Abandoning Nuclear Power: A Social Constructivist Analysis of Germany’s Response to Fukushima

Daniel Blackmore

Abstract

This paper seeks to understand why, and how, Germany came to its radical decision to abandon nuclear power following the Fukushima crisis. Drawing from a social constructivist perspective, this paper argues that a focus on Germany’s identity offers the most beneficial understanding of its response to Fukushima. A longitudinal analysis demonstrates that Germany's identity was characterised by a set of anti-nuclear norms which were created by a pervasive anti-nuclear movement and institutionalised by political parties prior to the Fukushima crisis. Anti-nuclear norms influenced the way in which the government interpreted and responded to Fukushima. However, factors such as impending elections provided a political context that also influenced the government’s response. This paper will show that it was a combination of the Fukushima crisis and a suitable political context that intensified anti-nuclear norms to an extent that influenced Germany's drastic change in nuclear policy. Germany's identity as an anti-nuclear nation was thus a core reason for its response to Fukushima.

Keywords: Germany, Fukushima, identity, norm, anti-nuclear
Introduction

On the 11th of March 2011 a Richter scale 9 earthquake occurred 100 km off the northeast coast of Japan. It was followed by a giant tsunami that caused widespread damage and resulted in many casualties. Moreover, the quake and tsunami initiated a sequence of events that led to a major accident at Tokyo Electric Power Company’s (TEPCO’s) Fukushima Daiichi nuclear power plant. Reactor cooling systems were destroyed, which led to large explosions and the release of radioactive materials (Kantei 2011; INPO 2013). Mass evacuations took place while plant operators struggled to bring the reactors under control. The reactors were eventually stabilised 9 months later, on the 16th of December 2011, although the government reported that it would cost at least $13 billion and take decades for decontamination works (BBC 2011a; Reuters 2011a). As a result, the accident was rated 7, the highest rating possible, on the International Nuclear Event Scale (INES) (Srinivasan and Rethinaraj 2012).

The Fukushima crisis reignited the debate on the use of nuclear power and instigated reassessments of nuclear policy worldwide. While the majority of nations with nuclear programs remained committed to their nuclear policies, and those without reaffirmed their opposition to nuclear, Germany made significant policy changes (Elliott 2013). Soon after the accident the German government shut down all of the country’s older nuclear plants and decided to phase out those remaining by 2022. The government stated that it would focus on increasing the nation’s dependence on renewables to meet future electricity demand.

Germany’s decision to abandon nuclear power stood in stark contrast to a previous announcement in 2010 that the government would extend the lifespan of its reactors. It was also met with a series of warnings from critics who argued that there would be no shortage of problems following the policy change (Elliott 2013). Energy industry officials warned that the country would suffer economic difficulties due to increases in energy prices and necessary energy imports from abroad; while analysts warned that a rise in the use of coal-fired power stations would damage the nation’s attempts to reduce carbon emissions (Evans 2011; Wiesmann 2011). The government itself recognised that there would be a range of problems that could be caused by social and institutional adjustments following the policy change (Ethics Commission 2011).
The aim of this paper is to examine why, and how, Germany has come to choose a divergent course of action that holds significant implications for its economy and society, and for the energy security of Central Europe. Drawing from a social constructivist perspective, the paper will argue that a focus on Germany’s identity as a nation offers the most beneficial understanding of its response to Fukushima. This research will show that an adequate examination of Germany’s identity requires an analysis that looks beyond international structures. Instead, focus is placed upon the domestic context in which identity formation takes place.

This paper posits that Germany, as a result of its historical experiences, has developed an identity characterised by a set of anti-nuclear norms that influenced the way in which domestic actors interpreted and responded to the Fukushima crisis. Opinion polls both prior to and after the accident have shown that an increasing majority of Germans oppose nuclear power (Davies 2011; Elliott 2013; Rüdig 1990). The nation has also seen the rise of political parties with anti-nuclear views such as Alliance ‘90/The Greens (the Greens), and the development of anti-nuclear views held by the Social Democratic Party (SPD). Moreover, Germany has consistently witnessed mass demonstrations by a pervasive anti-nuclear movement throughout the development of its nuclear program. Consequently, the events at Fukushima provoked strong reactions within Germany as the country saw huge demonstrations by the anti-nuclear movement calling for a full nuclear phase-out (Elliott 2013). The key objectives of this research, therefore, are to determine the core factors that enabled the formation of anti-nuclear norms in Germany; and to examine the way in which, and the extent to which, the government was influenced by anti-nuclear norms.

However, the paper recognises that Germany’s change in nuclear policy cannot be reduced to the influence of anti-nuclear norms alone. The political environment in which changes took place is also important. Indeed, the Fukushima crisis occurred in the midst of state elections. This fact did not go unnoticed by many critics, and even proponents, of Germany’s policy turnaround, who suggested that the decision was a populist move by the federal government (Davies 2011). This paper thus also seeks to determine the degree to which anti-nuclear norms influenced the government’s policy change as opposed to political pressures such as elections.
The central thesis is that a mix of the Fukushima crisis and a suitable political environment strengthened anti-nuclear norms to an extent that influenced significant policy change. While anti-nuclear norms may not have caused Germany’s change in nuclear policy, they may be regarded as a core reason for change. Germany’s response to the Fukushima crisis and resulting change in nuclear policy, therefore, may be attributed to the anti-nuclear norms that constitute and prescribe Germany’s identity and behaviour.

The significance of this study is that it draws attention to a topic that currently lacks adequate research. While the majority of academic work that touches upon Germany’s response to Fukushima has acknowledged the nation’s history of anti-nuclear demonstrations and protests, few have directly attributed these as a core contribution to Germany’s change. So far, Wittneben (2012) has explicitly referred to Germany’s history of anti-nuclear views as a significant influence on its response, albeit it in a brief paper outlining possible avenues for further research. A more in-depth study, provided by Ueköetter (2012: 9), suggests that Fukushima provided the impetus for what was the ‘final step in a long farewell’ to nuclear power in Germany.

This paper will build upon the above views and use Germany’s response as an opportunity to discuss the relevant actors and ideational processes involved in the formation of norms that influence state identity and behaviour. The relevance of this research within the field of International Relations is that it draws further attention to the necessity of understanding the historical and sociological contexts which influence state responses to international events. This study serves to add to the growing body of literature that utilises social constructivism as not only a viable, but often necessary means to understanding divergent state behaviours.

Due to the analytical approach that this study employs, and the lack of literature surrounding the topic under focus, Section 1 provides an in-depth discussion of the theoretical background and analytical framework underpinning the approach of this paper. The section will serve to substantiate the specific method of analysis employed in Sections 2 and 3. Section 2 will draw out and apply the theories outlined in Section 1 while analysing the historical context in which anti-nuclear norms emerged in Germany. It will pay particular attention to the activities of the anti-nuclear movement, the SPD and the Greens, and the effects of previous nuclear power incidents. Finally, after an examination of the historical context and an
understanding of the core features of anti-nuclear norms, Section 3 will utilise a similar approach, and analyse Germany’s response to the Fukushima crisis.

Section 1: A means of understanding Germany’s change in nuclear policy

This section will begin with a brief analysis of traditional approaches to change in International Relations. The discussion will draw out the reasons for why state identity is an important variable to consider when analysing changes in state behaviour. The section will then move on to outline a social constructivist understanding of identity and introduce the key theories that will be used to understand how Germany’s anti-nuclear identity is constituted. After a thorough discussion regarding the fundamental approach of this paper, this section will conclude with a discussion of the specific analytical framework used in Sections 2 and 3.

Theoretical background

The problem of change in International Relations

Understanding Germany’s aberrant decision to change its nuclear policy may initially prove to be troublesome in an International Relations context. Discussing notions of change is not always a straightforward task within the discipline. For instance, Holsti (1998) notes that the concept of change is an important feature in distinguishing different schools of thought about International Relations, yet has remained relatively under-theorised within the field.

The problem, according to earlier observations by Buzan and Jones (1981), stems from International Relations over-emphasis on continuity at the expense of change. This is because, Ruggie (1998: 862) explains, ‘neorealism and neoliberal institutionalism treat the identity and interests of actors as exogenous and given’. That is, these approaches view states as rational actors that seek to maximise their utility under anarchy, be it for enhanced security and power, or for cooperation and the common good (Ruggie 1998). This suggests that states are predisposed to particular behaviours that are, to some extent, predictable. For instance, Holsti (1998: 2) argues such views suggest that ‘anarchy creates a realm, which predisposes states and their policy-makers to behave in certain ways irrespective of national attributes and policy-makers’ wishes’.
Germany’s swift decision to abandon nuclear power, however, was unexpected by many (Davies 2011; Elliott 2013; Jahn and Korolczuk 2012). On the surface, considering the criticism Germany faced from analysts worldwide, its decision may not appear to make any immediate, quantifiable sense. In the UK, for example, official reactions consisted of apparent bemusement towards Germany’s policy shifts, while its media focused on the economic hardships the nation would be pitted against (Elliott 2013). If Germany were merely responding in line with rationalistic, utilitarian interests, perhaps its actions would not have been surprising for such onlookers. An unexpected response, which has potential negative consequences for Germany, requires a suitable approach to analysis. What is needed, therefore, is an appreciation of other variables that constitute the state interests that direct state behaviour and lead to such changes in the international system.

