implication could be avoided, and the Yokohama Strategy and Plan for a Safer World from 1994 whose focus was on natural disaster prevention and mitigation (ibid). However, this leads to the question of whether the formal consensus on DRR (disaster risk reduction) has actually led to implementations (Wallbott 2012: 231–234). The results are a bit paradoxical; some countries have been able to reduce their GHG emissions, while in other countries the level of emissions grew – however, the results are also difficult to pinpoint as reporting mechanisms lack in accuracy (ibid).

Rothe (2012: 243–254) discusses the securitization of concepts and the gap between securitization claims and the implemented policies; he discusses this topic in relation to cataclysm (catastrophic natural disasters) and to Copenhagen School, meaning that natural disasters lead to securitization of environmental issues which then should lead to the use of exceptional measures. Rothe (2012: 244) begins by briefly explaining Copenhagen School (put simply as follows); securitizing actors (political leaders with authority) make

securitizing moves (statements about objects in reality being threats) which then, transform the issue into a political issue (as they are accepted by the audience) resulting in the adoption of exceptional political instruments. The Copenhagen School has been criticized; first, securitization is a process rather than an event, second, what is considered as audience and actors is too limited and third, designating threats through military conceptions is too narrow (Rothe 2012: 245). Rothe (2012: 245–246) begins by addressing the issue of discourse (in contrast to speech acts); in discourse language is used to attempt to make claims about the reality, however, these discursive structures are never fixed but changed and challenged by individual actors in process where they relate to previously established discursive structures. This understanding of securitization as a discursive process compromises (rightfully) the distinction between politics and security; “The construction of threats is thus a feature of every ordinary political process” (Rothe 2012: 246–247). As a consequence, Rothe (2012: 247–248) adheres to a different model for securitization where “alternative interpretations of the world, political problems, and the right political solutions compete with each other. In this process, individuals take up different subject positions to construct their arguments”.

In conclusion, Rothe (2012: 254) uses this argumentative model for securitization to explain the gap between statements (securitizations) and the implementations, or policies. Statements about security do not automatically transfer to policies due to the fact that there are multiple attempts by various actors to securitize concepts which conflict with each other. This becomes apparent in my thesis where the contradictory arguments are made by different actors all who use securitization as a measure to justify their points of view.

3.4 Concluding remarks

Under *Securitization as theory and method*, I gathered specific insights all which are necessary in order to understand what we are talking about when we use the concept securitization. Not only are these theories important in order to grasp the concept but they also provide me with the tools with which I am able to assess the data from the securitization viewpoint. The definition about securitization provided under the subheading *Essence of Securitization* is not an exhaustive one, but the definition includes the insights which are important and pivotal in terms of this research. In other words, the definition includes those insights which one needs to know in order to be able to carry out the analysis. The tools provided to me include key features of securitization, for example

intersubjectiveness, responsibility, the political nature of securitization (the causality between speech and effect) and securitization as politics of extraordinary (the relationship between normal politics and security practices: does politics of extraordinary function according to democratic principles without using violent practices).

The essence of securitization provides a solid definition of securitization which is pivotal in order to establish an understanding of securitization in this thesis. The aspects provided above are not, however, enough and it is imperative that the definition is to be broadened in order to establish a definition of securitization which is an appropriate one for this study, and that is what I did under the subheading *Securitization in IR: broadening of issues and complex construction*. The first important tool enables me to assess securitization topics which go beyond state conflicts and friend-enemy division, and therefore, include the securitization topics which are addressed in the data gathered for this study, for example energy policies and environmental issues. In addition to this, with the theories provided under this subheading, I am able to assess how securitization is done, for example through utterances of threats and where these utterances are made and by whom and does these factors make a difference.

The theories under the topic securitization of climate change offer insights to environmental conflict discourses which refer to the fact that environmental issues have been accepted as securitized topics. This is a pivotal aspect of securitization for my thesis, and it allows me to assess the wider safety and security concerns uttered in regard to nuclear power policies. In addition to this, not only can it be said that environmental topics have been successfully securitized, but it can be also argued that they lead to changes in policies. This will be an interesting tool to use when I assess the data in terms of beforehand accepted environmental threats and proposed disaster preparation. Internationality was also connected to the concept of securitization of environmental issues. It will be interesting to see if my data includes ideas which propose nuclear power policies as an international issue. This matter is, however, not as black and white as it might seem, and therefore, in order to understand this topic better and assess the data more accurately, I also included ideas on gaps between securitization and implementation. In other words, it needs to be questioned whether securitization always automatically leads to policy-changes, and if not, why is that.

My goal here was to create a logical whole, a consistent analytical and theoretical framework for securitization. Also, this section, securitization, guides the interpretation of Atomausstieg; the theories (which also guide the analysis) help interpret the reduction of use of nuclear power in terms of what is securitized and how and why. In other words, the theories provide insights and tools to assess the data and the securitization arguments made within that data which either claim Atomausstieg as necessary due to safety and security risks or claim the opposite.

4 Energy Safety and Security

4.1 Risk communication

Figueroa, in his article *Risk communication surrounding the Fukushima nuclear disaster* (2013), discusses the relevance of effective risk communication strategies. The strategies include different guidelines which can be followed by governments when they convey sensitive information to the public regarding possible risks and actions taken (or to be taken) in case of an emergency. In this case, that information includes open discussions and official publication relating the build of nuclear power plant, but also calculated expectations on what might cause a power plant to break down and what are the exit plans for the people in those areas that might need to be evacuated.

Figueroa (2013: 57) defines risk communication as follows: “actions, words, and other interactions that incorporate and respect the perceptions of the information recipients, intended to help people make more informed decisions about threats to their health and safety”. The reasoning behind Figueroa’s research is the argument that poor communication from the government leads to distrust in the people, and in this case, led to distrust as after the Fukushima disaster it became apparent that the government had not provided (or even acquired) necessary information regarding nuclear risks (Figueroa 2013: 60). In addition to distrust among the people, Japan’s handling of the disaster troubled also international nuclear agencies (Figueroa 2013: 56). Figueroa argues that the political system in Japan is infamous for poor communication and secrecy, and that there is a need to change the structures so that the communication can be improved upon. Although poor communication strategies have negative consequences, Figueroa makes suggestions on how these consequences can be avoided; poor risk management can be dealt with through transparency of decision-making process. Figueroa argues that the main thing which raises the level of transparency is citizen participation in various forms, and that particularly the democratic model supports and emphasizes numeral participatory routes for citizens and stakeholders to take part in projects and state their (expert) views on matters.

The methodology Figueroa (2013: 54–55) uses is called multi-sited ethnography. The multi-sided aspect refers to multiple *loco* in the research, meaning that a topic is studied by looking at its properties in different physical or social locations. In Figueroa’s study the

topic is poor communication and there are multiple reasons for this, both political and social. Figueroa (2013: 58–60) lists the reasons or the *loco* for poor communication in Japan as follows. First, there was a denial of risks (Figueroa 2013: 58). Nothing could be published by the government or local operators simply because risks resulting in need for evacuation were not considered an option (ibid). Second, even as the crisis went on, the width and impact of the disaster was downplayed and therefore, even at the time of the disaster, a great deal of information was kept hidden from the people by the government (Figueroa 2013: 59). The third aspect of poor communication includes unwillingness on the government's part to openly speculate the worst-case scenarios (Figueroa 2013: 59–60). Figueroa refers to Sandman and his theories on crisis communication (Figueroa 2013: 60). There are three hypothetical reasons used to justify lack of communication; there is a misconception that it is wrong to speculate, or people don't need to know or that people might panic (ibid). In addition to this, the sociopolitical culture in Japan contributes to poor communication as it defines the ways things are usually done and what are taboos; "actual practices of risk management and risk communication are embedded into a political culture that some scholars describe as opaque and secretive" (Figueroa 2013: 56). From a political point of view there has been a dedication towards nuclear energy; nuclear energy was (still is) an important part of Japan's energy policies: "Since its inception in 1954, when the first budget for nuclear research and development was proposed to the Diet (Tabusa 1992, p. 88), the Japanese government has had a strong commitment to nuclear energy policies" (Figueroa 2013: 55). It provides plenty of energy supply contributing to Japan's self-sufficiency and commitment to *green* source of energy. Figueroa (2013: 56) states that there was a myth of safety that surrounded nuclear energy – at least on the government's part as resistance against nuclear energy and building of nuclear power plants has been reported from the locals.

4.2 The new perceptions of risks

Rieu (2013) also revolves around the topic of the notion of risk and trust – as did Figueroa's topic – but he studies them from a different point of view and ties them together with knowledge and society of knowledge. These three aspects comprise what Rieu (ibid) calls the powerful conceptual complex. Rieu (ibid) criticizes this complex, how it has been conceived and the problems with previous interpretations, and he then uses this criticism to reshape how people think and understand it. The Fukushima disaster changed the way

people perceive risks and the relationship between society, politics and industry. As Rieu (2013: 66) states: “The Fukushima catastrophe is an appeal for new knowledge. The goal of this paper is to understand how it changes the way we think”. After the Fukushima disaster, the notions of risk and cooperation and democracy have expanded.

Rieu (2013) begins with the concepts of real and reality; real is something that exists regardless of whether it has been studied or specified, and reality comprises of scientifically studied and reported events and phenomena. Rieu argues that what *really* caused the disaster was not the earthquake but Japan’s power structure; Japan’s nuclear industry enjoys a sovereign position in Japan’s techno-political structure meaning that “their power competes with the government’s power” (Rieu 2013: 67). The Tokyo Electric Power (TEPCO) knowingly made decisions that would harm public safety, did not inform the government about risk- and safety-related issues nor complied with security requirements (ibid). In addition to TEPCO, also the Democratic Party of Japan (DPJ) and Ministry of Economy, Trade and Industry (METI) need to be mentioned as they were committed to nuclear energy. Second, in contrast to real and reality, Rieu (2013: 69–72) discusses the concept of metaphysics of risk. Metaphysics has a long history and is still used today, and it includes ideas such as overpowering nature, uncontrollable by mankind, unpredictable by human technology, whatever precautions. Theories of metaphysics have been proven false and with that the notion of natural risks has changed. Natural risks can be assessed and should be assessed as there are effective ways to prepare for them and also limit their consequences. Rieu calls this as the extended level of risk and it in the idea is that humans transcend their environment. With this new extended notion of risk comes also new means to acquire new information; there needs to be joint investigation and debate in order to reach sustainable sources for energy. Third, Rieu focuses on the issue of trust in the new context (of extended notion of risk and risk investigation). According to Rieu, trust is a major issue and currency in both business and politics. A democratic nation individuals and groups interact with each other and therefore, also manage conflicts together.

Lastly, the third and last aspect of the complex is knowledge society (Rieu 2013: 75–76). A knowledge society consumes knowledge rather than natural resources; everything revolves around knowledge. Governments spend funds on research, research creates innovation and new policies with which jobs are created, and as jobs can be offered to the people, people pay taxes to the government that is then used for further research and social programs. This new type of society creates a new type of industrial policy; it is system of

innovation based on knowledge and it is the innovation that creates advanced industrial societies. In other words, developments happen all the time and there are tight and permanent relations between politics, society, culture and economy; policies affect all aspects of life and therefore people need to be associated into politics. Trust is what closes this circle as it makes participation possible. In terms of energy safety and security, as policies are created this way, they have long-term (positive) consequences and risks can be managed better.

4.3 Energy Policy Challenges Post-Fukushima

Koyama (2013) in his article discusses Japan's energy policies. He begins with the Fukushima disaster and a review of Japan's energy plan which was modified after the disaster. After the review, Koyama discusses some further challenges that Japan still faces in terms of choices for energy sources, supply and the consequences of possible solutions to the energy problem. The goal of his article is to produce the 'energy best mix policy' which comprises of four different possible energy plans each of its address the challenges in regard to energy policies and specially to controlling the consequences of a nuclear accident.

The disaster left Japan with serious power shortages; energy conservation and mandatory power cuts shadowed civil and business life as importing energy became necessary which increased the cost of energy. Also, without nuclear energy, the use of oil- and natural gas-fired power plants was maximized which increases CO₂ emissions. In short, the unattainability of nuclear energy resulted in implications for the three E's: In addition to the unattainability, strong antinuclear sentiments stemming from concerns over energy safety left Japan in need of coming up with other sources for energy. (Koyama 2013: 274–279.)

All these factors led to the fall in Japan's energy self-sufficiency which became the number one concern in Japan's Basic Energy Plan: stable energy supply (energy security) needed by government, for welfare and business. The Plan includes a goal of raising the self-sufficiency ration from 38% to 70% with the use of nuclear energy. However, concerns relating the energy safety of nuclear energy resulted in the need to review this Plan and the government to produced four different energy scenarios. Koyama (2013: 280) states that "According to the Cabinet Decision, the establishment of new energy policy should be

based on responsible discussion with respective local governments and the international society as well as on the understanding of Japanese citizens, with a continuous check and review process". Whether this was achieved was left ambiguous but also doubtful as Koyama (2013: 281) ends the chapter with a statement about the government led by the Liberal Democratic Party: "The LDP-government is now believed to take a stance to re-starting of nuclear power plants as a critical means to address the 3Es and macroeconomic problem for Japan".

Koyama (2013: 281–287) lists the three pivotal energy-policy challenges for Japan: nuclear re-starts, LNG Supply Security, and Power Market Reforms. Nuclear re-starts are necessary, according to Koyama, as energy imports will be unbearable to Japan's economy as wealth outflows will be greater and rising energy costs can no longer be handled. This does not mean that nuclear energy supply and nuclear energy policies should remain as they were before the disaster but certain constraints are to be placed; technical and safety regulations need to be respected and Nuclear Regulatory Agency is to inspect that regulations are followed. Second, LNG supply security refers to the pricing of natural gas and how the price should be lower, and Japan should 'look East' or buy cheaper natural gas from Russia. Third, the power market reform comprises of institutional reforms aimed to that Japan may achieve better transparency and with that to improve more efficient energy markets. Also, consumers would have a greater freedom when choosing where to buy energy. The power market reform comprises of three stages and it revolves around the three Es (energy security, environmental protection, economic efficiency) and S (safety) and M (micro economy). In short, the market reform includes the key issue for Japanese economy and civil life.

Lastly, with these three challenges in mind, Koyama (2013: 287–290) designed the Best Energy Mix which includes four central ideas: energy saving, renewable energy, fossil fuels and nuclear energy. Further energy savings could and should be made in order to reduce energy imports and CO₂ emissions. Renewable energy sources should be taken into broader use as they stabilize the power supply and may lower costs. Fossil fuels continue to play a major role and in this sector natural gas as the most economic, realistic and workable solution. In terms of nuclear energy, it will also be a part of Japan's Energy Plan as it provides a way to produce power efficiently and economically. Nuclear safety should be considered and in order to achieve this international cooperation should be active among countries and organizations so that knowledge and practices relating nuclear safety

can be accordingly dealt with. What is more, a national scheme for nuclear safety might also restore trust in administration and nuclear energy.

4.4 Concluding remarks

The section *Energy Safety and Security* comprises of three segments which include insights on effective risk communication and on how threats should be perceived and handled, but also propositions on what a secure energy policy plan might look like.

Figuroa (2013) gives suggestions on what strategies effective risk communication includes, and these suggestions function as the tools I need to conduct my analysis. With these insights, I am able to look at the data and find out what strategies have taken place in German parliamentary debates and what might have not been used. I am able to assess for example the level of interaction and transparency which was proposed by Figuroa (2013), or I can look at the words and actions taken which are required as key aspects of effective risk communication. In short, I will be able to give a description of Germany's political culture in terms of energy safety and security by assessing the practices of risk management and risk communication.

Rieu (2013) argued that the Fukushima crisis changed the way people perceive risks, and bases on that notion a further argument; when risk perception changed, also did perceptions on how threats and energy safety and security issues should be handled, that is via cooperation and democratic principles. The insights proposed by Rieu (2013) provides me with the tools with which I am able to assess whether there is evidence in my data which would also indicate a changed and widened notion of threats and the ability to handle them appropriately. With the tools, it is possible for example to assess what threats and information in terms of energy safety and security are included in the debates.

When Koyama (2013) discusses energy policy challenges, he at the same time provides me with more insights on what topics might be and perhaps should be included into discussions on energy safety and security issues. In other words, I can reflect the topics which emerge from my data on to this background, and see whether there are similarities, whether the same issues and aspects are included the parliamentary debates which comprise the data for this thesis. Koyama (2013) argued that for example secured energy production, CO₂-emissions, environmental protection and economic efficiency are all

essential topics within energy safety and security and therefore, should be included when energy policies are deliberated upon and even possibly changed.

Not only do the above-mentioned theories provide the necessary tools which I need in order to conduct a detailed and comprehensive analysis, but they also comprise key factors on the concept of energy safety and security. In other words, these insights are pivotal in understanding what the topic is when energy safety and security is discussed.

