Environmental protection and political ideology in Germany: An analysis of party manifestos (1949-2013)

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Abstract

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Reference

Environmental Protection and Political Ideology in Germany

An Analysis of Party Manifestos (1949-2013)

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Summer 2019
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Geneva, 5th of August 2019
Abstract
This study focuses on party manifestos in order to establish a possible link between political ideology and environmental protection in Germany. Earlier studies found that right-wing parties, unlike left-wing parties, tend to oppose environmental protection. This is the basic premise on which this study is based. Party programs from 1949 to 2013 are analyzed and grouped according to the connotation of environmentally relevant sentences. However, the study finds no clear connection between political ideology and environmental protection.

Acknowledgements
I would like to thank Prof. Simone Dietrich for her valuable inputs, which always provided fresh motivation. I would also like to thank all the people who made it possible for me to reach this stage of my life. That would be my mother, my father, my two siblings and my dear friends who have always supported me. Thank you.
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<th>Description</th>
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<tr>
<td>CDU/CSU</td>
<td>Christlich-Demokratische Union; English Christian-Democratic Union</td>
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<td>FDP</td>
<td>Freie Demokratische Partei; English Free Democratic Party</td>
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<tr>
<td>IEA</td>
<td>International Environmental Agreement</td>
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<td>SPD</td>
<td>Sozialdemokratische Partei Deutschland; English Social-Democratic Party of Germany</td>
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1. **Introduction**

The discussion about the climate change, nuclear energy and fossil fuels has introduced environmental politics as a consolidated and important field in the political arena. As climate change is becoming a global problem, many countries have implemented nature conservation and environmental protection on their political agendas. Environmental issues such as pollution, animal protection or sustainable energy, were nowhere to be found in Germany following the end of the Second World War. Later, German politics of the post-war era has been shaped by the three major parties SPD, FDP and CDU/CSU. \(^1\) Environmental politics have been in their party programs for decades, but were hardly ever prioritized. This has been changed mainly due to the following reasons: the emergence of societal changes and different environmental movements in the 1970’s, such as the anti-nuclear movement and the establishing of the Green Party \(^2\) in the early 1980’s. The Green Party prioritized environmental politics and was thus well received by the public. In order not to leave this important field to the Green Party, the three dominant parties began to grant environmental politics a more prominent position. This became obvious as mostly the right parties increased their share of environment-related phrases in their manifestos.

This study sheds light on the political attitude of parties on environmental issues and is motivated by achievements of similar studies (e.g. Klingemann 1986; Schulze 2014). This study extensively covers the linguistic aspect of party programs. German party manifestos are coded and analyzed by their connotation. The connotation, be it positive, neutral or negative, serves as an indicator for attitude. This study’s objective is not only show the attitude, but also if the attitude is congruent with the basic ideology of a party and whether the attitudes experience changes over time. Many studies examined the political ideology in relation with international environmental treaties. This study steps down on a domestic level to analyze the different behavior of political parties toward environmental issues in Germany over the period of six decades.

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\(^1\) The Christian-Democratic Union is an alliance between the two sister parties CDU and CSU, founded in 1949. The latter is active only in the federal state of Bavaria. Accessed: 19th March 2019. https://www.cdu.de/partei/geschichte

Environmental policies have been an established issue on political agendas in recent times, especially in highly industrialized countries (Jahn 1998). What remains little explored is the way parties talk about it and whether they dedicated themselves toward environmental issues aligned to their respective ideology.

The study is structured as follows: At the beginning, the history of environmental policy in Germany is explained, then the concept of ideology and its peculiarities are discussed. After a detailed analysis of the results, a short discussion will conclude.
2. Beginning of Environmental Politics in Germany

Germany has a history of nature conservation, reaching back to the 1830’s. The first area has been the Drachenfels, a hill close to the Rhine river with an old castle ruin on top of it. The reason to protect the area was to prevent the ruin from further collapsing. The ruin also had high symbolic value to German national identity, since the state was divided into many small states at that time. Later, the protected area was extended to include the hills of the Siebengebirge (Jax & Rozzi 2004). The concept of Heimatschutz (protection of home landscape) has been coined by German musician Ernst Rudorff in the 1870’s, who later became a major advocate of the new idea of conservation (Knaut 1990). Heimatschutz was first and foremost a reaction to the gradual urbanization and industrialization. It aimed “to secure what was conceived as the historical identity of the German nation [...]” (Jax & Rozzi 2004: 351). The beginnings of Heimatschutz was restricted to natural monuments such as trees and rocks and not cultural monuments. Humans were included in the idea of conservation, as far as they were involved in non-progressive, rural lifestyles (Jax & Rozzi 2004).