Ruggie (1998) argues that an understanding of how state identity is formed is key to understanding divergent responses in state behaviour. He suggests that the specific identities of states shape their interests and, through this, can influence patterns of international change (1998). An understanding of what constitutes Germany’s identity, therefore, would offer an insight into its response to the Fukushima Crisis. Ruggie (1998) explains that realism and neoliberal institutionalism are lacking in this respect.

In comparison, ‘constructivists cannot take identities and interests for granted’ (Finnemore and Sikkink 2001: 394). Social constructivist theorists suggest that state interaction is primarily shaped by ideational factors; not simply material ones, as espoused by proponents of realism and neoliberal institutionalism (Ruggie 1998). Understanding the very processes by which identities are constituted and change has thus been a core focus of the constructivist approach (Finnemore and Sikkink 2001). Therefore, social constructivism offers a means to understanding issues such as Germany’s response to Fukushima.

**A social constructivist approach**

‘Constructivists focus on the role of ideas, norms, knowledge, culture, and argument in politics’ (Finnemore and Sikkink 2001: 393). The most important ideational factors, according to Finnemore and Sikkink (2001), are the widely shared intersubjective ideas and beliefs constructed by actors in society. These shared ideas and beliefs, in turn, ‘construct the
interests and identities of purposive actors’ (Finnemore and Sikkink 2001: 393). Germany’s identity, although it is a state, may be looked at in a similar way. For example, theorists such as Katzenstein (1996: 23) argue that, ‘The state is a social actor’.

In his edited volume, *The Culture of National Security* (1996), Katzenstein and fellow authors use the concept of norms to refer to the intersubjective ideas and beliefs that shape states’ identities. Norms are, as Jepperson, Wendt, and Katzenstein (1996: 54) explain, ‘collective expectations about proper behavior for a given identity’. Specifically, they argue that the cultural-institutional context that nations operate under shapes their identity (Jepperson, Wendt, and Katzenstein 1996). For instance, ‘Cultural or institutional elements of states’ environments—in this volume, most often norms—shape state identity’ (Jepperson, Wendt, and Katzenstein 1996: 52). In this sense, this paper argues that norms have influenced Germany’s identity to a significant extent.

Katzenstein (1996) argues that norms shape state identity in two ways. Norms either operate like rules that define how an actor is expected to act, or standards that specify how they are supposed to act in the international system (1996). For instance, Katzenstein (1996: 4) states that norms ‘either define (or constitute) identities, or prescribe (or regulate) behaviour, or do both’. Therefore, it can be argued that because Germany’s norms influence its identity, any given change in its norms, be it cultural or institutional, hold the potential to change its identity. Any change in Germany’s identity will affect its interests, and as a result, the way in which it implements policies. Jepperson, Wendt, and Katzenstein make this same claim, albeit in reference to national security policy: ‘Variation in state identity, or changes in state identity, affect the national security interests or policies of states’ (Jepperson, Wendt, and Katzenstein 1996: 52).

Thus, it can be argued that Germany would not have merely reacted to the Fukushima crisis through a structurally determined set of actions influenced under anarchy. Rather, it would have responded to the disaster in line with the norms that underpin its identity, and made policy changes accordingly. This, in part, serves to explain why it had such a divergent response to Fukushima compared to the majority of other nuclear nations. However, while it is important to analyse the norms that shape state identity, it is necessary to understand where the focus of norm analysis should lie; that is, whether norms are international or domestic in
scope. It is also important to understand the processes by which norms come into being in the first place.

**International and domestic norms**

Katzenstein (1996: 22) states that both ‘international and domestic environments shape state identities’. For example, on the one hand, international norms regulate behaviour, predisposing states to certain behaviours and constraining actions to some extent (Finnemore and Sikkink 1998). On the other hand, however, ‘international norms must always work their influence through the filter of domestic structures and domestic norms, which can produce important variations in compliance and interpretation of these norms’ (Finnemore and Sikkink 1998: 893). In turn, domestic norms have the ability to influence international norms. For instance, Finnemore and Sikkink (1998: 893) argue that many ‘international norms began as domestic norms and become international’.

As suggested above, should there be any significant shifts in norms, whether international or domestic, then changes in state policies may take place. In other words, ‘idea shifts and norm shifts are the main vehicles for system transformation’ (Finnemore and Sikkink 1998: 894). Therefore, both the international and domestic sphere will have influenced Germany’s norms and shaped its identity, and thus its response to Fukushima, to a significant extent.

Because of the cyclical nature of international and domestic norms, Putnam (1988: 427) argues that it is ‘fruitless to debate whether domestic politics really determine international relations, or the reverse’. Both are considered important (Putnam 1988). However, Katzenstein (1996) and fellow authors suggest that an understanding of domestic norms offers a better insight into the patterns of international relations (Barnett 1996; Berger 1996; Katzenstein 1996; Risse-Kappen 1996). Finnemore and Sikkink put this view succinctly, stating, ‘For the authors in Katzenstein’s edited volume (1996), identity was mainly a domestic attribute arising from national ideologies of collective distinctiveness’ (Finnemore and Sikkink 2001: 399). It can be argued, therefore, that an understanding of what constitutes Germany’s domestic norms can offer a good insight into its identity, and thus shed light on the reasons for its response to the Fukushima crisis. This is particularly beneficial in this case, because it enables a deeper analysis of the domestic actors within Germany that have been influential in shaping the nation’s decision to abandon nuclear power.
Actors of change: Framing and political opportunity structure

There has been a history of individuals and groups in Germany that have viewed nuclear energy as a risk to humanity and a danger to the environment. During the initial stages of nuclear development in Germany and after various nuclear accidents, these groups formed demonstrations and protests, and continuously lobbied for the abolition of nuclear power (Uekoetter 2012; Rucht and Roose 2003). The mobilisation of these groups, referred to as Germany’s anti-nuclear movement, was a key source of the anti-nuclear norms that have influenced Germany’s identity.

The way in which the anti-nuclear movement contributed to the formation of Germany’s anti-nuclear norms will be discussed in detail in Sections 2 and 3. Before these discussions, however, it is necessary to explore the fundamental ways in which social actors are able to construct the norms that underpin identity.

Finnemore and Sikkink (1998: 896) argue that norms are ‘actively built by agents having strong notions about appropriate or desirable behaviour in their community’. These agents function as ‘norm entrepreneurs’ that call attention to, or even create, issues (1998: 896). For example, the participants in Germany’s anti-nuclear movement may be regarded as norm entrepreneurs due to their efforts to promote views that oppose nuclear power. For instance, Rucht and Roose (2003: 102) state that the ‘strength of the anti-nuclear network was conducive to keeping the [nuclear power] issue on the agenda’.

However, Finnemore and Sikkink (1998) appreciate that the construction of norms is not always successful. This is because, ‘new norms never enter a normative vacuum but instead emerge in a highly contested normative space where they must compete with other norms and perceptions of interest’ (Finnemore and Sikkink 1998: 898). The process norm entrepreneurs use to create norms, alongside the context in which they are created, are thus important variables affecting the overall formation of norms.

Norm entrepreneurs construct norms through the creation and recreation of the meanings they attach to issues through a process known as ‘framing’. Finnemore and Sikkink state that:
Norm entrepreneurs are critical for norm emergence because they call attention to issues or even “create” issues by using language that names, interprets, and dramatizes them. Social movement theorists refer to this reinterpretation or renaming process as “framing” (Finnemore and Sikkink 1998: 898).

As suggested in the quote above, in order to explain the way in which norm entrepreneurs disseminate their ideas through framing, Finnemore and Sikkink (2001) draw upon the literature of social movement theorists such as Snow et al. (1986). Building on Goffman’s (1974) work on frames, Snow et al. (1986: 464) suggest that frames function as ‘schemata of interpretation’. In other words, frames perform an interpretive function that ‘enables individuals to locate, perceive, identify and label occurrences within their life space and the world at large’ (Snow et al 1986: 464). Social movement literature refers to the widespread adoption of frames that mobilise individuals and direct action as ‘collective action frames’ (Benford and Snow 2000: 612).

In Finnemore and Sikkink’s terms, the construction of cognitive frames is an essential component of norm entrepreneurs’ strategies, since when they are successful, ‘frames resonate with broader public understandings and are adopted as new ways of talking about and understanding issues’ (Finnemore and Sikkink 1998: 897). Thus, Finnemore and Sikkink (1998; 2001) consider successful collective action frames as functioning as norms. They state, ‘Whereas IR theorists talk of norms, social movement theorists tend to talk of collective or shared beliefs’ (Finnemore and Sikkink 2001: 409).