5 Analysis

As I went through these documents I discovered very quickly that the nuclear disaster of Fukushima – although an essential part of the discussions – was not the only focus of attention, and instead I discovered roughly eight different subcategories of arguments *against* the use of nuclear energy which refer to safety and security issues. In the following, I discuss these safety and security issues further. I dedicated the last subheading for safety and security arguments which are made *for* the use of nuclear energy – these arguments, however, were quite few and far apart representing the change in the content of energy policy discussions and safety and security perceptions regarding nuclear energy⁶.

As has become apparent, although the focus of the debates is neither military nor state conflicts, we are still dealing with security issues none the less. When I discussed securitization, I referred to Williams (2003)⁷ as he explained the broadening of the agendas in securitization, and this phenomenon is exactly what can be seen in these debates and arguments. Following Williams' (2015)⁸ idea of politics of extraordinary; all these arguments include a declaration of a threat – this confirms securitization as a type in constructivism. This might not, however, be enough as stated by McDonald (2008) when he discusses the importance of the actors who make the speech acts and the context of those speech acts: usually it is a matter of *state representatives'* utterances which include words on security and a threat within an established political context. Moreover, what needs to be considered is the capability of making a change with those speech acts (McDonald 2008). Waever (2015) also discussed this in terms of speech and effects. The causality of speech acts is an essential feature in securitization: there is a cause-effect relation between the speech acts performed by political actors and the causes, for example policy changes as in this case (Waever 2015). As will become clear, all these requirements (utterances of security agendas outside state conflict and actors/context) have been met in these debates.

⁶ Kaarkoski (2016): 'Energimix' versus 'Energiewende'. Competing conceptualisations of nuclear energy policy in the German parliamentary debates of 1991–2001. Jyväskylä: University of Jyväskylä. The conceptualizations are no longer *competing* ones and instead Energiewende/Atomusstieg prevailed.

⁷ Williams, Michaels (2003): Words, Images, Enemies: Securitization and International Politics. *Electronic Journal of International Studies Quarterly* 47, 511–531.

⁸ Williams, Michael (2015): Securitization as political theory: The politics of the extraordinary. *Electronic Journal of International Relations* 29:1, 114–120.

5.1 Fukushima/Japan and further nuclear disasters

The first and foremost energy safety and security argument by far used against the use of nuclear energy was the nuclear disaster that took place on the East coast of Japan in Fukushima 2011. This disaster for the most part needed neither explanations nor further clarification, but the mere mentioning of Fukushima (name of the power plant and the city) was enough. As I went through all the documents which I gathered for this study, I quickly noticed that there was practically no document where Fukushima or the nuclear disaster of Fukushima had not been mentioned at least once – mostly it was mentioned several times. However, since this study is not a quantitative one, there is no need to state here each and every incident when it was mentioned, so instead I gathered a few examples which I feel represent the current state of German parliamentary discussions.

The first example is from a bill which was drafted by the opposition party, Die Linke, as a suggestion to alter the constitution in order to establish the space for Atomausstieg in the constitution⁹. Fukushima is already mentioned at the first page in the first sentence: “Havarie des Atomkraftwerkes im japanischen Fukushima”, to stress the utmost importance of withdrawal from the use of nuclear energy due to the catastrophic consequences of the nuclear disaster of Fukushima. Another example can be found in the same document on page five:

„hat spätestens die Kernschmelze in Fukushima gezeigt, dass die Gefahr eines größten anzunehmenden Unfalls (GAU) beim Betrieb von Atomkraftwerken” (ibid).

The core meltdown in the nuclear power plant of Fukushima is again used as a safety argument to validate the need to withdraw from the use of nuclear energy. This disaster was defined as proof of a maximum credible accident or MCA (größten anzunehmenden Unfalls or GAU), meaning that there will always be risks – high safety and security risks – that are beyond (governmental) risk assessment and, that Fukushima is a clear example of the fact that especially nuclear energy is an industry which poses a safety and security threat with its huge potential of severe accidents. In connection to these examples, I want to refer to Balzacq’s (2015) theory on epistemology of securitization. When epistemology of securitization is discussed, the focus is on how and why a certain topic became

⁹ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

securitized, and the nuclear disaster of Fukushima is an excellent example of this process. In these examples, it is clearly stated how these new concerns became about (due to an event which took place earlier, the nuclear disaster) and why (due to the destructive impact of that event).

The second document I will refer to, in order to present further examples, is also a bill put together by the opposition party, Die Linke, but this one is designed specifically to change the current laws regarding nuclear energy¹⁰. As seen above, Fukushima is given primary importance and referred to immediately in the very first sentence: “Atomkatastrophe von Fukushima...”, or the nuclear disaster of Fukushima (ibid). As mentioned in the introductory chapter under this subheading, there were no further clarifications about what had happened, how many casualties there were etc. This is obviously partly due to the type of document that is in question, but also due to the horrific safety and security consequences of that disaster which can be said to be widely known. The sentence and chapter goes on as follows: “Die nach der Atomkatastrophe von Fukushima aufgetretenen Sicherheitsbedenken... Wegen des Gefahrenverdachts“. In other words, the nuclear disaster of Fukushima brought forth new suspected risks and new safety concerns, and all this is used by the opposition party, Die Linke, as safety and security arguments against the nuclear energy in general and for the shutdown of old German nuclear power plants in specific (as a crucial part of Atomausstieg). Again, in both of these examples, the epistemology required from securitization by Balzacq (2015) is clearly present.

Another interesting example comes from a different kind of governmental document, namely a program proposal put together by numerous congress representatives and the congressional fraction of the Social Democratic party of Germany, or SPD¹¹ (SPD is also one of the opposition parties like the-above mentioned Left Party, Die Linke) in order to present a counterproposal to the more pro-nuclear energy plans. This proposal is a comprehensive document in which the topic of energy supply is dealt with extensively and from many viewpoints. As the name of the document implies, the goal is to establish a sustainable, affordable and secure system to create energy supply on a national level in Germany, and also on European and even international level. In this document, Fukushima

¹⁰ Entwurf eines Gesetzes zur Änderung des Atomgesetzes, doc nr 17/5472, 12.4.2011.

¹¹ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nur 17/5481, 12.4.2011.

is mentioned quite a few times and I want to refer to one of these statements now. On page three, there is the following sentence:

“Darüber hinaus haben die Ereignisse in Japan im März 2011 wieder gezeigt, dass die Atomenergie eine unbeherrschbare Risikotechnologie mit unkalkulierbaren Folgen für Mensch und Umwelt ist“.

Although in the subheading I mentioned Fukushima, I wanted to refer to this statement due to its peculiar form. The nuclear disaster of Fukushima (as a safety and security argument against the use of nuclear energy) is referred to as ‘the events in Japan April 2011’. In other words, it was possible to leave the proper term and the actual place of events out of the utterance. Instead, the focus of this utterance is on the destructive impact of such events. Trombetta (2012: 157–158) discussed this aspect of securitization; securitization discourses include statements about high-impact and irreversible events and so they should in order to emphasize the fact that they pose as a threat to (inter-)national security.

The following document is a written question put together by various members of the parliament and the parliamentary fraction of the Alliance 90/The Greens who want answers to questions about financial responsibilities in case of a nuclear disaster¹². As has become apparent now, documents which concern nuclear energy typically begin with a statement about the nuclear disaster of Fukushima, and this document follows that trend. On page one it states: “die Atomkatastrophe in Japan”. This document begins with a reference to the nuclear disaster in Japan and then continues with questions about such situations. The document represents, therefore, an example of Rieu’s (2013) idea of knowledge, knowledge society and quests for knowledge after dramatic events. Disasters change the way of how people think, how they perceive risks, and afterwards, people make appeals for more knowledge (Rieu 2013: 66). Although this document does not include a clear statement against the use of nuclear energy, the questions include clear safety and security concerns over nuclear disasters such as the one in Fukushima, for example on page two there is question number 12 regarding how will nuclear power plants might be monitored, as they should be in light of the nuclear disaster of Fukushima according to the opposition party Alliance 90/The Greens: “Beabsichtigt die Bundesregierung ggf. in Zusammenarbeit mit den zuständigen Länderbehörden im Lichte der Atomkatastrophe in Fukushima die

¹² Kleine Anfrage: Nuklearer Katastrophenfall – Haftung, Haftpflicht und Deckungsvorsorge bei Atomkraftwerken, doc nr 17/5715, 4.5.2011.

Festsetzung nach § 13 des Atomgesetzes”. What is also interesting about this document, is how the communication network presented by Patzelt (2012: 45–70) can be seen here. In Patzelt’s (ibid) work, communication is what legitimizes parliamentary decisions; the communication network is complex and includes all the individuals and groups who communicate with parliament (ibid). In this document the communication network comprises of individual members of parliament, a parliamentary group, a non-profit and independent research and expert organisation who focus on nuclear safety (Gesellschaft für Anlagen- und Reaktorsicherheit, or GRS), the International Atomic Energy Agency or IAEA (Internationalen Atomenergie-Organisation, or IAEO), owners and/or operators of nuclear power plant (AKW-Betreiber) and also the The German Nuclear Reactor Insurance Association (Deutschen Kernreaktor-Versicherungsgemeinschaft or DKVG).

The next document is another bill to amend the laws governing nuclear energy¹³. What makes this document different from the ones referred to before is the fact that this one was put together by the two ruling parties, the CDU/CSU and the FDP. On the first page, the problem and the goal is stated clearly:

“Die nuklearen Folgen der Erdbebenkatastrophe in Japan bedeuten einen Einschnitt für die friedliche Nutzung der Kernenergie auch in Deutschland. Im Lichte dieser Ereignisse hat die Bundesregierung ... einen gesellschaftlichen Dialog zu den Risiken der Nutzung der Kernkraft und zu der Möglichkeit eines beschleunigten Übergangs in das Zeitalter der erneuerbaren Energien angestoßen... [und] die Nutzung der Kernenergie zum frühestmöglichen Zeitpunkt zu beenden... bis zum 31. Dezember 2022 befristet und so ein festes Enddatum für die friedliche Nutzung der Kernenergie”¹³.

The chapter begins with a statement about the disaster in Japan¹⁴ and uses it as a safety and security argument for multiple purposes. First, the ruling parties want to make clear that they have taken into consideration the nuclear disaster of Fukushima and its consequences, and therefore, urge a dialog to take place about the risks (brought forth by the events in Japan 2011) revolving around nuclear energy and then, hasten the end date to be established after which nuclear energy could not be used anymore. Although the end date is set in the future and therefore, also comprises of continuation of use of nuclear energy,

¹³ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6070, 6.6.2011.

¹⁴ What makes this statement interesting, however, from previous ones is the fact that it refers to Fukushima as a natural disaster concerning an earthquake that had detrimental consequences due to the fact that nuclear power plants took a hit during this natural disaster.

the end date eventually terminates the use of nuclear energy. A bit later in the same document on page six, the events in Japan are mentioned again and in relation to them the same demands are also stated including public discussions in order to ensure a security planning which would include a wider variety of the possible risks and including also ideas on protections against risks, threats and dangers. With that said, it becomes clear that also in this document the communication network and its importance is emphasized (Patzelt 2012: 45–70). There is, however, something more interesting in this utterance; namely the fact that it differentiates itself from previous statements by a reference to Fukushima as a natural disaster concerning an earthquake that had detrimental consequences due to the fact that nuclear power plants took a hit during this natural disaster. This brings us to Rieu's (2013: 69–72) theory on metaphysics of risk. In short, the idea is that, while previously natural disasters might have been perceived as uncontrollable and unpredictable, there is now a new notion of natural risks; they, too, can and should be assessed and investigated (ibid). With this new notion, it is possible to produce more information, and so the outcomes become controllable (ibid).

The following examples are taken from a recommended resolution proposed by the Committee for the Environment, Nature Conservation and Nuclear Safety:

“Das Unglück in Fukushima führte zu einer Neubewertung ... das Ziel, einen umfassenden gesellschaftlichen Konsens sowohl für den Ausstieg auf der einen Seite als auch für den Umstieg auf die erneuerbaren Energien“¹⁵.

In this quote from page 10 in the document, the Committee mentions the unfortunate incident of Fukushima and how it should lead to the withdrawal from nuclear energy and to a switch to renewable energy sources. In other words, not only can the nuclear disaster of Fukushima be (and should be) considered as a security and safety argument against nuclear energy, but also as a safety and security argument for other types of energy sources which are more environmentally friendly and include less security risks. In the same context, the Committee expresses its approval for the above-mentioned end date of nuclear energy: “zu- zustimmen, denn der Ausstieg sei mit Ende des Jahres 2022 klar und unumstößlich definiert”. In the same document on page 12, the Committee indicates that the new security concerns which came about from the reactor disaster of Fukushima pose

¹⁵ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

such severe safety and security threats that they need to function as incentives to the legislators in specific: “Reaktorkatastrophe von Fukushima... Zur neuen Risikoeinschätzung... eine Katastrophe wie in Fukushima für den Gesetzgeber Anlass sein könne und müsse”. On page 28 in the same document, the Committee quotes a proposition drafted by the opposition party, Alliance 90/The Greens, in which they refer to the nuclear catastrophe of Fukushima as an incident which shook up the whole world and forced it to recognize the unforeseeable consequences of the safety and security threats that nuclear energy poses:

“ Die Atomkatastrophe in Fukushima hat die Welt wachgerüttelt. Dass in einem Hochtechnologieland mehrere Atomreaktoren gleichzeitig außer Kontrolle ... parallelen Kernschmelzen ... unermessliches Risiko ... Die Menschen in der Region und weit darüber hinaus werden noch jahrzehntelang unter den Folgen leiden”.

The Committee concurs with this quote and uses it to emphasize how severe the consequences are; in this quote, the opposition party expresses its concern over how people suffer from the consequences still decades after the actual disaster. The Committee uses these safety and security arguments (quoted again from the proposition by the opposition party Alliance 90/The Greens) to justify and to demand on page 29 more secure nuclear power plants and to accelerate the transition from nuclear to other types of energy sources: “beschlossene Atomwende ist notwendig, aber nicht hinreichend ... Die Sicherheit der noch laufenden AKW muss deutlich verbessert werden – das ist eine Lehre aus Fukushima”. This all resonates with Patzelt’s (2012: 49–51) idea on parliamentary communication in terms of representation; elected representatives promote the interests of their constituency and they should be able to predict future problems and prevent them. In this case, the interests concern security and safety of the people who live in areas where there are nuclear power plants, and the representatives naturally want to prevent such a disaster and its consequences from happening in Germany.

The last document I want to refer to under this subheading is a transcript from a plenary session which took place 30th of June 2011¹⁶. What makes these remarks interesting and divergent to all the other statements listed above, is the fact that they refer to another nuclear disaster. On page 13371, Sigmar Gabriel from the opposition party SPD quotes an instance which took place 1986: “Wir haben diesen Schritt vor fast 30 Jahren bereits als

¹⁶ 117th Plenary session, doc nr 17/117, 30.6.2011.

notwendig erachtet, vor der Reaktorkatastrophe in Tschernobyl". The Chernobyl nuclear disaster was a catastrophic event with massive consequences that occurred in a nuclear power plant in Eastern-Europe. This is not the only time that the Members of Parliament refer to the Chernobyl and on page 13384, this disaster is also mentioned in connection with the nuclear disaster of Fukushima by Dr. Nils Schmidt who served at the time as the Minister of Finance and Economy in the state Baden-Württemberg: "Wenn Parteien 25 Jahre brauchen, nämlich von dem Unglück in Tschernobyl bis zur Katastrophe in Fukushima, um zu erkennen, dass die Atomkraft eine nicht beherrschbare Technologie ist". In this quote, Dr. Nils Schmidt criticizes the ruling parties for not changing the laws governing the use of nuclear energy after after the Chernobyl nuclear disaster. As can be seen from here, these catastrophic incidents are used together in order to form an even more stronger argument against nuclear energy; these incidents prove that nuclear energy, or nuclear power, poses safety and security risks because the technology that is in use is uncontrollable. In other words, it poses threats that are not possible to predict nor is it possible to protect people from the consequences if and when the technology fails and nuclear accidents occur. On page 13378 in this document, the nuclear disaster of Fukushima is also mentioned on its own: "Man kann die Bevölkerung nicht vier oder sieben Jahre länger dem Fukushima-Risiko aussetzen". Member of Parliament, Gregor Gysi from the opposition party, die Linke, uses Fukushima to raise the subject of safety and security threats posed by nuclear energy and with that the responsibility of legislators to protect the people against those safety and security risks.

These examples from the plenary session¹⁷ offer a perfect opportunity to reflect on the ideal type of securitization by Balzacq (2015: 106). First, the intersubjectiveness has been clearly established; there is a commitment from the securitization actors (members of parliament) to their audience (citizens, stake holders) (ibid). Then, the securitization move (statement of threat regarding nuclear energy) is based on knowledge about existential threats (in this case, the knowledge is about previous disasters, such as the Chernobyl nuclear disaster), and the securitization move is made by a member of parliament, meaning that there is a power relation present between the elected representative speaking on behalf of a constituency (ibid). Responsibility is also an aspect of the ideal type, and it is apparent in this incident as the representative is aware of the severe consequences of a nuclear

¹⁷ 117th Plenary session, doc nr 17/117, 30.6.2011.

disaster and tries to prevent those from happening and being suffered in the constituency (ibid). Lastly, another aspect of the ideal securitization is that they are engraved in social mechanisms; here it simply means that the securitization move is made within an established practice (parliamentary communication) and that it includes persuasion and propaganda as means to establish the changes (ibid)¹⁸.