Beside those selective measures, local protests remained the only measurable effect of the conservation movement. It wasn’t until the end of the 19th century, when significant players of environment protection emerged. One of the forerunner organizations was the Heimatbewegung. Members of the Heimatbewegung were largely from the educated middle class, e.g. pastors, architects and professors. However, the Heimatbewegung did not engage in preserving nature’s ability to reproduce, but rather the natural conditions of life. Consequently, the movement did not take sides in the dispute between farmers and the industrial companies, which caused environmental damage. In subsequent years, the range of natural features to protect was extended. Legal and organizational aspects were developed as well. In addition, German federal states passed conservation laws, which put certain plants, animals and areas under protection (Ditt & Rafferty 2008).

In the 1930's, environmental protection was mostly based on the “blood and soil” ideology, which found support in the German fascism. The ideology of the National Socialists, which seized power in 1933, came in favor of nature conservatists. Large
parts of the National Socialist’s programmatic statements was based on models and objects connected with nature. In 1935, the long-awaited Reich Nature Protection Law was passed. One of the most significant aspects of the new law was the protection of “beautiful parts of the landscape” (Ditt & Rafferty 2008: 18). After the Second World War however, environmental protection was pushed in the background and struggled to gain ground again. As the war has left massive destruction, nature conservation played only a minor role and reconstruction being the top priority. The newly founded Deutscher Naturschutzring in 1950, an umbrella organization of German pro-environment groups, could not advance the cause, despite its lobbying efforts (Brand 1999).

A few years later, in the mid-1950’s, the discussion about environmental protection ignited again (Ditt & Rafferty 2008). The discussion on environmental pollution in the United States spilled over to Germany and established environment as a significant policy field. The new environmental politics enabled parties (e.g. FDP) to distinguish themselves as reform parties (Brand 1993). So it was the liberal FDP, which discussed environmental politics the most extensively in its party programs compared to SPD and CDU/CSU in the 1970’s. Even though all major parties were in favor of environmental protection, they followed different approaches and left the decision to the electorate. A reason, why the FDP was engaged in environmental protection, was their priority for nuclear energy, which they emphasized as well as in subsequent decades. The CDU/CSU feared constraints for the economic performance, whereas the SPD wanted to help out by introducing new environmentally-friendly technologies (Klingemann 1986). In the aftermath of the war, cities were rebuilt and a rising number of people found themselves living in urban condition. Hence, people considered the countryside for leisure and relaxation. The Verein Naturschutzpark (an organization of national parks) demanded the creation of thirty national parks all over Germany, which then were founded a few years later (Ditt & Rafferty 2008).

According to Brand (1999), the coalition government between SPD and the FDP in 1969 can be seen as a turning point in respect of environmental politics. Environment-related issues became a separate policy field for the first time. In subsequent
years, environmental politics was characterized by a widespread social consensus. Industrial companies sought constructive co-operation between industry and state, which had a positive spill-over effect on the increasing number of pro-environmental citizen groups. After a number of reforms, the nationwide Federal Nature Protection Law was passed in 1976. The new law contained the protection of animals, plant, natural monuments, but also measures to sustain the productivity of natural elements. This law even surpassed the expectations of the Heimatbewegung. (Ditt & Rafferty 2008).

The years 1973 to 1975 were struck by an oil crisis and economic recession and the focus has been switched to crisis management. The new industry-friendly chancellor sealed the fate of the social change and thereby the environmental consensus was broken (Jahn & Korolczuk 2012). The government under chancellor Schmidt pursued to maintain a competitive economy. Thus, there is a gap between the explicit withdrawal of the environmental reform program and the intensified perception of environmental problems (Brand 1993). The new government curbed the efforts on environmental preservation and prioritized the development of new energy sources, especially the nuclear program being pushed ahead. Giant German corporations like Siemens were leading the way in nuclear energy. Along with the technological advantages, nuclear energy had quite large public support. However, a smooth trajectory was hindered by mainly two issues. The missing solution for the disposal of nuclear waste mobilized many people to protest against the introduction of nuclear energy. Further, the nuclear meltdown in Chernobyl forced politicians to re-evaluate nuclear energy (Jahn & Korolczuk 2012).