Finnemore and Sikkink’s (1998: 897) statement above that frames ‘resonate’ with actors when norm entrepreneurs are successful does not explain when or what makes frames resonate exactly, however. This is more clearly explained by Benford and Snow (2000: 619), who state that the concept of resonance serves to explain why ‘some framings seem to be effective or resonate while others do not’. They explain, ‘Two sets of interacting factors account for variation in degree of frame resonance: credibility of the proffered frame and its relative salience’ (Benford and Snow 2000: 619). Therefore, actors have to be able to both believe and accept a frame that is also directly relevant and important to their lives. An appreciation of frame resonance will prove useful when analysing the effectiveness of the anti-nuclear movement’s frames.
However, Germany’s anti-nuclear movement did not, and does not, rely on the success of the frames it has constructed alone. This is because the political context in which frames are constructed and norms are formed also needs to be taken into account. For instance, Koopmans and Duyvendak state (1995: 249), ‘Social movements are sometimes victorious in their efforts to frame situations as problematic, but only when they operate in a political context that offers them the opportunities to do so’. Benford and Snow (2000: 628) hold a similar view, recognising that ‘for some frames, changes in material conditions [lead] to changes in frame resonance’. Much of the literature that deals with social movements use the term ‘political opportunity structure’ as a means to define the suitable conditions which make this possible (see in particular, Benford and Snow 2000; Kitschelt 1986; Koopmans and Duyvendak 1995).

Compared to other countries, Germany has had a particularly suitable political opportunity structure for allowing the anti-nuclear movement to gain strength and create resonant frames. Kitschelt (1986) explains that the political institutional structure of Germany nurtured the development of the anti-nuclear movement during the 1970s and 1980s. Furthermore, Koopmans and Duyvendak (1995: 239) suggest that ‘the anti-nuclear movement was strengthened by the reactions of the West German political parties’. For instance, the SPD and the Greens strengthened anti-nuclear frames by striving to implement anti-nuclear policies that were opposed to nuclear power at various points throughout the nation’s history. Moreover, Kolb (2007) suggests that events such as government elections have provided political opportunities for the anti-nuclear movement to further its claims.

The above views will be discussed in further detail in Sections 2 and 3. To summarize the fundamental theories discussed so far: Norm entrepreneurs in social movements are not simply carriers of extant ideas and meanings that grow automatically out of structural arrangements, unanticipated events, or existing ideologies (Benford and Snow 2000). Instead, norm entrepreneurs may be viewed as signifying agents that are actively engaged in the production and maintenance of meaning for other actors through the frames they create (Benford and Snow 2000). The emergence of norms, however, depends on the political context, or in this paper, political opportunity structure, in which frame construction takes place. Germany had both a thriving anti-nuclear movement and the political opportunity structure that enabled the formation of anti-nuclear norms. Anti-nuclear norms contributed to the nation’s formation of identity, which in turn informed its response to Fukushima.
Analytical framework

As outlined in the introduction, this paper will first investigate the historical context of Germany; that is, the wider cultural-institutional context prior to the Fukushima crisis. Berger (1996) explains that it is necessary to analyse the historical context of states’ in order to understand what influences the formation of state identity. He states, ‘a longitudinal analysis allows us to escape the trap of deriving culture [identity] from behavior’ (1996: 328). (Katzenstein states that several of the authors in his volume, including Berger, ‘invoke the term culture as a broad label that denotes collective models of nation-state authority or identity’ (Katzenstein 1996: 6, emphasis in original)). This suggests, therefore, that in this study, it is not enough to merely analyse Germany’s decision to abandon nuclear power and equate that to evidence of anti-nuclear norms or an anti-nuclear identity. Instead, it is vital to track and dissect the cultural-institutional developments with regard to nuclear power prior to Germany’s decision to change its nuclear policy.

Specifically, Berger (1996) argues that a critical analysis of Germany’s historical context makes it possible to disaggregate policy behaviour and the meanings that political actors and the general public attach to those policies. Section 2, therefore, will utilise the theories of norm formation, framing and political opportunity structure, in order to analyse the formation of the ideas, meanings, and later, anti-nuclear norms that shape Germany’s identity. Section 3 will then utilize this knowledge and focus analysis, in a similar fashion, upon Germany’s response and behaviour following the disaster.

In short, Section 2 will demonstrate that members of Germany’s anti-nuclear movement functioned as norm entrepreneurs. These norm entrepreneurs were successful in creating resonant, or effective, frames that mobilised opposition to nuclear power. Anti-nuclear frames eventually became norms, which were later institutionalised in government policy.

Section 2 will demonstrate, however, that the success of the anti-nuclear movement relied not only on the creation of resonant frames, but also on Germany’s political opportunity structure. This provided a suitable setting for mobilisation and the creation of anti-nuclear norms. As a result, Germany developed an anti-nuclear identity which influenced its behaviour prior to, and during the Fukushima crisis. This will provide the context for Section 3.
Section 3 will take a similar approach as in Section 2. The section will analyse the improved resonance of anti-nuclear frames, and the resulting reinforcement and increased acceptance of anti-nuclear norms following the Fukushima crisis. This will be collectively referred to as the intensification of anti-nuclear norms. The section will argue that the intensification of anti-nuclear norms left the government even more liable to influence, which was a significant reason for the government’s decision to abandon nuclear power.

Section 3 will then analyse the political opportunity structure of Germany following the crisis. It will suggest that Germany’s political institutional structure, alongside impending elections, provided a setting that further pressured the government to change its nuclear policy.

This paper takes an interdisciplinary approach to analysis. This is partly due to the fact that much of the International Relations theories quoted so far have drawn from various other works, including products of sociology and comparative politics. As a result, they have varying terminology and approaches to analysis. However, Finnemore and Sikkink (2001: 411) have explicitly suggested ‘possibilities for fruitful cross-fertilization’ with comparative and sociological scholars. Katzenstein (1996: 1) also, explains how his book was ‘written by scholars of international relations rummaging in the “graveyard” of sociological studies’. These approaches provided the impetus for further investigation in sociological literature regarding framing and political opportunity structure.

Moreover, there was a limited amount of published academic literature regarding Germany’s response to Fukushima in general at the time of research for this paper (research took place August 2012 – February 2013). With this, and the above comments in mind, therefore, this paper has been written with the assumption that the creation of a unique analytical framework that combines several theoretical approaches would prove most beneficial to understanding Germany’s response.

The possible downsides to this approach are that it could lack a certain degree of analytical rigor compared with positivist approaches. For instance, Ruggie (1998: 884) recognises that social constructivism sometimes ‘lacks rigor and specification’ in comparison to positivist approaches such as realism and neoliberal institutionalism. Hopf (1998) makes a similar point, arguing that the evidence necessary to develop an understanding of national identity is
likely to be vast and varied. Indeed, this study may have benefited from further research such as interviews with organisers of anti-nuclear organisations, for example. That said, any number of social facts and variables could be included in constructivism’s ontology. Instead, the scope of this paper has limited research to mainly secondary sources of literature, although primary sources such as press releases and articles will also be used occasionally. It is assumed that within the scope of this paper, an interdisciplinary and heuristic approach is best suited to analysing Germany’s formation of identity and its response to Fukushima.

**Section 2: The historical context**

This section will analyse the historical context that shaped Germany’s identity regarding nuclear power. The section will start with an analysis of the emergence of anti-nuclear norms in Germany, followed by a discussion of the country’s political opportunity structure throughout the period. In a similar manner, the section will then move on to analyse the institutionalisation of anti-nuclear norms and the political opportunity structure that made this possible at the time. This will serve as evidence, in the final part of the section, to suggest that Germany’s identity was largely anti-nuclear in nature. This will set the context for Germany’s response to the Fukushima crisis, which will be analysed in Section 3.

The first half of this section will focus on events that took place in West Germany, prior to Germany’s reunification. This is because the ubiquitous repression in East Germany made nuclear protest activity scarcely possible (Rucht and Roose 2003). Therefore, references to ‘Germany’ will refer to West Germany generally. Later descriptions will use ‘Germany’ to refer to the unified nation post-1990.

**The emergence of anti-nuclear norms**

*Germany’s anti-nuclear norm entrepreneurs: The anti-nuclear movement*

From the mid-1950s to the end of the 1990s, the German federal government considered the use of nuclear energy as a means to secure a cost effective and reliable energy supply (Uekoetter 2012). This was legally recognized with the German Atomic Energy Act, enacted on the 23rd of December 1959 (Vorwerk 2002). The government invested heavily into nuclear
development and built reactors between the late 1960s and early 1980s (Uekoetter 2012). However, Germany has also faced a continuous backlash in the form of demonstrations, protests and lobbying from anti-nuclear groups.

Indeed, German communities were opposed to the idea of nuclear energy since the 1950s and 1960s, and were 'skeptical even before they learned about the dangers of nuclear power' (Uekoetter 2012: 14). But it was not until the 1970s that groups with anti-nuclear views mobilised into a larger movement (Uekoetter 2012). The result of which led to mass demonstrations opposing various nuclear power projects throughout the following decades (Uekoetter 2012).