5.2 Deficiencies of nuclear power plants

Although the first subcategory of safety and security arguments might partially account for this second subcategory as well, I found that it was necessary to depart the two topics mainly for two reasons. First, the nuclear disaster of Fukushima was caused by a natural or climatic factor, and second, the parliamentary discussions which took place clearly separated the two issues. In other words, it would be an inaccurate description of the discussions and of the arguments made. While mentioning Fukushima is also on its own enough to function as a safety and security argument, plenty of arguments were made where the deficiencies of nuclear power plants were very clear. In short, above was made clear that nuclear power plants, such as Fukushima, pose safety and security threats, and now, it is discussed *how* they might risk the state of safety and security. Deficiencies in nuclear power plants are, therefore, a major safety and security topic on its own.

A document to which I referred to already earlier is a proposition¹⁹ by the opposition party, Die Linke, to amend the constitution in order to establish a space for Atomausstieg and terminating the use of nuclear energy, and in this document, there is a reference to a specific technological issue which could cause a safety and security deficit. On the first page of this document, there is a comment made about the nuclear disaster of Fukushima and it is connected to the nuclear power plants in Germany: “in Deutschland betriebenen Atomkraftwerken ebenfalls zu einer Kernschmelze führen“. In other words, what the opposition party, Die Linke, strives to generalize the nuclear accident of Fukushima by claiming that what happened in Japan could easily happen also in Germany, namely a core meltdown at a power plant. The possibility of a core meltdown (and the disaster it causes) makes the use of nuclear fuel unethical and irresponsible. In addition to this, it was also

¹⁸ There is also one other aspect of the ideal type of securitization; the securitization moves instantiate policy change. This was obviously not included in the statements but, nevertheless, the policy changes which took place after these parliamentary debates is known.

¹⁹ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

said on the same page that, because of this safety and security risk, the use of nuclear fuel would actually be against the constitution: “aus verfassungsrechtlicher Sicht untragbar“.

The second document which entails references to possible technical deficiencies of power plants and to examples on how they might cause nuclear disasters is another bill which was put together by the opposition party, Die Linke, in order to change the German nuclear laws²⁰. On the first page, it is stated that there is a danger of a failure or an accident and, therefore, the facilities which use nuclear technology are highly questionable and at least unreliable. Because of the situation, it is suggested that nuclear power plants in Germany are to be shut down and any contracts that allow power plants to stay in use should be cancelled.

In the theory section I discussed the four traditions of parliamentary rhetoric (Turja 2008: 155–161). The fourth tradition is called a rational-legal style where the rhetoric bases on formal speech which comprises of scientific facts and experts’ statements (ibid). The utterances of risks, for example about a core melt down or unreliable technology, are an example of this type of speech. There is very little if any traces of the other three styles of rhetoric in either of these documents and the arguments made in them: opposing views, use of allegories and theatricality (ibid). Expert statements might not always be accurate, but the opposition party, Die Linke, definitely make use of the rational-legal style in order to push forward their agenda.

The program proposal²¹ put together by the opposition party SPD to which I referred to earlier is a document in which shutdowns of nuclear power plants in Germany is urged. The program proposal begins by defining nuclear energy as a risk technology, and on page three backs this up with a reference to the event which happened in Japan May 2011. Not only is nuclear energy defined as risk technology but it is also bluntly implied that the technology used is uncontrollable and that it puts people and animals in danger because the consequences are unpredictable. Later in the document under the subheading *Atomenergie* (nuclear energy) on page 22, when the focus is shifted specifically to nuclear energy, it is urged that the seven oldest nuclear power plants in Germany must be put out of business and cut from the energy network immediately. They argue as follows:

²⁰ Entwurf eines Gesetzes zur Änderung des Atomgesetzes, doc nr 17/5472, 12.4.2011.

²¹ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011.

“Die Ereignisse in den sechs Reaktorblöcken des japanischen Atomkraftwerks Fukushima haben gezeigt, dass besonders die periphere Technik (Kühlsystem, Notstromversorgung) in hohem Maße störanfällig ist. Diese Probleme können auch ohne den Einfluss eines Erdbebens oder Tsunamis auftreten. Die endgültige Abschaltung der sieben ältesten Atomkraftwerke ist anzuweisen”.

In other words, the argument refers to the nuclear disaster of Fukushima in which certain technical properties of the Japanese nuclear power plants showed weaknesses and faults in order to make a general claim regarding the technology made in nuclear power plants; the technology used in these facilities pose a far greater risk to people and the environment (even without natural disasters starting them) and, therefore, the permanent shut down of these old nuclear power plants is instructed. The fourth tradition of parliamentary rhetoric, the rational-legal style, is also apparent in this incident (Turja 2008: 155-161). The utterances of risks refer to very specific technical features of nuclear power plants: the cooling system and emergency electricity supply equipment. Experts’ statements are used to build credibility (ibid).

There is a parliamentary document²² where the German Federal Government, or the Bundesregierung, published its answers to a written question which was issued by a group of Members of Parliament and the opposition party, Alliance 90/The Greens, regarding nuclear energy. The questions in general are drafted to so that they comprise of possible safety and security threats, whereas the answers given by the Federal Government are formed in a way so that they best respond to the criticism. The first question and answer can be found on the first page and it regards the possibility and frequency of nuclear catastrophes. The question goes as follows: “Wie hoch ist ... das Risiko eines nuklearen Katastrophenfalls, differenziert nach Reaktortypen bzw. Baujahren”. In other words, how high a risk of a nuclear disaster do German nuclear power plants pose in terms of the nuclear reactor type and the year of completion of the facility. The answer is based on a study in which a probabilistic risk assessment is used, and according to those calculations, the possibility of a nuclear meltdown reoccurs every ten years. It was stated, however, that the calculations might not be that reliable since in the assessments not all factors can be taken into consideration, for example the environment and the surroundings of vary greatly according to the facility in question. In addition to this, in the same document on page four,

²² Antwort der Bundesregierung auf die Kleine Anfrage, doc nr 17/5878, 20.4.2011.

there is question number 19 and the answer to it which bring up an important safety and security aspect in relation to nuclear disasters:

“Wie hoch ist nach Auffassung der Bundesregierung die Größenordnung des für die Deckung der Schäden bei einem nuklearen Katastrophenfall theoretisch zur Verfügung stehenden Vermögens der Betreiber und ihrer Mutterkonzerne (nach heutigem Wert ihres Vermögens)?”

In other words, in case of a nuclear disaster, how much assets are the operator of a nuclear power plant required to have in order to cover for the damages caused by that nuclear catastrophe. The reason why this matter is so important is because of the fact that the possibilities and the funds reserved for damage control and repair constitute a great factor in a safety and security issue. The answer does, however, raise some hope as the funds that are required to be reserved are apparently quite substantial – though not decreasing the actual risk of a core meltdown. The answer does not give away any figures; it refers to the requirements posed by the law and also by the corporate parent of each nuclear power plant. In this example, McDonald’s (2008: 577–580) idea on securitization and that it includes a need for protection comes quite clearly across. Protection is an essential part in securitization and in disaster management (Brzoska 2012: 170–173); if and when a disaster happens, there must be resources of all kind available in order to produce the means for protection.

While the previous document included answers by the German Federal Government, I will now quote a few questions concerning reactor safety from a written question made for a question session held on the 20th of May²³. All these questions are presented to the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. On page 7, there is question number 23 which is asked by a Member of the Parliament, Heidrun Dittrich from the Left party (Die Linke). Dittrich refers to a conference which was held on the 17th of May 2011 where the topic of reactor safety and security was discussed: “Wie gedenkt die Bundesregierung nach der Feststellung der mangelnden Sicherung deutscher Atomkraftwerke gegen Flugzeugabstürze durch die Reaktor-Sicherheitskonferenz (RSK) vom 17. Mai 2011, künftig alle Überflüge zu verhindern, so auch die der US-Kampfflugzeuge, die am 13. Dezember 2010 über dem Atomkraftwerk Grafenrheinfeld übten”. In other words, Dittrich questions whether the nuclear power plants in Germany

²³ Fragen für die Fragestunde der 110. Sitzung, doc nr 17/5875. 20.5.2011.

are protected sufficiently enough against aircraft crashes including all the flights whose routes go over nuclear facilities. This is a very important and a new aspect in terms of nuclear power plants and their possible deficiencies. Another question I want to refer to from this document is the question number 24 posed by Sylvia Kotting-Uhl from the Green Party. There was a meeting between the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety and the Nuclear Safety Commission (Reaktor-Sicherheitskommission RSK) where a contract was made regarding the safety and security inspections which will be conducted in German nuclear power plants in order to make sure that they fulfill the standards set by that contract: “Wie lautet der genaue und vollständige Wortlaut des Auftrags, mit dem ... aufgefordert hat, einen Anforderungskatalog für eine Sicherheitsüberprüfung der deutschen Atomkraftwerke” . In other words, Kotting-Uhl enquires about the contract and the exact demands and requirements listed in it. Even though the actual standards are not listed here, it is made apparent that there is a need for such standards and also for a re-evaluation of older standard after the nuclear disaster of Fukushima in order to reconsider and prepare for the possible consequences that would stem from deficiencies of nuclear facilities. In the above-mentioned incidents, there are a few features regarding securitization and energy safety and security – these features have been seen in previous documents also. First, a new organization to the communication network (Patzelt 2012: 45–70) has been brought forth, namely the Reactor Safety Commission, or Reaktor-Sicherheitskommission (RSK). Also, the theory on how disasters change the way people perceive risks and begin to ask questions on other types of disasters, as in this case an aircraft crash, and produce new knowledge in the process, for example a re-evaluation of standards (Rieu 2013: 66).

In the next document the deficiencies of German nuclear power plants are also taken into consideration, and therefore, it is urged that by the end of the year in 2022 Germany would be nuclear energy free²⁴. On page seven, there is the headline, “Stellungnahme des Bundesrates”, meaning the official statements of the German Federal Council (Bundesrat), and right after the headline, there are the document’s first comments where the German Federal Council urges for Atomausstieg to be established as quickly as possible and irreversibly in order to move on to environmentally friendly energy sources. In addition to this, also the time between now and the end of 2022 is taken into consideration:

²⁴ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

“Die in Betrieb befindlichen Kraftwerke und die weiteren kerntechnischen Anlagen müssen einen hohen Sicherheits-standard gewährleisten”.

In other words, the facilities that use nuclear technology until the year 2022 must be subjected to inspections and are required to fulfill the highest safety and security standards. The document from pages eight to nine continues with the same idea and proposes a “Dynamische Risikovorsorge” plan where safety and security precautionary measures must be taken in order to ensure that life, wellbeing and material goods necessary for life are protected from the many risks associated with nuclear technology: “Sicherheit aller deutschen Kernkraftwerke durch die RSK überprüfen zu lassen”. In short, the German Federal Council criticizes the current situation and argues that all nuclear power plants must be inspected by the Reactor Safety Commission in order to guarantee their security level. The statement by the German Federal Council also includes the following example:

“Stand von Wissenschaft und Technik an die sich ändernden Erkenntnisse zum Risikopotenzial anzupassen, wird mit dieser Vorschrift klargestellt. Beispielhaft sind dies Erkenntnisse zu neuen terroristischen Bedrohungen und Flugzeugabstürzen oder zu Wahrscheinlichkeiten und Auswirkungen von Naturgewalten wie Erdbeben und Überflutungen.”.

The last sentence of this paragraph includes the most important part; the German Federal Council argues that there might be terrorist attacks, airplane crashes and natural disasters such as earth quakes and floods. All these add to the risk potential and, therefore, any facilities that use nuclear technology must be subjected to a ‘stress test’ quoted on page 13: “kerntechnische Anlagen sukzessive einer Sicherheitsüberprüfung unterzogen werden sollen”. In all these examples in this document²⁵, we can see a communicative function presented by Patzelt (2012: 51–60). Patzelt lists three communicative functions and the last one is law formation as a communicative function where various interest groups, committees and ministries cooperate in numerous hearings in order to produce a bill (ibid). In these cases, the aim of the bill is to establish new safety and security precautionary measures, for example that all nuclear power plants must be inspected by the Reactor Safety Commission and that any facility which uses nuclear technology must be subjected to a stress test.

²⁵ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

The second last document to which I will refer to is a recommended resolution proposed by the Committee for the Environment, Nature Conservation and Nuclear Safety²⁶. On page 11, the SPD fraction makes statements about the old age of nuclear facilities and the growing safety and security risks that go along with the aging facilities: “Die Atomkraftwerke, die am Netz seien, würden älter und damit wüchsen die Gefahren”. Further on the same page, the fraction continues to state that the security and protection from threats must be of prime importance., and that the nuclear facilities in the United States of America are included as warning signals: “Auch am Beispiel USA: Anlagen hochgradig störanfällig und problematisch”. In other words, the nuclear facilities in USA have proven to be highly problematic and very prone to accidents and failures. Unfortunately, it is not further explained which deficiencies in particular are the cause for the problems and failures in the American nuclear power plants. Nevertheless, the predisposition to failures is a severe security and safety threat. Lastly, in that same body of text, the same concern over airplane crashes is expressed: “Alle AKW sollen in einem angemessenen Zeit den Nachweis erbringen, dass ein Absturz eines Passagierflugzeugs nicht zu einer nuklearen Katastrophe führt”. In other words, there are clear deficiencies in the current state of nuclear facilities in so that they are not built to last when an airplane crashes on to them and they, therefore, pose a real threat to a core meltdown. The instances I listed here from the recommended resolution by the Committee for the Environment, Nature Conservation and Nuclear Safety, all show traces of Hamilton’s maxims. In other words, these examples can be identified as persuasive parliamentary speaking. Palonen (2008: 88–95) discusses Hamilton’s maxims on persuasive parliamentary speaking; Hamilton provides clear tactical devices ... Hamilton combines eloquence (how to express, quality of speech) with rhetoric (quality of persuasive act, to consider multiple aspects) and appeal to reason. First, multiple aspects of deficiencies in nuclear power plants are listed from unreliable technology and aging to possible new threats. One of the important features of the is the references made to past problems, and this makes the text very persuasive. All the while, the instances mentioned in the document appeal to reason; this is what has happened, and because the same problems still exist, similar catastrophes could also happen again.

²⁶ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

Last but not least, there is a document under the heading “Bekannte Sicherheitsdefizite deutscher Atomkraftwerke”, or in other words, the known security deficits of German nuclear power plants²⁷. The document comprises of 44 questions from the opposition party, Alliance 90/The Greens, and answers from the government. All these questions are related to the nuclear technology used in German nuclear power plants. These questions are very detailed questions about very specific aspects of the technology. While I do not think it to be necessary to list all the questions, I want to mention a few of them in order to be able to give a wider and more detailed description of the possible deficiencies which nuclear technology might include – as is argued by the opposition party, Alliance 90/The Greens. The answers by the government are crafted in order to best response to the criticism. On page two, there is question number three: “In welchen AKW sind die Flutbehältervorräte nach Kenntnisstand ... zu knapp”. In other words, in case of over-heating which nuclear plants do not have sufficient flood containers to cool the nuclear facility. In addition to flood containers, there also needs to be other technology in use in order to prevent and deal with over-heating, such as secondary *feeding* possibilities for steam generator and a residual heat removal system which were brought up in questions four and five on the same page. On page four, questions from 8 to 12 are used to argue that there are serious security deficits especially in the older nuclear power plants which were not built according to the current safety and security standards. On pages five and six in questions 18 to 21, there is a concern raised regarding a blackout situation; the technology used in nuclear facilities must include several security devises and installations so that if one or more might not be working in a black-out or failure situation, there will be back-up devises. On page seven in question 23, it is implied that there is the possibility of poisonous gases emerging and, therefore, nuclear facilities need to include automatic safety measures that automatically detect the gases and start operating. On page nine, question 33 expresses a quite critical aspect in terms of security devises: “In welchen Anlagen ... die Abtrennung von sicherheitsrelevanten Anlagenteilen nicht vollständig gegeben ist” and the answer is: “Allerdings ist bereits bekannt, dass in den Anlagen Biblis A und Brunsbüttel nicht alle Kabel redundanzweise vollständig brandschutztechnisch getrennt sind”. In short, the technology in nuclear facilities and in specific the safety devises in them need to be sufficiently separated from each other, and as we can see from the answer, in nuclear power plants Biblis A and Brunsbüttel their cables are not

²⁷ Antwort der Bundesregierung: Bekannte Sicherheitsdefizite deutscher Atomkraftwerke, doc nr 17/5808, 12.5.2011.

sufficiently separated from each other and, therefore, constitute a deficit in the safety technology. On page 12, question 42 and its answer are similar with the previous question with the exception that the heaters and reactor coolant pressure boundary (druckführenden Umschließung) are not build separately and, therefore, act as a security deficit. Lastly, I want to refer to question 41 and its answer on page 12, since it brings up an important safety and security deficit which has come up in many other documents, namely the insufficient construction technique of nuclear facilities which does not shield the facilities against a threat crashing from the sky; due to the earlier planning and construction time, the older power plants (Brunsbüttel, Philippsburg 1 and Isar 1) pose a security threat – a greater risk than the newer power plants – as they do not have the proper security facilities and systems that protect the power plants against a plane crash. It is, however, important to notice that this particular question and answer does not include the possibility of a crash of a military aircraft.