Consequently, protest against the use of nuclear energy became a main issue of the environmentalist movement in the 1980’s (Hernes et al. 2002). Social movements of that time used a simple yet populist rhetoric (e.g. “Stop the ...”, “Save the ...”). The protests aimed on chemical industry, electrical industry and parts of the ruling elite. Environmental discourse has been divided into ecologic-fundamental and technical-economic (Brand 1993). The efforts were not crowned by success, as none of the major parties in Germany adopted a clear stance against nuclear energy. As the Grundgesetz (Basic Law) ruled out plebiscites, nuclear energy critics could not take on their demands through referendum. The inaccessibility of the
political input structures made anti-nuclear protestors press for structural change (Kitschelt 1986). The access to the bureaucratic apparatus enhanced “with the establishment of a federal Ministry for Environment, Nature Conservation, and Nuclear Safety in 1986” (Hernes et al. 2002: 671). Against the odds, the major parties started adapting environmental policies on their agendas. The established parties thereby intended to head off the Greens from having electoral success and appease the protesters.

The history of environmental protection in Germany is characterized by pro- and anti-modernism. In its attempt to set against modern tendencies, e.g. industrialization, and the exploitation of animals, plants and natural areas, environmental protection was anti-modern in an economic sense, but progressive in respect of politics and culture. However, nature could not entirely escape modernization. It was no longer a place to relax, but rather a place to explore as activities such as photography, hiking and cycling became more popular among the urban population (Ditt & Rafferty 2008).

2.1 Present Environmental Politics in Germany

Environmental issues were highly polarized in German politics in the 1970’s, but became a priority on public agendas only ten years later. The “green movement” itself has become a strong player in national and international environment policy, which was remarkable considering the passive exclusively state form, which only allowed few channels of social influence (Hernes et al. 2002; Kitschelt 1986). As a response to the structural exclusion, in the late 70’s and early 80’s, the protest movements started to establish environmental institutions on their own. The institutions, which represent Germany’s present environmental policy network, were founded in three waves, which peaked in 1949 to 1950, 1972 to 1975 and 1990 to 1991 (Jost & Jacob 2004).

The newly founded Institute for Applied Ecology, set out to provide scientific data that could be used in court against questionable industrial facilities. In subsequent years, additional independent institutions were founded (Hernes et al. 2002). Consequently, environmentalism became more institutionalized over time. Over the
time, four main types of institutions could have been identified: NGO’s, research units, governmental units and interest groups (e.g. business, labor unions). The conflict level within the institutional network is very low. The highest conflicting potential was found between NGO’s and interest groups (Jost & Jacob 2004). Like in every social movement, failure and success depend heavily on the resonance of the public and the mediating role of mass media. Only if social movements successfully changed the institutional practices, redefined the symbolic order and implemented new forms of institutional problem-solving, they gain the right to exist (Brand 1999). The variety of recurring environmental problems legitimized the movement within discursive fields. The ecological movement turned into a mainstream movement and was soon represented in a vast number of political fields, economy and daily life (Brand 1993).

The arrival of the Green Party in the ruling coalition in 1998 did not bring real change in policy, except for nuclear energy policies. Within the German corporatist system, the Green could not reach electoral success in the bureaucracy, which is more important than the parliament (Hernes et al. 2002). This factor increased the Green Party’s dependence on successful mass mobilization. However, the Green party had a significant success before being part of the ruling coalition. The Greens challenged the SPD on nuclear policy, resulting in an ideological shift from pro-nuclear to the abolishment of nuclear energy between 1979 and 1986. From this point, the SPD and the Greens built a strong coalition against nuclear energy. However, the traditional right parties, FDP and CDU/CSU, remained on a pro-nuclear path (Jahn & Korolczuk 2012). During the subsequent periods, the left coalition in opposition tried to change the law in favor of the phasing-out of nuclear power. In 2009, the ruling coalition between CDU/CSU and FDP, was determined to slow the process of opting-out from the nuclear power program. This was to “remain an industrial powerhouse and to remain a role model for other countries in fighting climate change” (Jahn & Korolczuk 2012: 160).