The anti-nuclear groups that directed demonstrations from the 1970s onwards may be regarded as norm entrepreneurs. Drawing from Finnemore and Sikkink’s (1998) ideas discussed in Section 1, norm entrepreneurs call attention to, or create, issues through various means. For example, the first significant anti-nuclear event to receive widespread attention took place in the village of Wyhl on the 18th of February 1975. Approximately 28,000 people occupied the site of a planned nuclear power station in protest (Rüdig 1990). According to Rüdig (1990: 135), ‘The events of Wyhl sparked off a major political debate at [the] national level’, and subsequently, ‘sowed the seeds for a national anti-nuclear movement’. Thus, the participants at Wyhl, and continuous protests from then onwards, were key to drawing attention to the problems of nuclear energy. Members of the anti-nuclear movement may, therefore, be regarded as norm entrepreneurs.

The framing of nuclear power as a risk

The issues that norm entrepreneurs framed as problematic formed the basis of the anti-nuclear norms that emerged in Germany. As explained in Section 1, in order for norm entrepreneurs to be successful, it is important that their frames resonate with actors (Finnemore and Sikkink 1998). Benford and Snow (2000) suggest that frames have a higher degree of resonance, that is, will be more effective, if they are credible. Frames will also have a higher degree of resonance if they are salient to actors’ lives (2000). Fortunately for its adherents, the anti-nuclear movement was successful in creating resonant frames from the mid-1970s onwards.
Uekoetter (2012) explains that as the anti-nuclear movement grew it developed a tremendous expertise and understanding of its own regarding the inherent dangers of nuclear power. As a result, ‘Nuclear hazards emerged as a key issue as locals became educated about the risks of nuclear technology’ (Uekoetter 2012: 15). The anti-nuclear movement thus framed nuclear power as a *risk* in order to draw wider attention to potential hazards. For example, in response to the risks radioactivity posed after a nuclear accident, participants of the initiatives at Wyhl promoted the slogan: ‘Better active today than radioactive tomorrow’ (Nelkin and Pollack 1980: 5).

The anti-nuclear movement’s *risk* frame was largely validated by the Three Mile Island accident that occurred in Pennsylvania, US, on the 28th of March 1979 (NRC 1979). The accident was significant, rated at 5 on the INES scale (Srinivasan and Rethinaraj 2012). The Nuclear Regulatory Commission (NRC) reported that approximately 40,000 gallons of dangerous wastewater joined the Susquehanna River (NRC 1979). A tangible disaster such as this held the potential to strengthen the anti-nuclear movement’s claims that nuclear power posed risks. This is because the accident would have made the *risk* frame more credible.

Specifically, the accident would have provided the anti-nuclear movement’s *risk* frame with, what Benford and Snow (2000: 621) would call, ‘empirical credibility’. ‘Empirical credibility’, they explain, ‘refers to the apparent fit between framings and events in the world’ (Benford and Snow 2000: 621). Therefore, the fact that a nuclear accident actually occurred gave the *risk* frame improved empirical credibility, which in turn strengthened the extent to which it resonated with German nationals. This was at least the case with 100,000 people, who protested in Hanover shortly after the accident on the 31st of March 1979. This was, according to Rüdig (1990: 154), ‘the then biggest anti-nuclear demonstration in Germany’.

Following the uprising of the anti-nuclear movement in the 1970s, Joppke explains, ‘nuclear power in West Germany remained a major public policy concern...the German [anti-nuclear] movement did not break down in the early 1980s, but survived throughout the decade’ (Joppke 1991: 52). However, it was not until the Chernobyl disaster, which occurred on the 26th of April 1986 that the resonance of anti-nuclear frames increased significantly again.
Much like the Three Mile Island accident before it, the Chernobyl disaster can be said to have increased the empirical credibility of the risk frame. The Chernobyl disaster was rated at 7 on the INES scale, and very clearly demonstrated the extent to which nuclear risks could affect the lives of civilians (Srinivasan and Rethinaraj 2012). Shortly after the accident 299 people were evacuated for treatment in Moscow due to severe radiation exposure, of which 29 later died (Geiger 1986; Lushbaugh, Ricks and Fry 1986). Thousands of delayed deaths were also estimated for the years to follow (Geiger 1986). At the time, it was reported that 135,000 people were evacuated from the area following the accident (Lushbaugh, Ricks and Fry 1986).

Furthermore, it can be argued that the Chernobyl accident increased the salience of the risk frame. As stated previously, this is important because, just as the credibility of frames affects resonance, the salience of any given frame also affects its resonance (Benford and Snow 2000). To be specific, a frame is more salient if it holds ‘experiential commensurability’ for actors (Benford and Snow 2000: 621). In other words, a frame can benefit by relating to the personal, everyday experiences of its targets (Benford and Snow 2000). For instance, the German government took various precautions to protect citizens from any possible radiation contamination from Chernobyl. Although, in hindsight, radiation levels were, on the whole, negligible, the federal government enforced the closure of schools and kindergartens (Laka Foundation 2012). This directly affected the day-to-day experiences of German nationals, and served as a poignant reminder of the relevance of nuclear risks to their lives. Therefore, the Chernobyl disaster can be said to have increased the experiential commensurability of the anti-nuclear movement’s risk frame, which in turn increased its resonance.

The anti-nuclear movement’s frames appear to have been more resonant than ever following the Chernobyl disaster. Indeed, Koopmans and Duyvendak (1995: 238) state that, after the accident, ‘Germany witnessed a spectacular rise in the number of anti-nuclear protest events’. For instance, the number of protests per four-month period increased over five-fold in the weeks following the disaster (Rüdig 1990). Moreover, Rüdig (1990: 346), quoting from a survey conducted by the Commission of the European Communities (EC) (1988), observes that the majority of German nationals were mobilised against nuclear power. Approximately three quarters of Germans held the view that the ‘Risks are Unacceptable’ with regard to nuclear energy (Rüdig 1990).
In sum, due to the efforts of the anti-nuclear movement, a significant nuclear accident and a major disaster, the anti-nuclear movement’s frames strengthened the overriding message that nuclear technology should not be developed. The majority of the German public held this view from Chernobyl onwards. This is important because, as explained previously, when norm entrepreneurs are successful, their frames resonate with the broader public understandings of society and are adopted as new ways of understanding issues, thus functioning as norms (Finnemore and Sikkink 2001). Therefore, Germany can be seen to have developed a set of anti-nuclear norms by the late 1980s.

The political opportunity structure during the emergence of norms

As outlined in Section 1, the creation of anti-nuclear norms does not rely on the resonance of anti-nuclear frames alone. Success is contingent upon the political context in which norm entrepreneurs construct frames (Benford and Snow 2001; Finnemore and Sikkink 1998). In other words, Germany’s anti-nuclear movement relied upon the political opportunity structure of Germany alongside their framing efforts in order to create a consensus against nuclear power.

Kitschelt (1986) suggests that Germany’s political institutional structure provided a specific context in which the anti-nuclear movement could grow. Specifically, Kitschelt (1986) argued that Germany’s anti-nuclear movement had little opportunity to access the relatively closed political system in which to demand policy change. The government was thus able to maintain a somewhat steady pro-nuclear policy stance with little direct influence on policy implementation throughout the 1970s and early 1980s. This provoked demonstrations and protests by the anti-nuclear movement (1986). However, the government’s ability to implement and change legislation was relatively weak due to its fragmented implementation structures (1986). This led to slow and complicated licensing procedures for new plant builds, for example (1986). As a result, anti-nuclear activists could impose economic penalties on nuclear building, by slowing the construction of reactors being built and increasing the risk of future investments (1986). This in turn motivated the movement to continue its efforts.

In sum, Kitschelt (1986: 76) argues, ‘By neither consistently repressing anti-nuclear protesters nor granting them new democratic rights, the state may have unwittingly fuelled the movement's mobilization’. Therefore, the structure of Germany’s political system
provided an incentive for the continued mobilisation efforts of the anti-nuclear movement. The movement was consequently able to continue its framing activities and increase the resonance of its anti-nuclear frames.

Despite Germany’s federal structure remaining somewhat closed to the anti-nuclear movement there were attempts to push for nuclear policy change within Germany’s legislative body, the Bundestag. For example, after a series of successful state elections, the Greens (formed in 1980) were voted into the Bundestag on the 6th of March 1983 (The Federal Returning Officer 2012a). The Greens were, in part, a product of the anti-nuclear movement’s efforts, and strived to further strengthen the anti-nuclear cause (Rucht and Roose 2003).

The representation of anti-nuclear views by a political entity increased the political opportunities available to Germany’s anti-nuclear movement. Indeed, it is more favourable for a social movement if a political party in government is aligned with its constituency (Kolb 2007). Kolb (2007: 71) explains, ‘The partisanship of governments is likely to be more influential in states with a closed institutional political structure’. Admittedly, the Greens only won 5.6 per cent of votes, gaining 28 seats in 1983 (The Federal Returning Officer 2012a). However, after the events of the Chernobyl crisis, during August 1986 the SPD committed itself to a phasing-out of nuclear energy within the next 10 years (Rüdig 1990). Although the SPD lost the elections of 1987, it ‘maintained a strict anti-nuclear stance at state level’ (Rüdig 1990: 341).