All the statements from the previous document²⁸ are instances of the rational-legal speech style which is the most used and appropriate style of speech in parliamentary communication (Turja 2008: 155–161). The essential features include factuality and formality; the authority is based on expert statements (Turja 2008: 178–182). The statements are also instances of risk communication (Figueroa 2013). In his article, *Risk communication surrounding the Fukushima nuclear disaster*, Figueroa (2013) discusses effective risk communication. First, the communication should be open and second, include information about the build of nuclear power plant, the technology used in them, and also calculated expectations on what might cause a power plant to break down (Figueroa 2013: 61–62). As becomes apparent, the statements listed above all follow the requirements of risk communication.

5.3 Life and material goods necessary for life

This third subcategory might seem obvious since all safety and security issues revolve around matters of life and also because the discussion about Fukushima and other nuclear power plants always imply threats to life. These reasons, however, are not enough *not* to mention this subcategory separately. It is not enough to mention Fukushima or list

²⁸ Antwort der Bundesregierung: Bekannte Sicherheitsdefizite deutscher Atomkraftwerke, doc nr 17/5808, 12.5.2011.

deficiencies in power plants. What is needed, however, is to overtly state (and not only to imply) the life-threatening issues at hand. Although more often than not safety and security issues were implications, there were clear arguments made which comprehensively brought forth the causality between nuclear energy and threats to life. In other words, the first subheading defined the use of nuclear energy as a safety and security threat; the second subheading made clear how it poses these threats; and now, it is time to discuss what they actually threaten.

The bill which was drafted by the opposition party, Die Linke, as an amendment to the constitution in order to establish a space for Atomausstieg in the constitution, and to which I referred to earlier, is one of those documents which include a clear and overt reference to people, environment and animals²⁹. The quote can be found on page one where the problem of nuclear energy is stated as follows:

“Der größte anzunehmende Unfall in Japan beweist endgültig, dass die von der Nutzung der Atomenergie ... ausgehende abstrakte Gefahr für Leib und Leben einer nicht eingrenzbaeren Zahl von Menschen und Tieren, die natürlichen Lebengrundlagen und Sachgüter jederzeit in eine Störung mit unabsehbaren Folgen”.

In other words, it is argued that every time a failure occurs, the use of nuclear energy poses danger not only to people and animals in unlimited numbers, but also to the basis of their existence and material goods necessary for life, and these consequences usually are out of control and mostly unforeseeable. On page two, there are further statements about this safety and security threat: “Nutzung der Atomenergie ... stellt damit eine existentielle Bedrohung der natürlichen Lebensgrundlagen von Menschen und Tieren”. In short, nuclear energy threatens the very existence of the basis of life for people and animals. These utterances function as arguments against nuclear energy and reasons why the use of nuclear energy must come to an end permanently. These statements by the opposition party, Die Linke, follow Figueroa’s (2013) ideas on what risk communication should be like; they comprise of sensitive information which is open to the public and include discussions about possible risks.

²⁹ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

In another document, a program proposal put together by the Social Democratic party of Germany, there can be found similar argumentation³⁰. On page three, the introduction includes a reference to the nuclear energy as a risk technology: “Japan im März 2011 wieder zeigt, dass die Atomenergie eine unbeherrschbare Risikotechnologie mit unkalkulierbaren Folgen für Mensch und Umwelt ist”. In short, it is argued that the risk technology of nuclear energy is uncontrollable and the consequences for people and the environment are unpredictable, and that the event in Japan in 2011 proved this. The uncontrollable aspect refers to all the different technological aspects which were discussed above under the previous subheading (see Deficiencies in nuclear technology) but also to the environmental aspects which, firstly, are facility and area specific and secondly, also unknown and unpredictable. Later in the introduction on page four, there is a comment about life quality: “Ziel ist die Energiewende ohne Einschränkungen in der Lebensqualität”. In other words, when nuclear energy and its risks are discussed, it is argued that the risks do not only comprise of life threatening factors but also of factors that diminish life quality, such as material goods and also for example energy consumption and limitations in use of energy. On page 22, similar concerns are expressed as well:

“Mit weiter zunehmendem Alter werden zum einen die Ausfallzeiten länger und damit die Wahrscheinlichkeit einer zuverlässigen Energieversorgung geringer, zum anderen steigt die Gefahr für Mensch und Umwelt deutlich an”.

This sentence refers to the safety and security risks which go hand in hand with the aging of nuclear power plants. In other words, it is not enough to take into consideration nuclear power plants but also varying factors which increase risk probability as power plants get older and out of date – which they will be unavoidably as they age. The concern for people and the environment is expressed but also their need to use energy – energy being a necessary material good. As power plants age, the probability of a failure increases and with that also the probability increases greatly of energy shortages and other risks to people and animals. In short, these are safety and security arguments which point out the fact that nuclear energy should not be used, and this is stated in the document in the introduction:

“Die Politik muss nun einen Weg zu einer Energiewende aufzeigen, damit die Energieversorgung in Deutschland langfristig von fossilen und nuklearen

³⁰ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011.

Brennstoffen hin zu einer Energieversorgung auf Basis von erneuerbaren Energien umgestellt wird”.

In other words, the goal is to withdraw from using fossil and nuclear fuels, and instead start using renewable energy sources in order to improve the living quality of people and animals. These arguments made by the opposition party, SPD, are also instances of risk communication (Figueroa 2013); they comprise of discussions about possible risks and more importantly, they include new features of risk assessments which were not in the previous document, such as the age of a nuclear power plant and quality of life.

The same goal is implied in another document; this document is a bill which was drafted by the ruling parties, the CDU/CSU and the FDP, to amend the laws governing nuclear energy³¹. In this document on page seven, there appears the headline ‘sustainable development’. Under this headline there is the following sentence: “Die Nachhaltigkeitsstrategie der Bundesregierung zielt unter anderem auf den Schutz natürlicher Lebensgrundlagen, die wirtschaftliche Leistungsfähigkeit und eine dauerhaft tragfähige Entwicklung”. In other words, the German Federal Government argues that they aim for a sustainable energy strategy which entails the protection of the basis for life, economic competence and stable and viable development. The ruling parties use this argument to defend their policies and answer criticism. In this strategy – instead of nuclear energy – there will be investment to accelerate the transition to renewable energy sources: “beschleunigte Ausbau der erneuerbaren Energien”. McDonald (2008: 577–580) addresses the same important issues within securitization, and that is protection. In this instance, the protection is aimed at the necessary basis of life, economic competence and also stable and viable development.

Lastly, I want to quote a few statements which were expressed in the recommended resolution proposed by the Committee for the Environment, Nature Conservation and Nuclear Safety³². On page 13 in that document, the committee quotes arguments and claims made by the opposition party, Alliance 90/The Greens; as the consequences of a core meltdown have become clear to the citizens, it is in their right to expect and demand their representatives to re-evaluate the advantages and more importantly the disadvantages

³¹ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6070, 6.6.2011

³² Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

and risks of nuclear energy since they are the ones who legitimize and dictate the use of nuclear energy:

“Nachdem die Folgen einer Kernschmelze den Bürgern, die den Deutschen Bundestag legitimieren, vor Augen geführt worden seien, könnten die Bürger vom Gesetzgeber zu Recht eine Neubewertung verlangen. Denn es seien ihre Grundrechte auf Leben und körperliche Unversehrtheit”.

The argument states that the reason for this is that the consequences pose severe threats to life and well-being, and citizens have the right to life and physical integrity which is assigned to them in the constitution. Thus, an accelerated Atomausstieg is necessary. On the same page, the committee continues to quote the opposition party's arguments where it is stated that the Atomausstieg includes the immediate shut down of the oldest nuclear power plants and also the power plant Krümmel³³ which is located in the city of Geesthacht near Hamburg: “Die sofortige Einstellung des Betriebs der ältesten AKWs sei im Hinblick auf die Sicherheit der Bürger zwingend”. In short, it is argued that it is imperative to shut down these nuclear power plants in order to take into consideration the safety and security of its citizens. These last arguments from the committee's proposition are also instances of risk communication (Figuroa 2013); they comprise of discussions about possible risks which in this case is a nuclear meltdown. More importantly, these statements follow Brzoska's (2012: 166) observations on environmental security because they include solutions to problems, such as more inspections and shutdowns of nuclear power plants; a wide range of solutions is considered an essential part of environmental securitization.

5.4 Nuclear energy related security risks

As can be seen above, nuclear energy in itself can include various safety and security issues ranging from core meltdowns to a myriad of technical deficiencies all the way to unsuspected disasters with severe consequences when faced with natural disasters. Even

³³ The nuclear power plant Krümmel in Geesthacht is located in the North of Germany and was taken out of operation in 2009. This power plant was taken into use in 1983, but during the time it was used for commercial purposes several accidents and controversies have been a major part of its history. The power plant remains, however, still intact in its location
<https://en.wikipedia.org/wiki/Kr%C3%BCmmel_Nuclear_Power_Plant>, luettu 25.11.2016.

though this in itself depicts a quite unsafe and unsecure picture, there are other issues as well surrounding nuclear energy, such as nuclear waste, nuclear weapons and climate change which all need to be discussed and their risks assessed in order to get the full picture about the safety and security arguments made against the use of nuclear energy. These issues will be dealt with now.

I want to begin with nuclear waste. A topic which is a pivotal issue when nuclear energy is used and, because of its central position, it is also discussed quite extensively. The first document where references to this issue can be found is the amendment by the opposition party, Die Linke, to the constitution regarding Atomausstieg³⁴. In this document on page one, this issue is called the “Problem der Endlagerung des hochradioaktiven Mülls”, in other words the problem of final disposal of highly contaminated waste. When nuclear energy is used, it produces nuclear waste as a side product; this waste is highly contaminated and, therefore, to find suitable places to build deep geological repositories for the waste is a complicated issue which has raised plenty of irritation and resentment among the public – especially when those repositories have been placed in their neighborhood or state³⁵. According to the document: “bei der Nutzung der Atomenergie ... eine weitere schwerwiegende Gefahr für Leben und körperliche Unversehrtheit der gegenwärtigen sowie vieler Folgegenerationen von Mensch und Tier darstellt” (ibid). With this claim the opposition party argue that nuclear waste is yet another safety and security issue surrounding the use of nuclear energy as it poses further grave dangers to life and physical intactness not only for the current generation but also for several future generations of mankind and wildlife. Another document in which references to this problem can be found is the program proposal put together mainly by the congressional fraction of SPD³⁶. On page 23, the costs of final disposition of nuclear waste raise concern: “Die Kosten für eine sichere Lagerung radioaktiver Abfälle und die notwendige Sanierung vorhandener Lagerstätten haben sich vervielfacht”. In this quote, the opposition party SPD argues that the more nuclear energy is used, the more nuclear waste is produced, and because of this, the costs of secure disposal of radioactive waste have multiplied, and, therefore, also the costs of building new depositories and also the costs for necessary repair

³⁴ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

³⁵ Kaarkoski (2016: 144): “the plans for Gorleben to become the location for a comprehensive nuclear disposal centre...Massive protest demonstrations were organized ... [and] [t]he protests (1995-97) against the transports of radioactive waste to Gorleben in many ways brought the anti-nuclear movement back to life”.

³⁶ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011.

and reinforcements of the existing depositories have multiplied. It also stated on page 23, that although nuclear waste is an internal part of the use of nuclear energy, the risks and damages associated with nuclear waste have not been officially included in use of nuclear energy: “Atomenergie mangelt Internalisierung ihres spezifischen Risiko- bzw. Schadenspotenzials nicht”. The government, however, answers to this criticism while at the same recognizing the safety and security threat posed by nuclear waste; on page 10 in a proposition³⁷ to change the laws regarding nuclear energy, the government states that the accruing radioactive waste and its secure final disposal simply must be taken into consideration and handled appropriately. In order for this to happen, it is suggested on page seven in the column E that there should be enough funding reserved for the secure disposal of radioactive waste which accompanies nuclear power plants. In addition, further on the same page, it is also suggested that the procedure of search for alternative final disposal locations should be transparent.

Each of the above-mentioned statements from the three different documents focus on an important matter: nuclear waste. It is an unfortunate by-product from nuclear energy; it is highly contaminated, radio-active and requires permanent and very secure depositories which are expensive to build and repair. Trombetta (2012: 155) discussed how environmental problems have transformed into accepted security issues – he also mentions the term environmental degradation. I would mirror the above-mentioned statements with Trombetta’s views; as was stated above, nuclear waste has not always been considered an issue just like Trombetta stated that environmental problems *transformed* (read; has not always been) into matters of safety and security. Nuclear waste due its high level of contamination and radio-activeness is highly hazardous, and in addition to this, it needs to be stored *indefinitely*. This is why it was stated that it poses dangers to life for several future generations of wildlife, and this is also the reason why I would categorize it as environmental degradation.

The second safety and security issue revolving around nuclear energy is nuclear weapons, or the use of nuclear energy for military purposes. This issue per se does not ban the use of nuclear energy all together, but it does ban the use of nuclear energy for certain purposes – military purposes. This issue is brought also up in the same document by the opposition party, Die Linke, in which the nuclear waste problem is also discussed³⁸. On page two, the

³⁷ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

³⁸ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

issue of nuclear weapons is depicted as follows: “Die Existenz von Atomwaffen als solche stellt eine Bedrohung für den Frieden in der Welt dar.”. In short, the opposition party argues that the very existence of nuclear weapons threatens world peace. Further on the same page, it is stated that because of this threat which nuclear weapons pose, the Federal Republic of Germany signed the Nuclear Non-Proliferation Treaty (Atomwaffensperrvertrag) in order to establish an international law which would promote nuclear disarmament. In the same page, there is also a proposition of how this international law would truly be established in Germany through the constitution:

“Um zu verhindern, dass das Verbot nuklearer Rüstung durch Kündigung des Atomwaffensperrvertrages aufgehoben werden kann, ist ferner ein ausdrückliches Verbot der Herstellung, Beförderung und des Inverkehrbringens von Atomwaffen sowie Technologien und Produkten zur Nutzung der Atomenergie für militärische Zwecke in das Grundgesetz aufzunehmen”.

So, in order to truly establish a situation where nuclear disarmament would be promoted and secured, the opposition party argues that a prohibition needs to be established in the constitution against manufacturing, development and introduction of nuclear weapons into circulation on the market as well as a ban against technologies and products that promote the use of nuclear energy for military purposes. In short, in the proposition we can find safety and security arguments against the use of nuclear energy in terms of nuclear weapons and other usages of nuclear energy as a part of military maneuvers.

The securitization of nuclear weapons – although emanates from the field of energy safety and security – would have to be classified as *traditional* securitization because it implies the threat of military conflict. Brzoska (2012: 170–173) focused on analyzing threats and the uses of military forces in defence documents and discovered that the analysis of the threats were an important part of defence planning and disaster preparation.

The third theme surrounding the use of nuclear energy is climate change and ways to control it. Environmental protection, including actions, treaties and laws aiming at reduction of CO₂ emissions and control of global warming, is an important goal both nationally and internationally. In addition to this, also diminishing fossil fuels, such as oil, gas and uranium, constitutes as a pressing issue regarding the use of nuclear energy. Both of these aspects, but more importantly the internationally established goal of environmental protection, function as a promotion of the transition to use renewable energy sources

instead of nuclear energy. Environmental protection or climate protection, such as reduction of CO₂ emissions, constitutes as a safety and security argument as it aims to improve and maintain elements necessary for life. The program proposal³⁹ drafted by the opposition party, SPD, introduces means to establish the goal to establish a sustainable, affordable and secure system to create energy supply on a national level in Germany and also on European and even international level. From page 10 onwards, the topic of climate protection and European emission trading scheme is discussed (under the subheading *Klimaschutz und Europäisches Emissionshandelssystem*). The following insert indicates the goal:

“Ziel der Klimaschutzpolitik der Europäischen Union ist es, den Anstieg der globalen Durchschnittstemperatur auf weniger als 2 Grad Celsius über dem vorindustriellen Niveau zu begrenzen ... An diesem Ziel hat sich auch unser deutsches Energiekonzept zu orientieren”.