The environmental-friendly and sustainable energy policies of the government appeal to large parts of the German population. However, public opinion polls showed that the public did not unconditionally support the new technologies, since they
did not seem to be fully developed. Locals fear a depreciation of their quality of life, if e.g. wind generators are installed nearby. Also, the rising energy costs generated by new technologies would influence the public’s view on sustainable energy (Zoellner, Schweizer-Ries & Wemheuer 2008). Similar contradicting tendencies are also described by Stoll-Kleemann (2001). The Bundesländer (federal states), which are in charge of establishing protected areas, often faced opposition from people living around the area. Opposition is mostly motivated by an intent to express the people’s traditions and liberties. Citizens were often organized in local, regional or national groups, which represented the interests of individuals. Protest could as well take other shapes. For example, boycotts of meetings with the politicians in office (Stoll-Kleemann 2001).
3. Literature

The research body on environmental protection covers plenty of issues related to mostly negative impacts on environment. Air pollution (Neumayer 2003), climate warming linked to gas emission (Hovi, Sprinz & Bang 2010), nuclear energy (Jahn & Korolczuk 2012) to name a few. International environmental agreements (Recchia 2002) or the establishment of sustainable energy (Frondel et al. 2010) on the other hand promote measures in favor of environmental protection. A brief overview shows that environmentalism or environmental protection is often linked to an particular sphere, often economy or politics as well as psychological theories. Stoll-Kleemann (2001) found evidence that pro-and anti-environmentalist behavior is driven by emotional and cultural differences. A similar study in the US showed that individuals who support a certain ideology often hold similar values, differing for each ideology. These psychological differences resulted in different valuation of energy-friendly options, when it was shown that non-left individuals were less likely to buy energy-efficient light bulbs (Gromet, Kunreuther & Larrick 2013). Frondel et al. (2010) examined the economic impact of renewable energy technology in Germany, finding that new technologies are extremely costly inducing a negative economic impact and a potential negative effect on net employment balance. Neumayer (2004) shows in his study, that economics and politics can be linked together. He concludes that left parties in 25 countries are likely to be in favor of ecological economies, in the sense, that economic processes should be sustainable and the allocation take place in an efficient way. These results can be attributed with the pro-environmentalist character of left parties, which becomes visible in party manifestos.

Among the numerous factors, which lead to an pro-environmentalist agenda setting, several authors identified institutional factors to be highly salient (e.g. Jahn 1998, Recchia 2002). Congleton (1992) examined political institutions within two regime types. He finds that authoritarian actors are less risk averse than the median voter due to career uncertainty and shorter time horizon. These differences lead to less stringent environmental policies implied by authoritarian regimes relatively to democratic regimes. In addition, political institutions largely determine, if a state is willing to take part in an environmental convention. He suggests, that
the degree of liberalism in a regime is positively related to participation. According to these findings, the number of international environmental agreements being signed increases with the number of democratic regimes. Further, democratic regimes institutionalized environmental agencies, which help to identify environmental issues (Recchia 2002). The *institutional* theory sums up the underlying mechanisms within a state. Political institutions enable to represent diffuse interests, which facilitates to put environmental issues on the political agenda. In contrast, majoritarian regimes, characterized by high centralization, constrain the influence of minority groups, making it less likely for environmentalists to make their statement (Milner 1993).

When environmentalism is considered from a political perspective, scholars identified a broad spectrum which may influence environmentalism. Environmental policies have become an important and decisive issue over the past decades. As the environmental constituency is constantly growing, politicians use environmental issues to attract “green voters”. In a study, List and Sturm (2006) concluded that during election campaigns, candidates advance a high number of environmental policies in U.S. states with large Green constituencies, only to reverse them, once they are elected. Knill, Debus and Heichel (2010) examined the impact of parties on environmental policy outputs within a sample of OECD countries. They could show that the left-right ideology is not a significant factor to determine a party’s influence on environmental policies. Rather the number of environmental policies adopted by governmental parties is decisive for an increasing number in environmental policies. Neumayer (2002) compared the environmental protection of democracies and autocracies. He concluded that democracies often value nature protection higher than autocracies inter alia, ratify more international environmental agreements (IEA) and participate in more intergovernmental environmental organizations. Recchia (2002) complements the previous study by identifying post-materialist values and centralized ratification procedures as main drivers of pro-environmentalist behavior in democracies, Bernhagen (2008) on the other hand the neo-corporatist system, which reduces information asymmetry between relevant actors.
However, many scholars take the left-right ideology spectrum as a reference measure. Thus, an increasing number of studies have been dedicated to find the impact of political ideology on environmental behavior. Gemenis and his colleagues (2012) challenged the notion that environmental issues are exclusively represented by left parties and found that several right wing parties in Western Europe dedicated a substantial part of their manifestos to anti-environmentalism. Whereas partisan ideology may impact domestic politics, it does not affect the ratification of IEA’s, regardless of left-right differences. Schulze (2014) identified the attitude of the government as the decisive factor. Similar findings are presented by Jahn (1998) in his study on regimes in 18 OECD countries. He summarizes, that neo-Liberal and right-wing regimes have a negative impact on the environmental performance of countries. On an individual level, Bornstein and Lanz (2008) found ideology to be a significant factor in ballots on environmental issues.