The representation of anti-nuclear frames by the Greens and the SPD was beneficial to the anti-nuclear movement’s framing activities. This is because each party gave increased credibility to anti-nuclear frames, although in a different fashion to empirical credibility as described above. For instance, Benford and Snow argue:

> The greater the status and/or perceived expertise of the frame articulator and/or the organization they represent from the vantage point of potential adherents and constituents, the more plausible and resonant the framings or claims (Benford and Snow 2000: 621).
Thus, the perceived credibility of members of the SPD and the Green Party impacted upon the credibility of anti-nuclear frames themselves. This in turn increased the resonance of anti-nuclear frames.

As demonstrated, therefore, the political opportunity structure of Germany sustained the activities of the anti-nuclear movement, which resulted in increasingly resonant anti-nuclear frames. This enabled the widespread adoption of anti-nuclear frames and thus the emergence of anti-nuclear norms. As a result, the anti-nuclear movement continued to thrive after Chernobyl. Rucht and Roose (2003: 104) explain, ‘the period from 1988 to 1997 is essentially the extension of a previous history of strong opposition against nuclear energy’.

It is important to note that during this time period, the German unification had repercussions for the movement to some extent. However, Rucht and Roose (2003: 103) contend, ‘the effects were less dramatic than one might have expected’. In short, the period of 1991 to 1993 saw a dip in activity, when problems such as large numbers of immigrants tended to overshadow all other domestic concerns (Rucht and Roose 2003). Protest activity increased again from 1993 onwards (Rucht and Roose 2003). However, it was not until the turn of the millennium that anti-nuclear norms were institutionalised as part of federal government policy.

**The institutionalisation of anti-nuclear norms**

*The implementation of anti-nuclear policies: The SPD and the Greens*

The emergence of anti-nuclear norms in Germany was important, because, as Katzenstein (1996) would argue, norms shape state identity. State identity, in turn, influences state behaviour (1996). As discussed in Section 1, norms either constitute identities, which define how an actor is expected to act; prescribe behaviour, which specify the way in which an actor is required to act; or do both (1996). In Germany, the widespread acceptance of anti-nuclear frames, both by the public and by political parties such as the SPD and the Greens, suggests that Germany’s identity was constituted by anti-nuclear norms from the late 1980s onwards.

It can be expected, therefore, that Germany would have behaved accordingly. Indeed, on the 27th of September 1998, a general election brought a coalition of the SPD and the Greens to
power (The Federal Returning Officer 2012b). This brought an end to the Christian Democratic Union/Christian Socialist Union-Free Democratic Party (CDU/CSU-FDP) coalition, which had retained its power since 1982 (The Federal Chancellor 2013). It was nearly two years later, on the 14th of June 2000, that the SPD-Greens coalition finalised an agreement with the nuclear lobby to phase-out nuclear power (Uekoetter 2012). As a result of this agreement, the Act for the structured phase-out of nuclear power finally entered into force on the 27th of April 2002 (Vorwerk 2002). It was initially decided that Germany’s reactors were to be decommissioned after 32 years (Vorwerk 2002).

The risk frame, in particular, provided motivation for the nuclear phase-out. For instance, Vorwerk states, ‘According to the decision of the German Government and the legislator, the further use of nuclear energy for commercial electricity production will only be permitted for a limited period due to the high risks associated with it’ (Vorwerk 2002: 7, emphasis added). This suggests, therefore, that the anti-nuclear norms that constituted Germany’s identity informed the government’s interpretation of the nuclear issue, and influenced its behaviour to a significant extent. The result of which led to the institutionalisation of norms that would prescribe Germany’s anti-nuclear behaviour from then onwards.

The political opportunity structure during the institutionalisation of norms

It can be assumed that Kitschelt’s (1986) claim that Germany provided a suitable environment to maintain anti-nuclear mobilisation held true during the institutionalisation of anti-nuclear norms. For instance, Rucht and Roose (2003: 102) explain that from 1988 to 1997, ‘The political institutions and procedures, including the rules of access to the decision-making process, [had] not been changed’.

The focus of anti-nuclear protest had changed, however. After 1990, ‘protest movements shifted attention to the issue of nuclear waste’ (Uekoetter 2012: 19). Demonstrations regularly took place at the nuclear storage facility of Gorleben, with every shipment of nuclear waste subject to large demonstrations of thousands of protesters (Rucht and Roose 2003). However, the transports were not only condemned by the anti-nuclear movement, but also heavily criticised by the wider public. This is because, on the 21st of May 1998, the German Environment Ministry announced that nuclear transports had been leaking radiation far beyond permitted levels, a fact the government had been aware of for the last 10 years.
Nuclear transport was subsequently banned, but not without tarnishing the reputation of the CDU/CSU-FDP coalition (Rucht and Roose 2003).

The CDU/CSU-FDP’s scandal regarding nuclear transport served to further strengthen the anti-nuclear norms that constituted Germany’s identity. For instance, when following Benford and Snow’s (2000) claims, it can be argued that the radioactive leaks during nuclear transport in Germany increased the empirical credibility and experiential commensurability of the risk frame once more. Although levels were unlikely to cause harm, the threat that nuclear radiation could directly contaminate German nationals increased the credibility and salience of the risk frame. This in turn increased its resonance.

Moreover, the risk frame gained further credibility due to the consistency of the SPD and the Greens anti-nuclear claims. For instance, Benford and Snow (2000: 620) explain that ‘a frame’s consistency refers to the congruency between [a frame articulator’s] beliefs, claims and actions’. In comparison, they explain, ‘inconsistency can manifest itself in two ways: in terms of apparent contradictions among beliefs or claims; and in terms of perceived contradictions among framings and tactical actions’ (Benford and Snow 2000: 620). Therefore, as time went on, the credibility of the risk frame grew as the SPD and the Greens continued to hold an anti-nuclear stance. In contrast, the CDU/CSU-FDP coalition’s pro-nuclear stance, and its corresponding frames claiming that nuclear was safe, did not correlate with its handling of the nuclear transport issue.

After the election in September 1998, the SPD and the Greens gained further representation in the Bundestag as the new government. Not only did this increase the resonance of anti-nuclear frames and further embed anti-nuclear norms into Germany’s identity, but it finally gave the SPD and the Greens the political opportunity to influence nuclear policy directly. This is because it is more favourable for social movements, political parties, and their proponents if their frames are largely represented in parliament (Kolb 2007). As a result, the coalition was able to amend the Atomic Energy Act, scheduling the nuclear phase-out, which can be seen as the institutionalisation of anti-nuclear norms.
Germany’s identity as an anti-nuclear nation prior to Fukushima

As demonstrated, the anti-nuclear movement in Germany played an important role in creating resonant frames that enabled the emergence of norms, which were later institutionalised by the SPD and the Greens. It can be seen, therefore, that Germany’s behaviour was both constituted by, and had rules prescribed by, anti-nuclear norms from 2002 onwards. In line with the running argument of this paper, Germany’s anti-nuclear identity can be expected to have influenced its behaviour regarding nuclear policy.

However, to say that Germany had defined itself as a nation that was against the development of nuclear power does not mean that its identity was unable to change. As discussed previously, norms are created in a normative space where they must compete with other norms and perceptions of interest (Finnemore and Sikkink 1998). Similarly, Berger (1996: 326) argues that norms ‘are not static entities hovering above society, directing behavior while they themselves remain immune to social, economic, and political forces’. Germany’s anti-nuclear norms, therefore, were susceptible to competition and replacement, which could result in a change in Germany’s anti-nuclear identity.

Indeed, Germany’s anti-nuclear norms were later contested. On the 18\textsuperscript{th} of September 2005, the SPD and the Greens coalition came to an end, and was instead replaced by a CDU/CSU-SPD coalition with Angela Merkel appointed as chancellor (Federal Returning Officer 2012c). Although the Greens no longer held any significant representation in the Bundestag, the SPD still held power. However, on the 27\textsuperscript{th} of September 2009, the SPD lost seats and the CDU/CSU-FDP formed a coalition with Merkel as chancellor once more (Federal Returning Officer 2012d). It was in the following year, on the 26\textsuperscript{th} of November 2010, that Merkel amended the Atomic Energy Act, which would allow for the extension of the lifespan of reactors by 12 years on average (Uekoetter 2012; Zeldin 2010). Although the eventual phase-out of nuclear power was still scheduled, Merkel’s government appeared to hold a pro-nuclear stance. It would seem, therefore, that the nuclear debate had not been laid to rest, and that Germany’s anti-nuclear norms faced renewed opposition.