In short, the climate protection plan of the European Union includes the goal that the growth of the average global temperature would be less than 2 degrees of Celsius above the preindustrial level, and that this proposal on German energy concept has been modified to fit this goal. On page 14, the goal of this program proposition has been explained and argued in terms of three cornerstones; energy saving, energy efficiency and renewable energies. On page 20 in the program, the following is stated: “Ziel der Energiepolitik ist es, die Stromversorgung bis zum Jahr 2050 vollständig aus erneuerbaren Energien zu decken”. In other words, the goal of this proposal in terms of German energy policies is to create power supply entirely from renewable energies by year 2050. Before this goal is achieved, however, there are proposals how to restrict the use of nuclear energy and how to align the use of nuclear energy according to the CO₂ reduction plan:

“Die Treibhausgasemissionen von fossilen Energieträgern ... Die sinkende Emissionsobergrenze sorgt dafür, dass die energetische Verwertung dieser Energieträger stetig abnimmt. Die Belastung der Atmosphäre mit klimaschädlichen Emissionen wird dadurch eingedämmt. Während die Folgekosten der Emissionen aus der Gas-, Stein- kohle- und Braunkohle-Verstromung eingepreist werden, profitiert die Atomenergie davon, dass ihr Risiko- und Schadenspotenzial für die Allgemeinheit nicht internalisiert wird. Die Atomenergie genießt daher unsachgemäße finanzielle Vorteile, da sie nicht auf Emissionsrechte angewiesen ist. Der Deutsche Bundestag fordert daher die Verstetigung und Erhöhung der bisher zeitlich begrenzten

³⁹ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011

Brennelementesteuer, solange Atomenergie in Deutschland noch kommerziell genutzt wird”.

In short, it is argued that environmentally unfriendly greenhouse gases stem from fossil fuels and in order to sink the level of greenhouse gases the use of these energy sources must decrease. Although other fossil fuels are taxed, nuclear energy constitutes an exception to the rule because all its risks and all the ways it damages the environment are not taken into consideration. The German Parliament, therefore, demands that the government expands and raises the taxation on fuels as long as nuclear energy is used. On page 23, the goal of a broader tax to include nuclear power plants is stated as follows: “Nötig ist aber eine dauerhafte Steuer, die bis zum Ende der Laufzeiten der Atomkraftwerke erhoben wird. Zudem muss die Brennelementesteuer derart ausgestaltet werden, dass eine echte Kompensation der Folgen der Nutzung Atomenergie möglich ist”. In other words, it is argued that as long as there are power plants in use, they need to pay the fuel tax (Brennelementsteuer). Also, the tax needs to be raised to compensate for the consequences with which the use of nuclear energy burdens the environment. Lastly, in regard to the climate protection and one of its cornerstones, the use of renewable energies, I want to quote a statement presented by a Member of the German Parliament, Ulla Lötzer from the Left party, Die Linke, in a plenary session⁴⁰ which took place on the 14th of April 2011: “Kohle- und Atomkraftwerke blockieren den dringend notwendigen Umstieg auf erneuerbare Energien.”. In short, Lötzer claims that not only does nuclear energy hinder the reduction of CO₂ gases, it also hinders to urgent need to transition to renewable energies.

Brzoska (2012: 165–175) describes how climate change instigates security policies. “Climate change has, within a few years, become one of the top items on the security agenda of many states and international organizations” (Brzoska 2012: 165). Brzoska (2012: 166) defines environmental security as follows: it includes a broad range of threats and vulnerabilities within the context of environmental change focusing on the negative effects to human populations and providing a wide range of policy solution. Environmental security includes threats, such as environmental disasters, both manmade and natural, and the reason why they are threats is the fact that they have negative consequences on the security of population and state (Brzoska 2012: 167–170). The above-mentioned data is an

⁴⁰ 105th Plenary session, doc nr 17/105, 14.4.2011.

example of environmental security; the use of nuclear energy contributes climate change (which is an environmental disaster which has negative consequences on the security of the population) by increasing the level of CO₂ emissions in the air.

Now I have covered the three most important safety and security arguments used against nuclear energy in Germany; the nuclear disaster of Fukushima, the (technological) deficiencies in nuclear power plants and issues which are tightly connected to nuclear energy, such as nuclear waste, nuclear weapons and climate/environmental protection by emission cuts. I also included a chapter which included arguments regarding who or what nuclear energy threatens. Now, I will move on to four other topics which revolve around nuclear energy; energy supply, energy prices, terrorism and foreign relations. All these constitute in connection with nuclear energy safety or security risks which then, were used as arguments against the use of nuclear energy.

5.5 Energy supply

As expected, parliamentary debates about which energy sources to use are tightly tangled with energy supply. How to produce energy and which energy sources to use are questions which are conditioned under another question, namely from where it is possible to produce enough energy so that the national energy supply can cover both private and commercial needs.

The concern over nuclear energy and the risks it poses to energy supply is argued quite simply by the opposition party, Die Linke, on page one in the proposed amendment⁴¹ to the constitution under the first section where problems regarding nuclear energy are explained:

“Die Atomkraftwerke in Deutschland sind teilweise nicht ausreichend gegen den Absturz von Verkehrsflugzeugen geschützt. Andere Großschadensereignisse, die einen Ausfall der gesamten Stromversorgung zur Folge haben, könnten in den in Deutschland betriebenen Atomkraftwerken ebenfalls zu einer Kernschmelze führen. Angesichts dessen sind der Betrieb von Atomkraftwerken zur Energieerzeugung und die Aufarbeitung bestrahlter Kernbrennstoffe nicht nur ethisch unverantwortbar, sondern auch aus verfassungsrechtlicher Sicht untragbar”.

First, in this paragraph the opposition party, Die Linke, makes a claim that nuclear power plants are not sufficiently secured against a plane crash. Secondly, it is argued that this is

⁴¹ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

not the only scenario which threatens nuclear power plants; also other types of large-scale emergencies could very easily destroy or damage nuclear power plants, and then, lead to for example nuclear meltdowns. In situations like these, the consequence is a blackout situation where there is not enough electricity and power supply in Germany. The opposition party, Die Linke, argues that in light of this matter, it is unethical and unsustainable to use nuclear power plants for energy generation.

The next document⁴² is put together by the ruling parties, the CDU/CSU and the FDP and in this document, they refer to concerns over energy supply in terms of power generation with nuclear power plants includes laws which have passed. On page three, the text begins as follows: “Der Bundestag hat das folgende Gesetz beschlossen”. Meaning, the German parliament has decided to change certain laws. These laws determine the expiration dates of certain German nuclear power plants, for instance Philippsburg 2, Gundremmingen B, Philippsburg 1 and Biblis A and B. The expiration dates range from the end of the year 2015 to 2022. These changes have been made according to the following reasons:

“Die zuständige Behörde kann zur Verhinderung von Gefahren oder Störungen der Sicherheit oder Zuverlässigkeit des Elektrizitätsversorgungssystems ... oder zur Verhinderung einer Gefährdung oder Störung der Energieversorgung für den lebenswichtigen Bedarf ... genannten Anlagen ... bis zum Ablauf des 31. März 2013 in einem betriebsfähigen Zustand zur Erzeugung von Elektrizität zu halten ist”.

In other words, the ruling parties answer to the criticism concerning the issue of unsecure energy supply by acknowledging the problem and basing its decisions to give expiration dates to the operation of nuclear power plants on its aim to prevent any disturbances to the secure and reliable power generation in Germany. The ruling parties argue that they ensure that there will not be anything that threatens or disturbs energy supply which is an essential human necessity. On page seven, they state that the legislators’ premise is to ensure energy supply at all times: “Der Gesetzgeber geht davon aus, dass mit diesen Regelungen die Versorgungssicherheit jederzeit gewährleistet ist”. They continue to argue later in the same page that the regulations are, therefore, made always to guarantee the secure and reliable electricity supply: “Die Regelung dient der Sicherstellung der Sicherheit und der Zuverlässigkeit des Elektrizitätsversorgungssystems“.

⁴² Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6070, 6.6.2011.

In a proposed bill⁴³ the German Federal Council (Bundesrat) claims that not only are expiration dates enough but they also demand that energy supply and especially energy reserves should be established by non-nuclear power plants in order to prevent interruptions to secure energy production and to ensure vital energy supply – as can be seen on page eight:

“Der Bundesrat stellt fest, dass zur Verhinderung von Gefahren oder Störungen der Sicherheit oder Zuverlässigkeit des Elektrizitätsversorgungssystems oder zur Verhinderung einer Gefährdung oder Störung der Energieversorgung für den lebenswichtigen Bereich eine ausreichende Reserve durch nicht nukleare Stromerzeugungsanlagen bereit gestellt werden sollte.”.

In a paragraph from the recommended resolution⁴⁴ by the Committee for the Environment, Nature Conservation and Nuclear Safety, the opposition party, Alliance 90/The Greens, concurs with the previous statement. On page 25, under justifications for proposed changes to German nuclear laws, the following can be found:

“Der Vorhalt eines Atomkraftwerkes im Reservebetrieb ist, wenn überhaupt möglich, technisch schwer umsetzbar und mit hohen Kosten verbunden. Energiewirtschaftlich ist eine solche Kaltreserve durch ein Atomkraftwerk nicht notwendig. Der Gesetzentwurf sieht zu dem gerade das Vorhalten eines der acht unsichersten Atomkraftwerke als Kaltreserve vor. Gerade bei diesen besteht Konsens, dass sie ,insbesondere aufgrund ihrer unzureichenden Sicherung gegen Flugzeugabstürze oder ihrer sonstigen Sicherheitsmängel, nicht mehr weiter betrieben werden dürfen. Auch ein Weiterbetrieb eines solchen unsicheren Atomkraftwerkes als Kaltreserve ist daher nicht vertretbar”.

In other words, the opposition party argues that even if it was possible to keep a nuclear power plant functioning as energy reserve, it would be technically very difficult to make these changes and in addition, also very expensive. The argument continues that if the issue is assessed purely from an energy industry’s point of view, a nuclear power plant as an energy reserve is not even necessary. The proposition of changing nuclear power plants from functioning power plants to cold reserves is based on the notion that nuclear power plants due to their high-risk potential are not fit to be put into use in energy generation. However, even if changed into cold reserves, nuclear power plants still pose the same

⁴³ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

⁴⁴ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

risks, and therefore, should not function as cold reserves either.

The arguments and concerns voiced by the opposition party Alliance 90/The Greens over energy supply seem to reflect the horrible consequences in Japan; an earthquake and a tsunami destroyed a nuclear power plant (Fukushima I) on the east coast in Japan and damaged the country's infrastructure severely and the energy supply for the whole population was severely compromised. The disaster left Japan with serious power shortages; energy conservation and mandatory power cuts shadowed civil and business life. After the disaster, Japan's number one priority was stable energy supply (energy security). Koyama (2013: 287–290) designed the Best Energy Mix and one of the mix's essential aspects is renewable energy; renewable energy sources should be taken into broader use as they stabilize the power supply.

5.6 Energy markets and prices

Energy markets are a huge industry which therefore, can have and do have huge consequences on the society, on issues such as employment and energy consumption and energy prices. A few of the most important issues regarding a safe and functioning society which promotes people's wellbeing are employment, investments, innovation and energy supply which corresponds to the demands. These issues might not threaten the security of the people directly, but if a large portion of the population cannot afford to use energy anymore, it is a safety issue none the less. Nuclear energy can influence greatly what happens in energy markets as will be shown now.

I will begin this chapter by quoting an argument about the current state of the markets which was pronounced by the opposition party, SPD, on page four in their program proposal⁴⁵ regarding Germany's sustainable, affordable and secure energy supply: "Der Preisanstieg fossiler Energieträger bis Mitte 2008 hat viele Volkswirtschaften weltweit vor enorme ökonomische und soziale Probleme gestellt. Die Preisentwicklung der Energieversorgung ist daher von besonderer Bedeutung". In other words, it is argued that the rising energy prices (in terms of energy produced with fossil fuels) put several national economies worldwide in front of enormous economic and social problems. Further in the

⁴⁵ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011.

same body of text, it is stated that it is, therefore, essential that renewable energy sources will be introduced into the markets in a larger scale so it is possible to use various energy sources and to present them to the public as affordable options:

“Erneuerbare Energien sind bislang zwar überwiegend noch teurer als Fossile. Die Kosten der Erneuerbaren Energien sinken aber deutlich ab, weil sich Effizienz und Wirkungsgrade stetig verbessern und die steigende Nachfrage dazu führt, dass die Produktionskapazitäten ausgebaut werden und die Produktionskosten gesenkt werden”.

It is also argued that the transition into and investments in renewable energies is essential, and that nuclear energy functions as an obstacle to this change: “Ein Festhalten an der Atomkraft hat diese Investitionen entwertet, den Übergang zu erneuerbaren Energien gebremst und dem Wettbewerb durch eine Zementierung des Erzeugungsmonopols der großen Vier geschadet”. In short, the argument goes as follows; as long as nuclear energy is used, investments in energy markets will go to nuclear energy instead of renewable energy sources, hindering, therefore, the necessary transition to renewable energies. Also, nuclear energy has frozen competition and allowed ‘the great four’⁴⁶ to enjoy a monopoly status in the markets. It is, therefore, demanded, in the same document on page four, that Atomausstieg will be hastened “Der Atomausstieg soll beschleunigt ... es geht auch ohne Atomkraft und im Wettbewerb wurde insbesondere durch neue Anbieter das Oligopol der großen Energieversorger eingeschränkt”. In other words, the argument entails that it is not only possible to cope without nuclear energy, the withdrawal from the use of nuclear energy would also improve competition in the energy markets by diminishing the oligopoly status of the biggest energy suppliers. Later in the same document on page 22, the establishment of new market players is praised and emphasized as a key factor in not only improving competition in energy markets, but with that, also, in creating jobs and increasing innovations: “Nur mit der Etablierung neuer Marktteilnehmer ist gewährleistet, dass die Energiepreise im Wettbewerb bleiben, mehr in unsere Energieversorgungsstruktur investiert wird und damit Arbeitsplätze und Innovationen zunehmen”.

⁴⁶ The great four refers to the four biggest energy suppliers in Germany who very much control the energy markets

A Member of the Parliament, Sigmar Gabriel from SPD, took the floor in the plenary session⁴⁷ on page 13372, to express similar concerns regarding Germany as an industry nation and the pivotal position of industry in Germany:

“Frau Bundeskanzlerin: Wir freuen uns, dass Sie hier den Atomausstieg mit uns endlich gemeinsam beschließen ... Die Art und Weise, wie Sie es [Atomausstieg] machen, ist mit erheblichen Risiken verbunden. Deutschland ist die größte Volkswirtschaft Europas und eine der größten der Welt. Im Kern unseres Landes ist die Industrieproduktion Grundlage unseres Wohlstandes ... wir glauben, dass endlich wieder Planbarkeit und Berechenbarkeit in die Energiepolitik zurückkommen müssen, damit Deutschland auch Industriestandort bleiben kann”.

In short, Sigmar Gabriel (SPD) compliments the decision to move forward with Atomausstieg, but warns, however, that the withdrawal from nuclear energy includes risks, and it is, therefore, important to make good decisions on how to proceed with it. He states, that Germany has the biggest national economy in Europe and one of the biggest in the whole world. In the heart of the wellbeing of the German population is its industrial production, and it is, therefore, essential to keep Germany a viable industrial location. This is achieved only if Germany’s energy policies are predictable and can be counted on. Another Member of the Parliament, Bärbel Höhn from the Green party, also took the floor in the same plenary session on page 13392 to discuss Germany’s industry in terms of energy policies:

“Wer aussteigt aus der Atomkraft, muss einsteigen in die erneuerbaren Energien und die Energieeffizienz erhöhen. Das werden wir tun, darauf werden wir achten ... Das schafft Arbeitsplätze. Es wäre Ihre Aufgabe als Wirtschaftsminister, die 250 000 Arbeitsplätze zu schaffen, die in diesem Bereich möglich sind. Dasselbe gilt für die erneuerbaren Energien”.

In short, Höhn argues that the transition to renewable energy sources and to the jobs which can be created within that field goes side by side with Atomausstieg. I referred to Koyama’s (2013: 287–290) design on the Best Energy Mix above in connection with the previous section regarding energy supply, but in terms of energy markets, the whole industry, supply is tightly connected to prices as well. One essential aspect in Koyama’s model is renewable energy; renewable energy sources should be taken into broader use as they stabilize the power supply. I would apply this here as well because Bärbel Höhn also

⁴⁷ 117th Plenary session, doc nr 17/117, 30.6.2011.

emphasized the importance of renewable energies, and because it is unnecessary to separate supply from prices. The industry, energy markets, would benefit from investments to renewable energies and with that so would the whole population benefit from it.

5.7 Terrorism

This topic was brought up in a few documents and it was of particular interest. Terrorist attacks have shaken the world especially after 9/11 when a series of airplanes – which were abducted by terrorists – crashed on to important buildings, the World Trade Center, in New York USA on the 11th of September 2001. This terrorist attack took almost 3 000 casualties and since then, numerous nations around the globe have fallen victims to terrorist attacks with thousands of casualties. The argumentation under this subheading goes roughly as follows; nuclear power plants constitute easy targets to terrorists since the consequences of for example a core meltdown are disastrous. It is, therefore, necessary to secure nuclear power plants against attacks of any kind.