A brief review over existing literature showed mixed results in respect of the significance of political ideology. However, there the circumstances allow to have confidence in the role of ideology. The German politics underwent important changes since the end of the Second World War. As there were three major parties (SPD, FDP and CDU/CSU) having a similar political pattern, the political spectrum has been widened with the emergence of mostly left parties such as the Green Party and Die Linke. The “newly” introduced level of environmentalism forced the established parties to adapt. However, there are a number of hurdles that need to be overcome in order to reach agreement on environmental policy. A few general aspects are discussed in the next chapter.
4. Problems with Environmentalism

Environmentalism faces obstacles, which can be separated from ideological reasoning. One of the main reasons these problems occur, is the extent of an environmental issue. For instance, the depletion of the ozone layer or acid rain does not respect borders and may as well become a global problem such as global warming. From an economic perspective, every country can release emissions into the environment. While the economic benefit remains domestic, the emissions are “shared”, and related to domestic and foreign emission (Carraro & Siniscalco 1993). Hence, international cooperation is not easy to achieve. A country may benefit from the participation in an international environmental agreement (IEA). Then again, there might be country specific incentives to stay out from such agreement and pursue own interests and be a free-rider (Hoel & Schneider 1997). Carraro and Siniscalco (1993) mention three conditions, which have to be matched in order to sign an IEA. Cooperating countries transfer welfare to induce other countries to engage in an agreement. Hence, the total of the transfers must be lower than the gain a country receives for its commitment. Under the assumption, that such transfers are self-financed. In order to form a pro-environmental coalition, all committing countries have to be better off in respect of a non-commitment, implying a Pareto-improvement. And lastly, countries choose their welfare transfers in a manner to maximize the number of signatories. Collective action is key, when it comes to environmental protection. If a subset of countries unilaterally or cooperatively reduce emissions, the incentives for other countries to free-ride increases.

The industrialization and its achievements often had an adverse effect on the quality of air, soil and water. For instance, the car industry showed an not negligible effect. The manufacturing of cars only accounts for a fraction of the total emission. The constructing of roads (accompanying with deforestation) and the contribution of gases known as Volatile Organic Compounds causes irreparable damage on nature. Further, cars account for up to 90 percent of carbon monoxide emission. Industrial and domestic emission has been stable since the mid-70’s, whereas the number of cars is constantly increasing with the growing global wealth, along with emission from aviation (Paterson 2000). The car industry is a good example for the
obstacles, politicians have to overcome in order to implement effective environmental policies. Car industry is often protected by the state, because it accounts for a significant share of the domestic economy. For instance, the French car industry was heavily protected in the post-war period, not only from cutting the production, but also from foreign takeovers (Reich 1989).

Misperceptions may explain, why some people are cautious about restrictive environmental protection. Falling prices for natural resources and growing economy generate the impression abundant resources, thus a healthy environment. As in fact, it is the progressive technology, which allows to produce in a more efficient way sell to cheaper prices. Similarly, nuclear energy is perceived as a clean source of energy, because it has replaced coal, oil and gas for the most part, and does not entail a reduction in economic growth rates. This implies the belief that scientific progress allows growth without harming the environment, which in turn can result in refusal of environmental protection (Gemenis, Katsanidou & Vasilopoulou 2012).
5. The Concept of Political Ideology

The concept of ideology has been the center of many controversies, resulting in a variety of definitions. For instance, ideology can be understood as a study of ideas (Freeden 2006). Further, ideology is attributed with a variety of traits in research. It can be dogmatic to someone or a dominant mode of thought to another. Sometimes an ideology is based on the interests of a social class, or to others, ideology defines itself from the absence of economic self-interest. The list is not conclusive, but we can say that definitions are plenty and sometimes even in odds with each other (Gerring 1997). But what is to say about the definition of a political ideology? The roots of political ideology can be tracked back to the last century when scholars have defined different approaches to explain the emergence of a political ideology.