However, while the decision to extend the lifetime of reactors was successful in parliament, the change was not supported by the majority of Germans, who remained opposed to nuclear power (Davies 2011). Merkel’s new nuclear policy provoked a surge of protests by the anti-
nuclear movement once more. For instance, on the 24th of April 2010, approximately 120,000 people formed a 120 kilometre-long human chain between the nuclear power plants of Krümmel and Brunsbüttel in response to the government’s reactor extension proposal (Spiegel Online 2010). This suggested that Germany’s anti-nuclear movement and norms were still strong. Therefore, despite any changes in nuclear policy by the government, Germany’s identity was fundamentally anti-nuclear in the lead up to the Fukushima crisis.

After looking at the historical context, it can be seen that the creation and propagation of resonant anti-nuclear frames by the anti-nuclear movement, combined with nuclear accidents and a suitable political opportunity structure, led to the emergence and institutionalisation of norms in Germany. This served to both constitute and prescribe Germany’s identity and behaviour. Germany’s identity may, therefore, be regarded as an anti-nuclear nation. It was this anti-nuclear identity that influenced Germany’s response to the Fukushima crisis, and its resulting decision to change its nuclear policy. This will be discussed in the following section.

Section 3: Germany’s response to Fukushima

This section will begin with an analysis of the intensification of Germany’s anti-nuclear norms. It argues that the increasing resonance of anti-nuclear frames and acceptance of norms shaped Merkel’s interpretation of and reaction to Fukushima. The discussion will then turn to Germany’s political opportunity structure during the crisis. This section will demonstrate that impending state elections made Merkel particularly susceptible to making changes that were in line with Germany’s anti-nuclear norms. This will demonstrate that it was a favourable mix between Fukushima, the intensification of anti-nuclear norms, and Germany’s political opportunity structure that led to the nation’s change in nuclear policy. This will also serve as evidence to suggest that although anti-nuclear norms did not directly cause Germany’s change in nuclear policy, they were a significant reason for the change. Overall, this will reinforce the argument that Germany’s identity as an anti-nuclear nation influenced its decision to abandon nuclear power following the Fukushima crisis.
The intensification of anti-nuclear norms

After exploring the historical context in Section 2, it can be seen that Germany’s identity prior to Fukushima was characterised by the development of anti-nuclear norms. The section demonstrated that members of Germany’s anti-nuclear movement functioned as norm entrepreneurs. These norm entrepreneurs were successful in creating resonant frames that were opposed to nuclear technology. Anti-nuclear frames were eventually widely accepted as norms, and were institutionalised in policies such as the nuclear phase-out implemented by the SPD-Greens coalition in 2002. As explained, however, norms are perpetually contested by other frames and norms, and are liable to further interpretation and change by actors (Finnemore and Sikkink 1998; Ruggie 1998). The CDU/CSU-FDP government’s later attempt to increase the lifetime of nuclear plants, despite public opinion and the nation’s enduring anti-nuclear norms, accentuates this point. Nonetheless, it was concluded that Germany’s identity remained anti-nuclear, which would influence its response to Fukushima.

Unsurprisingly, the Fukushima crisis underscored the anti-nuclear movement’s concerns regarding the risks of nuclear energy and presented an opportunity for the movement to strengthen its message once more. Germany saw mass demonstrations soon after the onset of the crisis. For example, on the 12th of March, the day after the earthquake, approximately 60,000 people formed a human chain reaching 45 kilometres between Stuttgart and the Neckarwestheim nuclear plant (Ausgestrahlt 2011a). Shortly after, on the 14th of March, approximately 110,000 people took part in protests nationwide (Ausgestrahlt 2011b). The demonstrations were organised by a range of groups working together, including the anti-nuclear organisation Ausgestrahlt, and environmental organisations Friends of the Earth Germany and Robin Wood, among others (Ausgestrahlt 2011a). These organisations were quick to reiterate the commonly held belief that nuclear power was a high risk that should be dealt with as soon as possible. Through interviews, online websites and press releases, members (re)framed nuclear power as a now ‘unjustifiable risk’ that deserves a ‘real and rapid phase-out’ (Ausgestrahlt 2011b; Robin Wood 2013a).

The idea that nuclear power was a risk was not new. Using Benford and Snow’s (2000) approach, it can be argued that the Fukushima crisis increased the resonance of the anti-nuclear movement’s risk frame, much like the Three Mile Island accident and the Chernobyl disaster did decades before. As demonstrated in Section 2, nuclear accidents hold the
potential to increase both the credibility and salience of frames, which in turn increases their resonance.

The accident at Fukushima provided the *risk* frame with further empirical credibility. The fact that a nuclear accident occurred yet again was enough in itself to demonstrate that the risks of nuclear power could be very real. For instance, nearly 100 workers on the Fukushima Daiichi site exceeded the legal limits for radiation contamination during the onset of the crisis, while similar radioactivity levels were later detected in milk, crops and fish from the surrounding areas (Elliott 2013). Such evidence of the risks of nuclear power makes accidents more tangible and thus more credible (Benford and Snow 2000).

As Elliott explains, however, the quantity of radiation released into the atmosphere was about 15 per cent of the radiation released from Chernobyl (2013). Moreover, the World Health Organisation (WHO 2013) estimated the long-term health impacts of Fukushima to be significantly low. Nonetheless, Elliott (2013: 8) argues, ‘It is clear that [Fukushima] was a very serious accident’. Indeed, Japan’s then Prime Minister, Naoto Kan, said that the worst-case evacuation scenarios planned in response to the accident included the complete evacuation of 35 million people living in the Tokyo area (Elliott 2013). Therefore, Fukushima posed catastrophic consequences should it have escalated. Although the situation was eventually brought under control, the potential risks posed by the accident became ever clearer. Fukushima, therefore, increased the credibility of the anti-nuclear movement’s *risk* frame, which in turn made it more resonant.

Still, it could be argued that the sheer fact the accident occurred on the other side of the globe, in a country prone to earthquakes and tsunamis, means that the accident holds little relevance to Germany, which is less prone to natural disasters. In which case, the anti-nuclear movement’s *risk* frame may have become more credible, but no more relevant, or salient, to the lives of those in Germany. However, Wittneben (2012: 2) suggests that Germans feel a ‘close cultural proximity’ to Japan. She states that if an unexpected nuclear accident can occur in Japan, then German citizens may regard it as a possibility for their own country, (albeit from a safety control issue as opposed to a proneness to natural disasters) (Wittneben 2012). Germans are thus able to empathise with the Japanese to some extent and more easily relate the effects of the disaster to their own lives should a similar accident occur in Germany. Benford and Snow (2000) would argue that this gives the *risk* frame improved
experiential commensurability. As explained previously, the more experientially commensurate framings are, the greater their salience will be (Benford and Snow 2000). Again, therefore, this suggests that the Fukushima crisis increased the resonance of the anti-nuclear movement’s risk frame.

As shown in the previous section, anti-nuclear frames were already significantly resonant with Germans. This was demonstrated by the emergence and institutionalisation of anti-nuclear norms. The above demonstrates that Fukushima increased the resonance of the risk frame even more, and thus served to mobilise yet more people against anti-nuclear power. The acceptance of anti-nuclear norms increased as a result. According to a BBC GlobeScan poll after the Fukushima crisis, approximately 90 per cent of respondents opposed nuclear power in Germany (BBC World Service 2011).

The increase in acceptance of anti-nuclear norms is important because it left less room for the construction of, or acceptance of, alternative views towards nuclear power following the Fukushima crisis. As Finnemore and Sikkink (1998) explain, norms may be contested by actors with opposing or variant norms. However, with the vast majority of Germans against nuclear power, there was less room for the construction and propagation of pro-nuclear frames and norms after Fukushima. Therefore, the German government was left liable to making policy changes that were anti-nuclear in nature.

Indeed, the government’s response was anti-nuclear, and for many, quite drastic and unexpected. On the 14th March, following the human chain protest on the 12th of March, and amidst even larger protests that day, Merkel announced a three-month moratorium on the decision to extend the lifetime of nuclear power stations (Harding 2011; Jahn and Korolczuk 2012). The next day, on the 15th, Merkel shut down all eight of Germany’s oldest reactors for safety checks that were to be undertaken by Germany’s Reactor Safety Commission (RSK) (BBC 2011b; Davies 2011). Finally on the 30th May, despite the RSK findings that Germany’s reactors hold a ‘high degree of robustness’, Merkel stated that the eight oldest nuclear plants would remain offline and that the remaining nine would be phased out by 2022 (Elliott 2013; Guardian 2011a). In light of this response, Uekoetter (2012: 11) went as far to suggest that, ‘for a generation used to seeing the political right as pro-nuclear and the left as anti-nuclear, it was as if the Pope had turned Muslim’.
Merkel’s turnaround to a seemingly anti-nuclear stance answered many of the anti-nuclear movement’s wishes. Indeed, Merkel’s new views echoed much of those found within Germany’s anti-nuclear norms. For instance, in an interview for CDU.TV, a publicity channel for the CDU party, Merkel expressed that her ‘appreciation of residual risk had changed’ following the impact of the Fukushima crisis (CDU 2011a). In a speech to the Federal Executive also, Merkel stated that the Fukushima crisis left her with questions regarding the ‘acceptability of risk’ (CDU 2011b). These comments mirrored the ideas embodied by the anti-nuclear movement’s risk frame; Merkel was now focused on the significant risks of nuclear power and the need to follow through with the phase-out (Davies 2011). This suggests, therefore, that anti-nuclear norms influenced Merkel’s interpretation of and response to the Fukushima crisis to a significant extent.