A bill⁴⁸ in which the matter of building more secure nuclear power plants or retrofitting the older ones is introduced, includes a plan by the government regarding a dynamic risk prevention. The plan for a more dynamic risk prevention in terms of nuclear power plants begins on page eight and continues on to page nine:

“Die Bundesregierung wird ermächtigt ... mit Zustimmung des Bundesrates unter Beteiligung der für Fragen der Reaktorsicherheit... insbesondere zur Abwehr von Gefahren aus terroristischen Angriffen, Flugzeug- und Schiffsunfällen, Erdbeben und Hochwasser, verwirklichen muss”.

In other words, the government answers to some criticism regarding the state of nuclear power plants, and with this statement argues that they acknowledge and carry into effect the safety and security of a nuclear reactor including in specific questions about the ability to defend the power plants from terrorist attacks, airplane and ship crashes, earth quakes and floods. In the same bill on page nine, it is suggested that there should be an obligation to retrofit the buildings according to the latest safety and security risks in order for the risk prevention to be more dynamic: “eine Nachrüstungspflicht im Sinne einer dynamischen Risikovorsorge begründet”. On the same page, it is claimed that the nuclear disaster of Fukushima in Japan showed that new risk assessments in regard to nuclear safety and

⁴⁸ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

security are in order, and those risk assessments arguable should include the threat of a terrorist attack: “Die Ereignisse in Japan bedeuten eine deutliche Änderung der Erkenntnisse zum Risikopotenzial. Die Verpflichtung der Betreiber, die technischen Vorrichtungen der Anlagen nach dem neuesten Stand von Wissenschaft und Technik an die sich ändernden Erkenntnisse zum Risikopotenzial anzupassen, wird mit dieser Vorschrift klargestellt. Beispielhaft sind dies Erkenntnisse zu neuen terroristischen Bedrohungen”. In short, it is argued that not only is it necessary to assess safety and security risks again and recognize the threat of terrorism, but it is also pivotal that legislators establish a requirement for the nuclear power plant operators to retrofit their power plants and secure them against for example terrorist attacks.

Another document where the threat of terrorist attacks is mentioned especially in connection with nuclear power plants is the recommended resolution⁴⁹ proposed by the Committee for the Environment, Nature Conservation and Nuclear Safety. On page 13, it is demanded that the oldest nuclear power plants in Germany should be immediately shut down in order to take the safety and security of the population in to consideration which is imperative: “Die sofortige Einstellung des Betriebs der ältesten AKWs sei im Hinblick auf die Sicherheit der Bürger zwingend. Die alten AKWs seien nicht oder besonders unzureichend (und da mit noch schlechter als andere AKWs) gegen den Fall eines Flugzeugabsturzes oder eines terroristischen Angriffs mit einem Flugzeug gesichert”. In short, the Committee argues that the German nuclear power plants are either not at all secured or poorly secured against for example airplane crashes or terrorist attacks. On page 13, the committee also refers to the 9/11 terrorist attack where airplanes were crashed on to skyscrapers in New York, USA: “Angriffe mit Passagierflugzeugen nach dem 11. September 2001 eine reale Gefahr und kein tolerables Restrisiko”. In other words, the 9/11 terrorist attacks is used as evidence that this is a real threat whose consequences are intolerable.

As can be seen above, the safety and security risks do not always stem from nuclear power plants themselves, but also from the combination of their technological deficits, hazardous materials (Uranium) processed inside them and also outside threats taking advantage of these factors. Fortunately, as was shown with quotes from the above documents, these risks

⁴⁹ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

have been taken into consideration – or at least have been included into the risk assessment regarding nuclear power plants – and suggestions made for these power plants to be shut down in order to ensure the safety and security of the population.

This chapter on terrorism and nuclear energy I would, first, connect with Rieu's (2013: 66) idea on how disasters change the way people perceive risks and produce new knowledge in the process, for example a re-evaluation of standards. What makes these instances interesting is the fact that there are not references only to the nuclear disaster of Fukushima, but also to other disasters, such as the 9/11 terrorist attack. There is no need to take into consideration only one disaster but also others if there is a possibility that the disaster could be in combination with one another and produce further security and safety risks. Third, one should also contemplate the references in connection to the ideal type of securitization by Balzacq (2015). One essential feature of the ideal type comprises of references to knowledge (Balzacq 2015: 106). In other words, the securitization moves which are made are based on knowledge of the drivers of securitizing moves are knowledge about threats, and this feature comes across quite clearly as there are references to a few threats which have already happened.

The next chapter is the final chapter which comprises of securitization statements which are made *against* nuclear energy. The topic is foreign relations; it is discussed how Germany's nuclear policies or energy policies in general affect foreign relations but also, how Germany's energy policies are affected by them. After this chapter I move on to discuss how safety and security statements were made *for* the use of nuclear energy.

5.8 Foreign relations

The last category of safety and security arguments made against German nuclear energy is foreign relations; these discussions comprise of perceptions on how the changes made in Germany energy policies might affect Germany's foreign relations. These matters were not brought up as much as I had expected – after all, Germany is a member state in the European Union, and in the European Union the issue of Energy Union has been heavily characterized by foreign relations, especially in terms of independency over other nations and energy import. This topic was, however, pointed out a few times. From this point of

view, foreign relations that is, German nuclear energy, or energy policies in general, can and should be viewed as a noteworthy issue included in Germany's foreign trade policy and safety/security policy.

The first document to which I want to refer to is the program proposal⁵⁰ by the opposition party. SPD, in which they define their own alternative to Germany's energy policies with the aim to ensure a sustainable, affordable and secure energy supply. On page nine in this document, the framework for Germany's energy policy is described, and it is naturally entwined with that of the European Union: "Die Energie- und Klimapolitik Deutschlands wird heute sehr stark von europäischen Vorgaben geprägt. Zugleich hat Deutschland als größter EU-Mitgliedsstaat aber auch die Chance, die europäischen Rahmenbedingungen entscheidend mitzugestalten". In other words, the opposition party argue that the energy and climate policy of Germany is characterized and shaped by the energy policies of the European Union, but also Germany – as the largest EU-member state – has the opportunity to co-create the framework for European energy policy. In the same chapter, it is stated that Germany imports 75% of its energy sources from foreign countries; these energy sources are oil, gas and Uranium:

"Deutschland importiert 75 Prozent seiner Energieträger aus dem Ausland. Die gesamten Einfuhren von Öl, Gas und Uran nach Deutschland erfolgen über andere EU-Staaten. Um seine Energieversorgung zu sichern, ist Deutschland auf die Kooperation der EU-Staaten angewiesen".

These energy sources are imported via other member states of the European Union, making Germany arguably depended on the cooperation of other EU-states. Under the same section (Europäischer Rahmen) on page nine, the opposition party states that in their proposal the two main goals of the EU are to, first, strengthen the energy solidarity and second, to fight climate change: "das Prinzip der Energiesolidarität festgeschrieben und die Bekämpfung des Klimawandels explizit als Ziel hervorgehoben". Right after this statement, a few strategies are mentioned which are pivotal in order to achieve these goals; the diversification of the energy sources and the transit routes ("die Diversifizierung der Energieträger, der Versorgungsquellen und der Transitrouten"). Just below these statements on page nine, it is emphasized there is a need to create better cooperation mechanisms within the EU and also the need to increase the proportion of renewable

⁵⁰ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011.

energies in order to establish energy supply security: “Um Energieversorgungssicherheit herzustellen, sollen neue Mechanismen der EU-internen Kooperation bei der Krisenvorsorge geschaffen werden ... muss der Anteil erneuerbarer Energien durch nationale Maßnahmen und EU-Förderung kontinuierlich erhöht werden”.

On pages 38 to 40 (which begin the subchapter *Energieaußenpolitik*) in the program proposal, Germany’s energy foreign policy is discussed further, and the discussion begins with these statements:

“Die globale Verteilung der Energieressourcen ist eine Schlüsselfrage des 21. Jahrhunderts. Sie beinhaltet eine innen- ebenso wie eine außenpolitische Komponente und verbindet Herausforderungen der Umwelt-, Sozial- und Wirtschaftspolitik mit Aspekten der Außenwirtschafts- und Sicherheitspolitik”.

In other words, the opposition party argues that the global distribution of energy sources is a key issue of the 21st century. This matter includes both state and foreign policy factors, and combines the challenges in the environmental, social and economic policies with the issues regarding foreign and security policies. As was stated in the introductory chapter under this subheading, questions about nuclear energy, or energy sources in general, cannot be separated from security issues, but must in fact be discussed by taking the safety and security aspects into consideration.

On page 39, the energy security issue is explained further; energy security implies not only the availability of necessary energy sources, but it is also argued that supply security must be ensured while taking into consideration sustainability and profitability: “bedeutet Energiesicherheit mehr als die physische Verfügbarkeit der notwendigen Ressourcen. Energieaußenpolitik betrifft neben der Gewährleistung klassischer Versorgungssicherheit auch die Dimensionen von Nachhaltigkeit und Wirtschaftlichkeit und sie beschreibt einen kooperativen Mechanismus, der möglichen Verteilungskonflikten um den Faktor Energie präventiv begegnet”. Also, all this essentially boils down to the goal of preventing conflicts over energy distribution. The argument states that globally there are three main factors that threaten energy security; the increasing global demand, concentration of resources within politically unstable countries and climate change. Unless these three threats are globally dealt with, there is a serious possibility that conflicts will develop not only threatening the

environment but also the stability of entire nations: “Es muss verhindert werden, dass aus einem immer härteren Wettbewerb um knappe Güter die Konflikte von morgen erwachsen. Ohne entschiedene Gegenmaßnahmen wird in dieser Situation der Klimawandel nicht nur zur ökologischen Gefahr, sondern bedroht auch die Stabilität ganzer Volkswirtschaften”. In addition to this, on pages 39 to 40, the three main steps that German energy foreign policy should follow include the diversification of supplier sources and transportation, the establishment of legal and investment security and the development of strategic energy partnerships. In addition to these three steps, also the development of a stable energy supply program and energy efficiency on a national level in Germany is pivotal also which includes the development and investment into renewable energy sources.

The above-listed arguments made by the opposition party, SPD, in their program proposal focus on conflicts and foreign relations, and can be, therefore, thought of as conflict discourse. Trombetta (2012: 151–164) explores the relationship between environmental conflict discourses and security policies. These discourses constitute a cooperative approach on security; global environmental problems used to promote common global security (Trombetta 2012: 153). The global problems listed here are the problems of energy sources and also the dependency on other states in terms of import and transport routes. These are sources of threat to global security and need to be addressed – as is done in the above-listed statements; the problems are clearly stated and identified as possible threats to safety and security, and then, solutions are offered.

There is another document where statements about energy foreign policy and nuclear energy can be found, but in this one, a different point of view is taken. The document is a bill⁵¹ designed to change the German nuclear energy laws and it is put together by the government and it includes both criticism by the German Federal Council (Bundesrat) but also answers from the government. On pages 10 to 11 under the subheading ‘Begründung’, or justification/reasons, the Federal Council argues (and at the same time criticizes the government) that it is politically and morally conflicting for Germany to support the use of nuclear energy abroad while at the same time develop Atomausstieg within Germany due to all the known safety and security risks revolving the use of nuclear energy. Germany should, therefore according to the Federal Council, resign from supplying nuclear fuel to

⁵¹ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

foreign customers. Only then can the German Atomausstieg be defined as systematic and credible. This, however, is not enough. In the same document on page seven, the Federal Council also demands that Germany should not anymore import electricity which was generated by nuclear power, and instead, increase the level of use of renewable energy sources in power generation: “Den Import von Atomstrom zu diesem Zweck lehnt der Bundesrat ab ... Erforderlich ist eine Erhöhung des Anteils der Erneuerbaren Energien an der Stromerzeugung”. This argument shows dedication to the international society, and as the entire theme, foreign relations, includes references to the international society, for example neighboring countries and the EU. Brzoska (2012: 167–170) also discusses the matter of foreign relations in term of solutions to security matters and disaster management. One of the disaster management strategies is international cooperation, or as discussed in this chapter foreign relations (ibid). Koyama (2013: 287–290) designed the Best Energy Mix which includes the idea that in order to achieve nuclear safety there should be international cooperation should be among countries and organizations.

I want to end this section with a statement which was made in the plenary session⁵² on the 30th of June 2011. This statement was made by Norbert Röttgen who served as the Federal Minister for the Environment, Nature Conservation and Nuclear Safety at that time. The statement refers to the use of nuclear energy and can be found on page 13369: “Wir werden die Abhängigkeiten vom Import, politische und geopolitische Abhängigkeiten, aber auch die Volatilität des Preises, also wirtschaftliche Abhängigkeiten, reduzieren”. In short, Minister Röttgen claims that we [the ruling parties] will reduce our dependency on import and also decrease our political, geopolitical and economic dependency as well as diminish the volatility of the prices. All this implies cooperation with international society as well as emphasizing stability.

5.9 Safety and security *for* nuclear energy

In this study, the first research question comprises of two parts; what kind of safety and security arguments are made *against* the use of nuclear energy (or *for* Atomausstieg), and second, what safety and security arguments are made *for* the use of nuclear energy (or *against* Atomausstieg). Although it was to be expected that most statements would be made against nuclear energy, there were also statements which argued for nuclear energy.

⁵² 117th Plenary session, doc nr 17/117, 30.6.2011.

The book, *Parliamentary Style of Politics* (2008) by Soininen and Turkka, includes many aspects on parliamentarism and the first and foremost aspect about parliamentarism is that it is a fact of political life (Soininen 2008: 61–79). In addition to this, a pivotal feature of parliamentarism is freedom (Soininen 2008: 63–69). Freedom can refer to the practice of free will (ibid). It is this feature from which it is possible to derive to the second topic of my study; in parliamentary systems (which include freedom) decisions are made under the condition of confrontation (ibid). Palonen (2008: 82–103) defines this matter with the concept of speaking *pro et contra*. The principle of *pro et contra* comprises of pros and cons; favoring and opposing views are always brought up and discussed in detail (Palonen 2008: 82–86). The very procedures of parliament operate according to this mode of speaking (ibid). Before this chapter, the statements mainly comprised of benefits of Atomausstieg and the disadvantages of the use of nuclear energy. Now, the opposing views are stated; how is it possible to benefit from the use of nuclear energy and how might Atomausstieg harm the society.

The first document to which I want to refer is a bill⁵³ written by the parliamentary fraction of CDU/CSU (the ruling party which is a political alliance between the Christian Democratic Union of Germany, also known as CDU, and the Christian Social Union in Bavaria, also known as CSU), and FDP, the Free Democratic Party (also a ruling party). In this bill on page five, the then current situation is explained as background information to the proposed changes:

“Im Rahmen des Gesetzgebungsverfahrens zur Umsetzung des Energiekonzepts im Jahr 2010 hat die Bundesregierung ausgeführt, dass die Kernenergie als Brückentechnologie für einen Übergangszeitraum weiter genutzt werden soll, bis sie durch erneuerbare Energien verlässlich ersetzt werden kann”.

In other words, the German Federal Government, or the Bundesregierung, had established an energy plan in 2010 which defined the use of nuclear energy as a bridging technology for the transition period before nuclear energy can be completely replaced by renewable energies. Although this bill was made from the point of view that the use of nuclear energy poses severe threats and that Atomausstieg should be established as quickly as possible, the ruling parties also argue on page five, that it is simply not possible to withdraw from the use of nuclear energy in terms of generating electricity with it until the

⁵³ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6070, 6.6.2011.

end of the year 2022: “ein vollständiger Ausstieg aus der friedlichen Nutzung der Kernenergie zur gewerblichen Erzeugung von Elektrizität faktisch vor dem Jahr 2022 nicht möglich ist”. Later, on page 7, the ruling parties emphasize that in every step of the way a secure energy supply must not be compromised: “die Versorgungssicherheit jederzeit gewährleistet ist”.

What we can see from these instances is that the same reasoning, the securitization of energy supply, is used as it was used against nuclear energy and for renewable energy sources, but now, it is used to argument for nuclear energy. Nuclear energy is defined as the bridge between two different energy industries; one which relies on fossil fuels and one which incorporates the use of renewable energy sources. As discussed by Koyama (2013) energy security relies heavily on a stable energy supply.

In another document, arguments against Atomausstieg are made more clearly. It is a transcript from a plenary session⁵⁴ which took place on the 14th of April 2011. In that plenary session on page 12019, Volker Wissing, a Member of the Parliament and a representative from the FDP party, took the stage to criticize Atomausstieg:

“Wir haben schon frühzeitig darauf hingewiesen, dass die Energiepreise die Brotpreise des 21. Jahrhunderts sind. Wir haben immer auf die Kostenbelastung der Bürgerinnen und Bürger geachtet ... Energiepreise auch eine soziale Bedeutung haben ... man müsse aufpassen, dass Strom nicht zum Luxusgut wird. Das haben wir seit Jahren gepredigt ... Sie sehen ein, dass der Atomausstieg eine Gefahr für Menschen mit niedrigem Einkommen ist”.

In other words, Wissing is arguing that the withdrawal plan from the use of nuclear energy as in its current state would raise the energy prices and, therefore, burden citizens and especially lower-income households whose social status would as a consequence deteriorate even more because they might not be able afford to pay the energy prices anymore. Energy prices, therefore, have a social meaning as well and it should be ensured that electricity does not become a luxury commodity. Wissing then defines the current state of the withdrawal from the use of nuclear energy program as the ‘Atomausstiegspanik’, or the panic of nuclear phase out: “die Atomausstiegspanik ... man dürfe nicht einfach so heraus aus der Atomenergie, ohne einen Plan”. In other words, there was a state of panic

⁵⁴ 105th Plenary session, doc nr 17/105, 14.4.2011.

regarding the withdrawal from the use of nuclear energy, and Wissing warns that there should be no Atomausstieg without a real plan which would ensure energy supply, reasonable energy prices and the wellbeing of the population. I want to focus on Wissing's choice of words, "Atomausstiegspanik", in context with McDonald's (2008: 575–577) conceptualization of the issue of the moment; a moment or a specific point is when an issue either becomes securitized or accepted by the audience or when violent measures are implemented. This may, however, raise problems; most issues, for instance issues on immigration or environmental issues, evolve over time and demand many efforts before becoming security issues (ibid). This then, creates unnecessary tension between politics and security; political issue is understood differently than security issues and may result in 'panic politics' (ibid). I would say that this is what Wissing refers to; there is a state of panic which has resulted in a lack of understanding of how policy formation works and also in the lack of proper handling of an issue.

Another member of the Parliament, Heinz Golombeck from the FDP party, also took the floor to express similar concerns over Atomausstieg in the same plenary session⁵⁵ on page 12025. Golombeck refers to energy costs, but not only from the consumers point of view but also from the economic view point:

“Aufgrund des schnelleren Ausstiegs aus der Kernenergie ... Es nützt nichts, darum herumzureden: Energie wird ohnehin teurer werden. Wir können und wollen die Verbraucher nicht von mehreren Seiten durch höhere Preise belasten. Dies würde unser gerade erst mühsam erkämpftes Wirtschaftswachstum bremsen”.

In other words, Golombeck argues that it benefits no one to pussyfoot around the topic; along with the rapid withdrawal from the use of nuclear energy, energy prices will grow higher. We [the ruling parties] cannot nor will not burden the consumers with higher prices. In addition to this disadvantage, Golombeck argues further that the rising prices would also slow down the already slow and difficult economic growth. In Golombeck's statements, many of the features of the ideal type of securitization are included. In Balzacq's (2015: 106) list of features which comprise the ideal type of securitization, there are features such as intersubjectiveness, knowledge of threats, power relations, social mechanisms and responsibility. Each of these features is present in Golombeck's

⁵⁵ 105th Plenary session, doc nr 17/105, 14.4.2011.

statement; we can see the intersubjectiveness and power relation between the securitizing actor (Member of the Parliament) and its audience (parliaments, constituency). The statement comes from the sense of responsibility and knowledge of threats; rising energy prices burden heavily lower-income households and the economy, and as a representative Golombeck has the responsibility to try to predict and avoid negative consequences. The social mechanism in use here is persuasion by implying to the negative consequences.

The consumers and the economic growth are, however, not the only ones burdened by Atomausstieg as will be argued in this next document. In a bill⁵⁶ drafted by the ruling parties, the CDU/CSU and the FDP, it is brought forth that also the state budget would take a hit. On page two, there are estimates made how Atomausstieg, the proposed change to nuclear energy laws, would affect the state's budget: "mindert die Änderung ... das Aufkommen der Kernbrennstoffsteuer im Erhebungszeitraum 2011 bis 2016 um etwa 1 Mrd. Euro jährlich". In other words, it is argued that if the bill is passed, the revenues collected via the nuclear fuel tax would decrease by one billion euro every year making a dent in the state budget. The fourth style of speech, rational-legal style, is something I have referred to already numerous times, and also this incident represents that style (Turja: 155–161). As can be inferred from its name, the style includes the use of expert statements in formal speeches. The fact being here the calculated amount of loss of revenue.

In the next document, a program proposal⁵⁷ put together by the Committee for the Environment, Nature Conservation and Nuclear Safety, the committee voices concerns over energy supply and also over the damage which the withdrawal plan from the use of nuclear energy could do. On page 14, the committee suggests that, although the withdrawal from the use of nuclear energy is important, it should, however, be established rationally and gradually over time; it needs to be taken into consideration that Atomausstieg threatens the stability of regional power generation and the risks should be assessed in order to ensure the secure energy supply:

“für die Stabilität der regionalen Stromversorgung im Rahmen des Ausstiegs Gefahren hätte bringen können ... Abwägung des zu begrenzenden Risikos mit der Sicherheit der Stromversorgung ... Der stufenweise Abschaltung von Atomkraftwerken”.

⁵⁶ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6070, 6.6.2011.

⁵⁷ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

Also this incident can be viewed in the context with McDonald's (2008: 575–577) conceptualization of the issue of the moment; a moment or a specific point is when an issue either becomes securitized or accepted by the audience or when violent measures are implemented. This may, however, raise problems; most issues, for instance issues on immigration or environmental issues, evolve over time and demand many efforts before becoming security issues (ibid). This then, creates unnecessary tension between politics and security; political issue is understood differently than security issues and may result in 'panic politics' (ibid). In this statement, it is urged that Atomausstieg should be established in an orderly fashion; there should be no hurry since then, the risk assessment, for example about energy supply, could suffer and as a by-product produce more harm.

Lastly, I want to end this section by quoting a response from the Federal German Government to the criticism presented in the same document by the Federal Council, *Gegenäußerung der Bundesregierung*, which can be found in a draft law⁵⁸. On page 12, the Federal Government argues that it is very clear that it is impossible to withdraw from the use of nuclear energy due to the insufficient capacity of cold energy reserves:

“Nach den derzeitigen Erkenntnissen der Bundesnetzagentur kann allerdings nicht davon ausgegangen werden, dass die zur Verfügung stehenden Reservekapazitäten – einschließlich fossiler Kraftwerke – zur Gewährleistung der Versorgungssicherheit auch unter extremen Bedingungen ausreichen ... Elektrizität vor allem in den als kritisch ausgemachten Wintermonaten muss daher die Möglichkeit geschaffen werden, Reservekapazität durch ein in Reservebetrieb versetztes Kernkraftwerk bereit zu stellen. Auch Stromimporte aus dem Ausland stehen im Übrigen in den Wintermonaten nicht mit ausreichender Sicherheit zur Verfügung ... zur Sicherstellung der Sicherheit und der Zuverlässigkeit des Elektrizitätsversorgungssystems der Reservebetrieb eines Kernkraftwerks erforderlich”.

In other words, the government argues that according to the recent information provided by the Federal Network Agency, it is impossible to assume that the reserve capacity – even when including fossil power plants – would offer a sufficient amount of energy under extreme conditions. It is, therefore according to the government, necessary especially during the critical winter months that the possibility of providing more reserve capacity through nuclear power plants is established and maintained. In addition to this, the government also emphasizes that it is also critical to take into consideration the fact that even importing energy is not sufficient to guarantee that there would be enough energy for

⁵⁸ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

use. So, in order to guarantee a secure and reliable electricity supply system, it is necessary to have nuclear power plants for standby operation.

First, I want to reflect this statement in connection to Patzelt's (2012: 45–70) views on functions of parliamentary communication. The basic idea is that parliamentary communication is the key concept which legitimizes parliamentary decisions and that there are institutionalized patterns within which communication operates. The political process of communication is complex; there are various agents, such as interest groups, assemblies, NGOs and parties, and all of these agents form the communication network that revolves around the representative body, the parliament (Patzelt 2012: 45–49). This statement included a new agent of the communication network which had not yet been mentioned, namely the Federal Network Agency.

Secondly and lastly, I want to say that this statement follows Koyama's (2013) views on energy security in terms of energy supply. The number one concern is to ensure a stable energy supply because it is very much needed by the government, but it is also needed for welfare and for business (Koyama 2013: 280). In this statement, the concerns revolve around reserve capacity and the fact that importing energy is not a sufficient replacement for nuclear power plants. So, in order to secure a stable energy supply, it is necessary to have nuclear power plants for standby operation. With nuclear power plants, it is possible to ensure that the government stays in function, people's welfare is not jeopardized and that the prerequisites for business are not compromised.

6 Results

The goal of my study was to conduct a content analysis on German parliamentary debates regarding the securitization of nuclear energy in Germany after March 2011 when the nuclear disaster of Fukushima took place until the end of June 2011 when the parliament established a new direction for its energy policies (away from nuclear energy and towards renewable and environmentally-friendly energy sources).

I began my thesis by exploring parliamentarism and different aspects of parliamentary debates. In the data, there were several interesting results to be found in terms of insights about parliamentary debates. First and foremost, the aspect of freedom could be found in the data. Freedom in the sense of equality in opportunity to participate in the debates and in the sense of practice of free will. There was *deliberation* to be found. The data included various documents which were put together by a myriad of members of parliament, party members from several different political parties (from the opposing parties, such as the Left, the Green and the Social Democrats to the governing parties, such as the Christian Democrats and the Free Democratic party) and the contribution from expert associations was also present in the debates. In the documents, there were written questions which the members of the coalition government were obliged to answer and so be held accountable to their constituency. In addition to this, I mentioned the aspect of ensuring that there are opportunities to find, invent and imagine grounds both for and against of the bill in question. The data included various documents which date to different times during those spring months making sure that there was time to take part in the parliamentary discussions, for example by participating in plenary sessions or taking part in committee work and assigning questions. Also, what Koyama (2013) emphasized in his article, namely transparency, was also achieved in this process.

Another important aspect was the concept of speaking *pro et contra*, and indeed, the debates (my data) included various opposing and favoring views on the matter. I used Palonen's (2008: 82–103) views on the concept of speaking *pro et contra* as part of parliamentary rhetoric, and this scenario certainly was present in these debates. The issues were discussed in detail and it seemed that no effort was spared to find multiple aspects on

the matter of safety and security regarding nuclear energy. There were various themes within the discussions about nuclear energy, such as how it relates to and affects the environment and the global warming and how international relations with other states are affected by Germany's nuclear power policies. There were even discussions about terrorism and how that aspect also needs to be factored into the discussions about nuclear power policies. So, not only there were opposing and favoring views to be found in terms of Germany's nuclear power policies, but they were found in various topics within the theme. Speaking *pro et contra* is a type of rhetoric but it is not, however, the only aspect about rhetoric. The most used style, or type of rhetoric, to be found in the data represented the rational-legal style which is very fact-based and objective in the sense that there were no theatricalities used nor colorful language. So, in light of the results, the style of speech called rational-legal style was most used and the most appropriate as argued by Turja (2008: 178–182). The arguments comprised of scientific facts and relied on expert authority, and they were formal in style (Turja 2008: 155–161). The communication could be characterized as sticking to the facts and specific technical aspects or for example on statistics regarding energy consumption and production. In terms of rhetoric and the modes of speaking, the function of the debates also need to be taken into consideration because the function of the communication also reflects itself on the rhetoric used. Law-formation is usually the end-goal of parliamentary debates; the debating parties all want to make sure that the form which the bill will take when ratified conform to the opinions of the debating parties in question and also their constituencies. However, before law-formation, there needs to be efficient argumentation, persuasion. This function, to be able to persuade the other debating parties, is an important factor and an inherent aspect within deliberation. When one wished to persuade for example the other members of parliament as in this case, it can be useful to employ the mode of speaking which is considered the most appropriate one. In this case, it seems that the most appropriate type of rhetoric is the rational-legal style and the backup of experts.

Another topic relating to parliamentarism and, therefore, these parliamentary debates is communication network. I already above touched upon this topic briefly when I mentioned different individuals and groups who had taken part in the debates. When communication is assessed, it can be important to inspect the communication network little closer also because the communication network can influence the content of the debates greatly. As stated earlier, the biggest demographic in the data were members of the parliament – which

is to be expected when the data of the research comprises of *parliamentary* debates. This is, however, an insufficient description of the communication network since members of parliament can hardly be defined as a monolithic demographic. There are various parties, as in this case there are the parties which form the coalition government (the Christian Democrats and the Free Democratic party) and then, there are the parties which form the opposition (the Greens, the Left and the Social Democrats). In addition to this division, there also needs to be taken into consideration the committees and their composition, but also the different ministries and their area of expertise. Moreover, in the data there was quite often to be found information gathered together by an expertise association, such as the Nuclear Safety Commission, which makes these associations a part of the communication network. All in all, the composition of the communication network in light of my data seems, on the one hand, to be quite unanimous when it comes to for example on expertise on policy-formation or expertise on nuclear power, but on the other hand, when assessed closer, the communication network within this field comprises of individuals and groups who hold different opinions on the matter making the communication network rather various and manifold.

The results I discovered conveyed an interesting description of the situation regarding the safety and security based arguments about Atomausstieg; the arguments entailed various energy safety and security issues. Although the debates included many references to the nuclear disaster of Fukushima – as was expected – they also included many other points of view, for example various (and very specific) deficiencies of nuclear power plants, hazardous by-products of nuclear energy, such as nuclear waste, all the way from terrorism to questions about energy supply. What this tells us, interestingly, is that the beginning situation (Fukushima nuclear disaster) ended with an entirely different scenario regarding the safety and security threats posed by nuclear energy. The situation is a very complex one with different aspects all which could have serious consequences on a society.

The data included numerous energy safety and security based arguments both for and against Atomausstieg which in itself is an interesting result to be discovered. There was plenty of data to be found, meaning that the situation as a whole reflects quite well the requirements made by Figueroa (2013) in terms of effective risk communication. These discussions were numerous, open for public viewing and included detailed insights on various threats. All which are an essential part of effective risk communication. This

situation (again as a whole) also reflects Rieu's (2013) suggestions on risk perception. These debates showed that there had been means used in order to acquire new information, investigations had been made and referred to in order to acquire a wider and better understanding of the possible threats posed by nuclear energy. In addition to this, Rieu (2013) also called for debates as a key means to address possible threats, and also this feature became apparent in my data. If one looks at the parliamentary debates (the data) as a whole, it is also possible to detect the three key features regarding the challenges of energy policies proposed by Koyama (2013). These features are energy security (securing energy production to meet the societies need, or consumption), environmental protection and economic efficiency. The aspect of environmental protection was to be found in the data numerous times under many categories, for example when nuclear disasters were discussed or the consequences of deficiencies of nuclear power plants, or when nuclear energy related issues were discussed, such as the hazardous waste which is an inevitable byproduct of nuclear energy. Economic efficiency was also given plenty of attention, for example in the arguments which fall into the categories of energy supply and energy markets and prices.

Lastly, if one looks at the data and the results as a whole, it is possible to confirm Williams (2015) conclusions about the politics of extraordinary and the relationship between normal politics and security practices. The arguments within the data comprise of declarations of threats, and therefore, defining the parliamentary debates as politics of extraordinary. The relationship, however, between normal politics and security practices does not seem to depict any type of division of the two. In other words, what is possible to see in light of the data, is that security practices can also function according to democratic principles, meaning that there are no use of violent practices, but instead debates and law-formation which conform with democratic principles of how issues are dealt with. Patzelt (2012: 45–70) defines communication as the key aspect which legitimizes parliamentary decisions, and it can be argued that in the light of the data, the debates constitute as this communication and therefore, also as the legitimizing factor.

Now, I will discuss the results in a more detailed fashion and at the same time discuss them in terms of securitization, or the key aspects within it. I categorized the arguments under eight subcategories which are references to nuclear disasters, deficiencies of nuclear power plants, life and material goods necessary for life, nuclear energy related security issues, energy supply, energy markets and prices, terrorism and foreign relations. The majority of

the arguments fall under the first four categories. However, the key features of securitization and energy safety and security (which were discussed in the first half of this thesis) were apparent in all the arguments. In other words, not each and every argument made included all the key features gathered for this thesis, but all of the arguments always included some of the key features.

The parliamentary debates included many answers for the first half of the first research question of what kind of securitization arguments relating to energy safety and security are used *against* nuclear energy, or *for* Atomausstieg. First, the arguments used against nuclear energy included references to threats of nuclear disasters, such as the Fukushima nuclear disaster in Japan. One example of these references comes from a bill⁵⁹ which was drafted by the opposition party, Die Linke, as a suggestion to alter the constitution in order to establish the space for Atomausstieg in the constitution. In this document, the opposition party argues that the nuclear disaster of Fukushima is proof of a maximum credible accident or MCA where there will always be high safety and security risks relating to nuclear energy. Among the arguments about nuclear disasters there were also references to another disaster, the Chernobyl nuclear disaster, and but there were also references to possible nuclear disasters such as these two. In these arguments, the epistemology of securitization, was strongly present. In other words, safety and security threats are explained by referring to previous events which prove that there is the possibility that also other high-impact and irreversible events could happen again. The fact that the topic of discussion here is precisely *high-impact* events with detrimental consequences is crucial since that is a key aspect in securitization; not all events can be securitized, and there, therefore, needs to be an aspect of *high* risks.