It is important to recognise, however, that Merkel’s decision was also influenced by the recommendations of the independent Ethics Commission on a Safe Energy Supply. The Commission was established after Fukushima, on the 4th of May 2011, and was headed by former environment minister Klaus Toepfer (Ethics Commission 2011). The Commission was appointed by the government in order to examine the ethical principles and implications of any changes in Germany’s energy policy (Ethics Commission 2011). It presented its findings to Merkel on the 28th of May 2011, two days before her announcement of the new plans for the nuclear phase-out (Ethics Commission 2011).

The Commission concluded, ‘phase-out is necessary and is recommended in order to rule out the risks posed by nuclear power in Germany in the future’ (Ethics Commission 2011: 5). These views correlate with the anti-nuclear movement’s risk frame. Considering that the commission’s findings focus on the collective beliefs of Germany’s society, which would include its anti-nuclear norms, the Commission’s views are to be expected. It thus follows that Germany’s anti-nuclear norms indirectly influenced Merkel’s decision via their influence on the Commission. Therefore, regardless of Merkel’s interpretation of the situation, this further suggests that anti-nuclear norms informed Merkel’s response to the Fukushima crisis to a significant extent.

Although a deep concern about the inherent risks of nuclear energy has been of particular significance following the Fukushima crisis, a belief in the potential of renewable energy has also gained prominence. Anti-nuclear organisations and the SPD and the Greens put much
effort into framing renewable energy as an alternative to nuclear following the Fukushima crisis. Brief examples include the anti-nuclear organisation Ausgestrahlt, which published a brochure shortly after Fukushima in July 2011, arguing, ‘a full renewable energy supply is possible and safe, reliable and affordable’ (Ausgestrahlt 2011c). Also, during a speech in the Bundestag soon after Fukushima on the 24th of March 2011, the spokesman for the Greens’ energy policy, Hans-Josef Fell, strongly argued: ‘we need to accelerate the development of wind power, solar energy, hydropower, bio energy and geothermal energy’ (Fell 2011). Such examples demonstrate how a renewable energy frame, has been propagated by the anti-nuclear movement and in parliament since the Fukushima crisis.

The renewable energy frame was particularly resonant in Germany because it held empirical credibility. For instance, Germany has quadrupled its reliance on renewable technology for energy generation since 1990 (Wittneben 2012). Germany thus holds the economic capabilities to make a rapid transformation into a nation that relies on renewable sources (Wittneben 2012). This view is supported by the German Advisory Council on the Environment (SRE), which claims that ‘a complete or nearly complete shift of the power supply to renewables could be achieved [by the year 2050]’ (SRU 2011).

Consequently, Wittneben (2012: 2) suggests that Germany’s identity consists of an inherent ‘[t]rust in renewable innovation’. Germany’s vast developments in the manufacture and use of renewables has affected the everyday experiences and lives of most German nationals. The renewable energy frame, therefore, held experiential commensurability for Germans; this in turn increased its salience. Moreover, the frame was especially significant as it provided a viable solution to, and justification for, the immediate shut down of nuclear reactors. This further increased its salience, and thus resonance.

It can be argued, therefore, that Merkel was significantly influenced by the renewable energy frame also. For instance, she used the renewable energy frame as a focal point of her new energy policy plans. Following the Fukushima crisis, Merkel regularly used ‘Energiewende’ as a buzzword to encompass plans to accelerate the switch to renewables and the shutdown of Germany’s 17 nuclear power stations (Gross 2011). For example, soon after the onset of the crisis, on the 17th of May 2011, Merkel announced that her goal was ‘to reach the age of renewable energy as soon as possible’ (BBC 2011c). This suggests that the renewable energy frame alongside the risk frame influenced Merkel’s interpretation of and response to the
Fukushima crisis to a significant extent. Therefore, this adds further evidence to suggest that Germany’s anti-nuclear norms were an important influence on the government’s response to the Fukushima crisis.

In sum, it can be seen that the Fukushima crisis led to an increase in the resonance of anti-nuclear frames. This led to an intensification of anti-nuclear norms. Consequently, anti-nuclear norms influenced the government’s interpretation of and aberrant response to the Fukushima crisis.

The political opportunity structure during the intensification of anti-nuclear norms

Section 2 demonstrated that the creation of anti-nuclear norms does not rely on the resonance of anti-nuclear frames alone. Success also relies upon the political context in which norm entrepreneurs construct meaning and create norms. This is particularly important in the case of Germany after Fukushima. Although Germany’s anti-nuclear norms were widely accepted, a suitable opportunity structure left the government particularly susceptible to influence, which enabled the intensification of norms and a somewhat drastic anti-nuclear response.

As the previous section explained, Germany’s political institutional structure was a core factor that contributed to the success of the anti-nuclear movement and the construction of anti-nuclear norms in Germany. Kitschelt (1986) claimed that Germany has a closed and weak political institutional structure that continually fuelled the activities of the anti-nuclear movement during the 1970s and 1980s. It was argued that this situation continued into the 1990s and 2000s. As a result, Germany’s anti-nuclear movement remained strong in the lead up to Fukushima. This holds true post-Fukushima also. For instance, the anti-nuclear movement lacked access to the political input structures that would allow them direct influence on the formation of nuclear policy following the crisis. The alternative, therefore, was to resort to demonstration strategies, as had been taken in the past. This resulted in the mass demonstrations that occurred. Thus, the political institutional structure after Fukushima provided a suitable context in which anti-nuclear frames and norms could continue to gain wider acceptance. Consequently, the government was under further pressure and influence from anti-nuclear norms.
However, as noted by both critics and proponents of the anti-nuclear movement, the government was also facing impending elections during the Fukushima crisis. This would have certainly been a core factor contributing to Merkel’s construction and interpretation of the energy policy problems facing the government. Indeed, there were several core regional elections set for March 2011 alone. For example, the traditional conservative stronghold of Baden-Württemberg, with elections scheduled around two weeks after Fukushima on the 27th of March, was of particular importance to Merkel. It had been under the direction of the CDU, which Merkel headed as chancellor, for the past 58 years (Reuters 2011b). However, the CDU, which had traditionally held pro-nuclear views, faced stiff competition from the SPD and the Greens, and their history of anti-nuclear views. Considering that the national political response to Fukushima would directly affect the regional candidates of the ruling coalition, it can be argued that Merkel was liable to respond according to her own interests, that is, in a manner which would have the best political outcome (Kolb 2007; Wittneben 2012).

An effective way to gain electoral success, according to Kolb (2007), would be to employ policy measures that correspond to public opinion. To not do so would risk punishment at the polls and replacement by a candidate who is more in line with public opinion (Kolb 2007). In short, Kolb (2007: 59) states, ‘The basic argument is that politicians must consider public opinion because they want to be re-elected’. Therefore, Merkel may have chosen to align herself with the anti-nuclear stance without complete agreement on its underlying frames and norms.

For example, Merkel’s use of the renewable energy frame, which she referred to as ‘Energiewende’, may have been a carefully crafted attempt at drawing attention away from the government’s indecision on energy policy. Not only was a focus on renewables included in the concept, which was already particularly resonant with Germans, but it also suggested ‘an uplifting forward-moving change’, which does not necessarily draw attention to the different course Merkel followed previously (Gross 2011: 379). This notion was not lost on many critics of the decision at the time (Davies 2011). For instance, Thomas Schmid, writing in Time Magazine, claimed that Merkel’s decision was ‘politically motivated [for] tactical reasons alone’ (Schmid 2011). In sum, Merkel’s initial actions, such as the announcement of a three-month moratorium, may have simply served as an attempt to appease voters (Wittneben 2012).
As events had it, the government still performed badly in the elections despite its temporary nuclear moratorium (Elliott 2013). A coalition of the SPD and the Greens successfully ousted the (CDU led) CDU-FDP coalition in sought-after Baden-Württemberg (Reuters 2011b). On the same day, an SPD-Greens coalition successfully held onto power in Rhineland-Palatinate (Reuters 2011b). According to SPD national chairman, Sigmar Gabriel, the results represented a ‘clear rejection of nuclear power’ (Reuters 2011b). As Benford and Snow (2000) would expect, although Merkel had taken steps in line with public opinion, such as shutting down nuclear plants during the moratorium, her lack of consistency in nuclear policies prior to and post-Fukushima will have reduced the credibility of her apparent anti-nuclear frames and decreased their resonance. In comparison, the consistency of arguments concerning nuclear power by the SPD and the Greens since the 1980s and throughout the Fukushima crisis further strengthened the resonance of the anti-nuclear movement’s frames.