Second, the arguments used against nuclear energy referred to the safety and security threats which can be posed by the deficiencies in nuclear power plants. The deficiencies might lead to very serious problems, such as a core meltdown, which in themselves might lead to nuclear disasters. One example of these types of arguments was presented by the opposition party, SPD, in their program proposal⁶⁰ in which references to the technical properties of the Japanese nuclear power plants were made which arguably showed weaknesses and faults. These arguments in particular were textbook examples on the

⁵⁹ Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

⁶⁰ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011

rational-legal style; no traces of any other style of rhetoric was used, only references to scientific and technical facts and expert statements.

Third, since use of nuclear power includes threats of nuclear disasters, the use of nuclear power poses threat to life and also to material goods which are necessary to life. In their program proposal⁶¹, the Social Democratic party of Germany argues that the risk technology of nuclear energy is uncontrollable and that the consequences for people and the environment are unpredictable. One of the key features of securitization is that it includes the need for protection. The need to protect is included within disaster management. In other words, if or when a disaster happens, there has to be resources available in order to produce the means for protection. These arguments define life and material goods necessary for life as factors which are necessary to protect, and the means to do so, is to remove the cause of the threat completely, which in this case is nuclear power.

Fourth, it was claimed that the use of nuclear power also includes nuclear energy related threats. These issues comprise of nuclear waste, nuclear weapons and climate change. One example can be found in the amendment⁶² by the opposition party, Die Linke, where they argue that the problem of final disposal of highly contaminated waste is yet another safety and security issue surrounding the use of nuclear energy because it poses further grave dangers to life. Each of the three nuclear related issues in themselves include several risks and therefore, constitute as safety and security based arguments against the use of nuclear energy. In case of references to nuclear waste and climate change, it becomes clear that environmental problems have been transformed here into security issues. An aspect of securitization which has not always been included into securitization. The references to nuclear weapons, instead, comprise a more traditional aspect of securitization; military conflicts have always been an essential part of securitization. What is more, it is interesting to see, how traditional and established features were combines with more contemporary topics such as energy safety and security which might not yet be so established.

The fifth and sixth category of safety and security arguments against the use of nuclear energy comprise of threats to the society in terms of secured energy production and consumption. It is argued that the use of nuclear energy threatens society because the use

⁶¹ Antrag: Programm für eine nachhaltige, bezahlbare und sichere Energieversorgung, doc nr 17/5481, 12.4.2011

⁶² Entwurf eines Gesetzes zur Änderung des Grundgesetzes, doc nr 17/5474, 12.4.2011.

of nuclear energy for the production of electricity includes several risks and therefore, compromises the stability of the society. One example of these references comes from a bill⁶³ where the German Federal Council (Bundesrat) claims that not only are expiration dates (of nuclear power plants) enough but they also demand that energy supply and especially energy reserves should be established by non-nuclear power plants in order to prevent interruptions to secure energy production and to ensure vital energy supply. The concerns under these subcategories seem to have risen from Japan's example where the Fukushima nuclear disaster damages the country's infrastructure greatly. The consequences of this were serious power shortages which overshadowed both civil and business life because they threaten the wellbeing of the population.

The seventh category of arguments made against the use of nuclear energy and for Atomausstieg comprises of threats of terrorism. It is argued that nuclear power plants are not secured against terrorist attack and therefore, constitute a major threat. The Committee for the Environment, Nature Conservation and Nuclear Safety, for example, in their recommended resolution⁶⁴, on page 13, claims that the German nuclear power plants are either not at all secured or poorly secured against for example airplane crashes or terrorist attacks. One of the essential features of securitizing arguments is that the claims made are based on knowledge about existential threats. Although there were not several arguments found which refer to the possibility of a terrorist threat, it can be said that the arguments include this feature. The arguments include, first of all, detailed knowledge about the technical build of nuclear power plants, but also include knowledge about terrorist attack which have taken place.

Lastly, foreign relations are discussed. These arguments are mainly made by the opposition party, SPD, and they argue that in order to avoid conflict between nations, there needs to be enough energy sources, energy production and energy supply for everyone. In addition to this, the energy sources should not harm the environment in such a way that it poses risks to societies, to life or to the environment. Due to this situation, it is argued that the use of nuclear energy poses threats and should instead be substituted by investing in renewable and environmentally-friendly energy sources. One of the features of securitization is environmental conflict discourses and how they are combined with

⁶³ Entwurf eines Dreizehnten Gesetzes zur Änderung des Atomgesetzes, doc nr 17/6246, 22.6.2011.

⁶⁴ Beschlussempfehlung und Bericht des Ausschusses für Umwelt, Naturschutz und Reaktorsicherheit, doc nr 17/6361, 29.6.2011.

security policies. The threat which nuclear energy poses on global (environmental) security is brought forth here in order to remove the threat and promote global security.

In addition to this, not all the arguments, however, were against nuclear energy. I ended the analysis by referring to and discussing safety and security argument which were made *for* nuclear energy. They were also varying, some referring to energy supply and others to self-sufficiency and a secured energy supply. This adds another dimension to the situation and how it has been discussed.

The second half of the first research question, what safety and security based arguments are made *for* nuclear energy and *against* Atomausstieg, falls roughly under three categories; material goods necessary for life, energy supply and, energy markets and prices. One of the arguments used for nuclear energy includes the idea of nuclear energy as a necessary bridging technology. In other words, it is argued that it is simply impossible to withdraw from the use of nuclear energy because then, the securitization of energy supply would be compromised and with that the generation of electricity. These arguments seem to argue for Energiemix which in Kaarkoski's doctoral thesis held an established position in German parliamentary debates between 1991–2001.

Second, there are arguments made which refer to the rising prices if the energy markets are drastically changed by removing the use of nuclear energy; it would burden citizens and especially lower-income households whose social status would deteriorate even further. In addition, Atomausstieg would also slow down the already slow and difficult economic growth. Atomausstieg threatens the stability of power generation and therefore, also the secure energy supply. Lastly, Atomausstieg in its current situation is depicted as the panic of nuclear phase out, and that there should be no Atomausstieg without a real plan which would ensure energy supply, reasonable energy prices and the wellbeing of the population. Both of these types of arguments can be identified with the concept of moment and panic politics within securitization. There can be tension between normal (and slowly evolving) policy-formation and security issues which can evolve over one moment and therefore, demand hasty decision.

One of the key features of securitization was proposed by Rothe (2012: 243–254); there can sometimes appear a gap between statements (securitizations) and the implementations. Although the implementations by Bundestag in terms Atomausstieg might not constitute a huge gap between the securitization arguments made here and the implemented policy-

formations, there is, never the less, a gap to be found, for example when the deficiencies of nuclear power plants and the threat of terrorist attacks are considered. Rothe argues that the gap can be explained by the diverse situation when securitized claims are made; there are multiple attempts by various actors who make securitizing concepts which conflict with each other, and this can affect policy-formation and how the (claimed) threats are handled. This phenomenon is present in this case as well; there are multiple actors, which in this case are politicians from different parties, who make conflicting safety and security arguments. This leads to another topic within securitization, and this the importance of the context. Securitization is a complex process and not only the arguments made matters, but also the fact who makes them and where. McDonald (2008: 570–573) addresses the importance of context; not only speech acts form security issues but also the context where speech acts are made influences, for example previous security issues, actions/agents and the audience. What all the arguments have in common is the fact that they were all made by politicians, members of the parliament, in a parliamentary setting. This surely influenced the perception of the threats in terms of whether they are accepted or not by the audience (constituency). Power relations is considered as one the essential features of securitization and this feature is present in all the debates; all the arguments are made by members of parliament who are also in charge of policy-making which then are implemented as laws and then followed by the population. This fact also includes two other essential features of securitization which are intersubjective commitment and responsibility. In other words, subjects of safety and security threats posed by nuclear energy are raised and with that the responsibility of legislators to protect the people against those safety and security risks also. The responsibility becomes apparent in these debates when the representatives are aware of the severe consequences of a nuclear disaster and try to prevent those from happening and being suffered in the constituency.

Before moving on to the second study question of this thesis, I would like to further discuss the different aspects which became apparent in the light of the data. Whether securitization arguments were used for or against the use of nuclear energy, one feature became clear, and that is that the concept of security and safety was used to refer to a wide variety of phenomena. Ihalainen and Palonen (2010: 12) discussed this phenomenon when they described how same concepts may be used by parliamentarians when they refer to different phenomena; especially in the context of parliamentary debates, it is possible if not likely to find that conceptualizations acquire different meanings when political parties use

them in different times. As described above, I was able to find eight different safety and security features which political parties referred to ranging from possible technical problems to foreign relations. In addition to this, Ihalainen and Palonen (ibid) also discussed that the use of concepts can even reflect the ‘status’ of the speaker, i.e. whether the parliamentarian is a member in a ruling or an opposition party: “[In the] tradition of constantly speaking pro et contra in a competitive atmosphere, the distinctions between the opposite sides could be very clear, and these are reflected in conceptual choices”. In the light of my data, it seems that the opposition parties refer to certain safety and security features in order to criticize the use of nuclear energy more than the ruling parties.

The situation of German nuclear energy policies seems quite clear; before the nuclear disaster of Fukushima, Germany relied on nuclear energy and produced quite a large portion of its electricity with nuclear power plants. All that, however, seems to have changed drastically after the events of Fukushima in March 2011. The number of arguments in the parliamentary debates – which comprise the data for this research – and the fact that they were so diverse show that energy safety and security issues enjoy a quite established position within the field of securitization – at least in terms of German parliamentary debates which concentrate on *Atomausstieg*. So, in terms of the second research questions, “Can it be argued that the content of these debates comprises a break in German parliamentary debates regarding the use of nuclear energy”, it seems that, in light of the data, these debates do comprise a break in the overall debates which have been had in Germany in regard to *Atomausstieg*. The data showed that energy safety and security issues have been accepted, and this seems to indicate that the time span which I chose to analyze German parliamentary debates comprises a unique new milestone, or a particular time span of its own. The established energy safety and security threats undermine severely the arguments made for the use of nuclear energy, for example in the form of *Energiemix* which at least from 1991 to 2001 was still a competing concept with *Energiewende*. This result might not be as unexpected as one might think. After all, a key feature of securitization is securitization as politics of extraordinary. In other words, when disasters happen, such as the nuclear disaster of Fukushima in Japan, they may change people’s perceptions on threats quite suddenly and therefore, also spark exceptional measures and policy-formation.

In addition to the vast amount and the wide spectrum of safety and security arguments made against the use of nuclear energy, it could be argued that there is also another factor

which gives evidence to the issue of this particular timespan defined as a separate milestone in the decades of German parliamentary debates concerning the use of nuclear energy. When one looks at democratic principles, it is usually expected to find that the opposition parties criticize the government and the ruling parties and their agendas, and then, in return it is expected to find documents where the ruling parties answer this criticism and defend their policies with various arguments. In short, it is usually expected that a clear cut between the two-sides exists. In light of my data, also this composition is to be found; the criticism arguing against the use of nuclear energy comes mostly from the opposition parties, such as Die Linke, Alliance 90/The Greens and SPD. And then, vice versa, the arguments for the use of nuclear energy for the most part come from the ruling parties, the CDU/CSU and the FDP. However, in light of my data, the situation is not so clear cut, and therefore, to claim this would be an inaccurate description of the debates and the agents taking part in the debates. Instead, what became apparent from the data gathered for this analysis is the fact that also the agents whose expected role is to give criticism also concurred with some arguments made by the ruling parties. One example of this can be found under the subheading where I inspected arguments made *for* the use of nuclear energy; the German Federal Council (Bundesrat) mostly only criticized the use of nuclear energy, but they also made similar arguments to the ones expressed by the ruling parties concerning the pace for Atomausstieg. In short, also the Council argued that a slow and steady transition from the use of nuclear energy to the use of renewable energy sources is to be emphasized and supported, therefore, also partially arguing for the use of nuclear energy. Another example of this can be found in instances where the ruling parties make arguments against the use of nuclear energy, such as when they justify their argument to permanently end the use of nuclear energy by the end of the year 2022. In short, in light of the data, it can be argued that the timespan chosen for this thesis does comprise a particular milestone in German nuclear energy debates in the sense that it seems to comprise of a particular blurring between the traditional divide between the two opposing sides, and instead comprise a rather unique situation where the safety and security concerns regarding the use of nuclear energy are shared among all the political parties. Palonen (2008: 103) discussed this situation, defining it as a common feature in modern parliamentarism; debates have lost their meaning as speaking *pro et contra*, and instead of striving to critically discuss bills in detail, the emphasis of the debates is on achieving consensus (ibid).

Lastly in terms of the second study question (whether these debates comprise a new milestone of *Atomausstieg*), I will discuss these debates and the results in comparison with previous German parliamentary debates. In this thesis, I have quoted Kaarkoski's dissertation in which Kaarkoski examined German parliamentary debates from 1991 till 2001 and especially investigated the use of the two conceptualizations, *Energiewende* and *Energiemix*, within debates about nuclear energy. In the introduction, I discussed a few key features from the debates from 1991 till 2001, and in light of my data, I would argue that it seems that the timespan for this thesis does comprise a new milestone of *Atomausstieg* when compared with previous debates. First, within the debates which date from 1991 till 2001, one of the key features was that nuclear energy was at least partially considered as environmentally friendly. This seemed to have been one of the most important factors used to argue for nuclear energy. In the light of the data from this thesis, I would, however, argue that this no longer seems to be the case. The various threats nuclear energy poses on the environment seem to have been varied and also generally accepted. Second, party alignments seem to have changed. In the debates from 1991 till 2001, for example within SPD there seems to have been some wiggle room on what the party's official stand on nuclear energy is. In the debates in this thesis, there seems to be quite clear alignments; within SPD there seems to be no divide or confusion about the party's official stand on nuclear energy. Also, as explained above, the division among different political parties seems to be rather unique. The division on for and against nuclear energy seems to be blurred, leaning towards a consensus within and among parties as against nuclear energy. Third, last but definitely not least, the use and acceptance of the term MCA (maximum credible accident) resulted in a much different situation then (1991–2001) than it did now (2011). As explained in the introduction, the incident of Tokaimura resulted in not much else than a few statements from certain political parties, such as the Alliance 90/The Greens, arguing that Tokaimura should be considered as MCA and therefore, also a reason to withdraw from using nuclear energy. In the debates from 2011, which I examined for this thesis, the nuclear disaster of Fukushima seems to have been accepted as an example of MCA, and used widely as an (accepted) argument against the use of nuclear energy resulting in the withdrawal from the use of nuclear energy. In short, there seems to be great differences among previous debates and the ones investigated in this thesis, resulting in a whole new milestone or stage of *Atomausstieg*.

I would like to end the discussion about the results by also pondering new and interesting questions which this study raised, such as how is nuclear energy viewed elsewhere in the world. Are safety and security risks posed by nuclear energy as accepted in other countries as they were in Germany? Are there discussions over the various safety and security aspects regarding nuclear energy? What could be interesting, is a comparative study between German and for example Finnish parliamentary debates regarding nuclear energy. In addition to this, another interesting possibility would be to focus only on Finnish parliamentary debates on nuclear energy. At the moment, it seems that the diversity and frequency of debates on safety and security issues revolving around nuclear energy seem to be missing when compared to the active situation in Germany. In short, it would be interesting to conduct an analysis to investigate how established energy safety and security issues are in other countries than Germany after the Fukushima nuclear accident on March 2011.

Another interesting aspect which could be studied if one wanted further information on the situation in Germany, would be to describe and analyze the communication between the parliament and the media. Bösch (2012: 371–386) described this relationship as first being quite productive; interaction between parliaments and journalists was common and useful because it gave representatives the opportunity to communicate with and reach wide audiences. Bösch (2012: 386) then, however, described a more modern feature of the relations between the media and members of parliament called lobbyism. With lobbyism Bösch refers to a situation where members of parliament and journalists do interact with each other but in a more restricted way; the ones who concentrate on and promote similar issues tend to interact with each other more (ibid). In my study, I was able to find and describe a quite wide communication network between different Members of Parliament, agencies and organizations. However, it might be interesting to analyze this communication network in detail and possibly find out if there are efforts of communication from a wider spectrum of organizations and agents than what I discovered in my study. As argued by Figueroa (2013: 54) effective risk communication includes various programs where active citizen participation is supported and promoted; there should be joint discussions about energy production schemes where common citizens and stakeholders can communicate with policy makers and representatives. In short, it might be interesting to see whether the requirements about active citizen participation and with that joint discussions in a wider sense have taken place in Germany in regard to these debates.

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