Moreover, the improved representation of the SPD and the Greens in states such as Baden-Württemberg further increased the opportunities available to the anti-nuclear movement. Not only did the added support from political parties increase the chance of anti-nuclear frames affecting policies, but they also provided anti-nuclear frames with better credibility. The increased resonance and acceptance of anti-nuclear frames and norms in parliament was mirrored in the government’s acceptance of Merkel’s decision to abandon nuclear energy. The Bundestag eventually voted 513-79 in favour of Merkel’s plans to shut down nuclear power stations on June the 30th 2011 (Davies 2011; Guardian 2011b).

Thus, notwithstanding the speculation around Merkel’s intentions, it can be seen that state elections provided an opportunity for the intensification of anti-nuclear norms. This came through both Merkel’s engagement with anti-nuclear frames, and through the increased representation of anti-nuclear views by the SPD and the Greens after the elections. The result is the same regardless of whether Merkel’s decision to abandon nuclear power was a political ploy, or whether it was a shift in her perception of risk and the potential of renewable energy. While the elections were an important factor in the government’s decision to abandon nuclear power, the policy change cannot be reduced to the interests of Merkel or other party officials alone. The state elections merely acted as a catalyst for what was already an ever-growing normalisation of anti-nuclear frames. Therefore, anti-nuclear norms were a significant
influence on the government’s nuclear policy change, albeit with the aid of a suitable political opportunity structure.

However, that is not to say that anti-nuclear norms caused the government’s decisions. Indeed, it could well be argued that without the state elections around the time of the Fukushima crisis then Germany’s anti-nuclear norms may have had less of an influence on the government’s policy change. The government may have simply enacted a moratorium and safety checks, for example, before reaffirming a position that nuclear power is economically necessary for the time being. Likewise however, should there have been elections without the presence of established anti-nuclear norms, then the government may have chosen to take similar measures simply in order to address what would have obviously been a salient issue. With these scenarios in mind, the existence of anti-nuclear norms can be seen to have been a core reason for the government’s response to Fukushima. Without the influence of anti-nuclear norms, Germany is unlikely to have responded in the way it did.

It can be seen, therefore, that a mix of the Fukushima crisis and a suitable political opportunity structure strengthened anti-nuclear norms to an extent that influenced significant policy change. In other words, anti-nuclear norms became further embedded into Germany’s identity following Fukushima. As a result, Germany’s distinctive identity left it more prone to seemingly drastic measures towards nuclear power from the very outset of the Fukushima crisis.

Conclusion

Germany’s response to the Fukushima crisis and resulting decision to abandon nuclear power cannot be sufficiently explained by International Relations theories that focus on the structure of the international system. Instead, social constructivism would suggest that an adequate understanding of Germany’s response requires an appreciation of its identity. Theorists such as Katzenstein (1996) suggest that a focus on the domestic cultural-institutional context in which identity is formed offers a particularly beneficial means to analysing the formation of identity. The role of domestic norms is seen as a core factor in the formation of identity. Therefore, this paper has been primarily concerned with the effect of the domestic norms that influenced the formation of Germany’s identity with regards to nuclear power.
A longitudinal analysis of the historical context prior to the Fukushima crisis demonstrated that, since the 1970s, Germany’s anti-nuclear movement functioned as norm entrepreneurs. These norm entrepreneurs were key to the formation of anti-nuclear norms in Germany. The anti-nuclear movement was successful in creating resonant frames that drew attention to, and understanding of, the risks of nuclear power. In other words, they were successful in creating credible and salient frames that were particularly effective in influencing the public perception of the risks of nuclear power. The anti-nuclear movement’s frames were aided by unfortunate nuclear accidents, such as the Three Mile Island accident and Chernobyl. These accidents underscored the movement’s concerns over nuclear power and strengthened the resonance of anti-nuclear frames.

The wide acceptance of anti-nuclear frames eventually led to the emergence of anti-nuclear norms in Germany, as reflected in opinion polls, the ever-growing strength of the anti-nuclear movement, and the support of political parties such as the SPD and the Greens. Anti-nuclear norms were later institutionalised in 2002 by an SPD-Green coalition, which implemented legislation that would eventually phase out nuclear power.

However, it was shown that the resonance of frames and growing acceptance of anti-nuclear norms did not rely on the success of the anti-nuclear movement alone. Germany has had a continually suitable political opportunity structure that has strengthened the anti-nuclear movement. The political institutional structure of Germany alone provided an environment which fuelled the mobilisation of anti-nuclear groups in Germany. The support of the SPD and the Greens also provided the opportunities the anti-nuclear movement needed to see an increase in the resonance of their frames and the acceptance of anti-nuclear norms.

Germany’s anti-nuclear norms were, therefore, a significant aspect of Germany’s identity prior to Fukushima. However, anti-nuclear norms are open to contestation from other actors. This was demonstrated by the CDU/CSU-FDP coalition’s attempts to extend the life of nuclear plants in 2009. Notwithstanding such moves to amend Germany’s nuclear policy, the anti-nuclear movement was still strong, and the majority of Germans remained opposed to nuclear power in the lead up to Fukushima. Germany’s identity remained anti-nuclear in nature until, and during, the Fukushima crisis.
After the events of Fukushima, Germany’s anti-nuclear norms intensified and gained further acceptance. This was due to the increased resonance of anti-nuclear frames. The crisis provoked huge demonstrations throughout the country, while the overwhelming majority of the public, at 90 per cent, opposed nuclear power in opinion polls. As a result, Germany’s anti-nuclear norms intensified and became further embedded into Germany’s identity. This influenced the government’s response to a large extent.

However, the increase in the resonance of anti-nuclear frames and the intensification of anti-nuclear norms was also aided by Germany’s political opportunity structure. The nation’s political institutional structure provided a political context which continued to fuel the anti-nuclear movement’s demonstrations and protests.

Moreover, impending state elections during the Fukushima crisis also provided an important political opportunity for anti-nuclear norms to intensify. Not only did Merkel’s decision take place within a context that was constituted by anti-nuclear norms, but under circumstances that would make her liable to acting in line with public opinion. Regardless of her motivations, her decision to abandon nuclear power was ultimately made under the influence of anti-nuclear norms. While the elections were an important factor in the government’s response to Fukushima, the policy change cannot be said to have simply been a populist move by Merkel or other officials. The state elections functioned as a catalyst for the further acceptance of anti-nuclear norms that had developed prior to Fukushima.

Despite Merkel’s turnaround in stance regarding nuclear power, the SPD and the Greens were successful in elections and thus found further representation in state governments. Increased government partisanship led to further normalisation of anti-nuclear frames. Consequently, the majority of politicians voted in favour of Merkel’s proposed plans to abandon nuclear power.

A key objective of this research was to determine the core factors that enabled the formation of anti-nuclear norms in Germany, and to determine the way in which and the extent to which the government was influenced by those norms. It also sought to determine the degree to which anti-nuclear norms influenced the government’s policy change in light of political pressures such as the elections. This paper has demonstrated that the ability of the anti-nuclear movement to create resonant anti-nuclear frames within a fortunate political context
led to the emergence and institutionalisation of anti-nuclear norms. These norms intensified and gained further acceptance after Fukushima. Anti-nuclear norms influenced the government’s response to a large extent, although they were aided by a suitable political opportunity structure.

Therefore, in line with the central thesis of this paper, it can be seen that the existence of anti-nuclear norms during Fukushima combined with the appropriate political environment were the key factors that influenced Germany’s unique response. While anti-nuclear norms cannot be said to have directly caused Germany’s change in nuclear policy, their existence can be seen to have been a significant reason for the government’s response. Germany’s behaviour, therefore, can be attributed to the anti-nuclear norms that constitute and prescribe its identity and behaviour to a large extent. In sum, Germany’s identity as an anti-nuclear nation left it liable to relatively drastic and, with regard to the majority of international responses, divergent measures against nuclear power during the Fukushima crisis.

Only time will tell whether Germany will make a success of its decision to abandon nuclear power. If the nation struggles, then in hindsight, the decision may come across as a political ploy that simply did not pay off. On the other hand, if the decision proves to be a success, then perhaps it will be heralded as a hallmark of nuclear safety and forward thinking. However, this paper has shown that the decision merely marked the closing to a historically contested path of development within a nation that was already characterised by an anti-nuclear identity.

References


Culture of National Security: Norms and Identity in World Politics. New York: Columbia
University Press, pp. 317-356.

Buzan, B. and Jones, R.J.B. (eds) (1981) Change and the study of international relations: the
evaded dimension. London: Pinter.

http://www.presseportal.de/pm/6518/2037784/cdu-tv-interview-mit-angela-merkel-zur-


Ethics Commission (2011) ‘Germany's Energy Turnaround - A Collective Effort for the
Future’. Report to the German Federal government. Ethics Commission on a Safe Energy
January 2013].


bundestag.de/parlament/bundestagsreden/2011/maerz/energiewende-jetzt-