A popular definition has been brought up by Lowenstein (1953) He considers political ideologies as a “substitute religion”: The nature of religion has it, that there it can only be accepted or rejected. Political ideologies are often affected by religious aspects. Religion provides particular belief and thought pattern, which embody values that are considered to be absolute and yielded by its adherents. Thus, ideology serves as a substitute religion for eroding religious values. Ideologies of non-religious parties (mostly liberal with values such as tolerance and relativism) show the similar pattern of “either-or”, when they encounter their antithesis of totalitarianism. In earlier studies, political ideology signified a subjective feature, unable to apply to a general public. Over time, the meaning of ideology shifted “to a general feature of political thinking” (Freeden 2006: 21). Pombeni (2006) argues that the absence of political power underpinned by a single ideology is the root of a diversity of modern political ideologies. It can exist if “any systems of beliefs, values, behaviour, culture” (Pombeni 2006: 62) can be taken as read by the governments and no further questions are asked.

Many scholarly studies use an unidimensional conceptualization to measure political ideology (Feldman & Johnston 2014). A number of researchers rely on the dichotomous scale, which separates political parties into a left and right spectrum. The abstract concepts of Left and Right are often used by partisans in a heuristic
way to “orient themselves in a complex political world” (Knutsen 1995a: 63). However, this unidimensional scale is often not able to sufficiently explain policy preferences. The meaning of the Left and the Right has undergone changes in recent times: Societal movements reflected the polarized political preferences and caused to transform the bases of both poles (Inglehart 1990). A prominent example described by Inglehart is the cleavage between materialist and post-materialist preferences of left workers and conservative owners of the means of production (Knutsen 1995b). This very issue does not allocate to a distinct political ideology. As a consequence, parties on both sides were challenged to adapt their policies to the new preferences in order not to chase away partisans.

6. Political Differences of the Left and Right

The common ground for all parties is their disposal of a political ideology. The political ideology of the Left and the Right is often diametrical to each other, which makes it hard to find consensus. The more polarized the political spectrum is, the more often you will come across hardened fronts. The Left is traditionally correlated with strong welfare interventions by the state, while a high presence of right-wing parties leads to a decline of welfare measures. The same can be said for development assistance. In respect of military spending, the correlation is reversed and spendings are higher if there is a high presence of right-wing parties (Imbeau et al. 2001). It is not to say, that mainly political values contributed to the divergence of the Left and Right. External factors may play an important role. In OECD countries of the pre-1973 years, parties showed “a broad left-right consensus over macroeconomic implications of public policy” (Imbeau et al. 2001: 24) due to high economic growth rates. Thus, party conflicts mainly occurred over the redistribution of abundant resources.

Differences can also be found in individuals. A survey-based study of American citizens by Crawford and Pilanski (2014) showed that left- and right-oriented individuals had diametrical opposed opinions on subjects like gay rights, abortion and separation of church and state. The common ground was found in the mutual intolerance toward the opposing group, challenging earlier findings of a right wing bias on intolerance.
The Left and the Right have a multitude of political issues, they support. Overall, two core values of right-wing ideology have been found to be stable in earlier studies (e.g. Jost et al. 2003): justification of inequality and resistance to change. These two values are motivated to manage threat and uncertainty (Jost et al. 2003). The concept of justifying inequality “captures the notion that the political left tends to yearn for equality while the rights sees society as inevitably and often appropriately hierarchical” (Thorisdottir et al. 2007: 178). Resistance to change is affiliated to a set of cultural beliefs like “traditional family, gender roles, religion, and morality from what is perceived as increasing secularism and humanism” (Dunlap et al. 2001: 34). In the 60’s and 70’s, several movements occurred, which were seen as a threat for traditionalism. Feminism, Pro-choice, Anti-war, Civil rights, to name a few, have all challenged the status quo. The uprising of the Environmental Movement can be perceived as a threat to the extent, that it challenged the traditional understandings of the role of human kind in nature, as people have historically a very anthropocentric view. Meaning that human have the right to use the environments for their needs. An earlier study linked resistance to change to conservative voting behavior in Israel (Schwartz & Barnea 1998). Even though resistance to change is mostly attributed to conservatism, it has been argued that either side of political extremism can have this characteristics. Greenberg and Jonas (2003) argue that conservatives in Europe aim to change the status quo, when a left-skewed ideology is the dominant one. They conclude that left-wing and right-wing parties prefer the status quo as long as the dominant ideology is in their favor.

Scholars elaborated further differences, which can be traced back to two core values in a cultural and economic context (Van Hiel et al. 2004). Cultural conservatism is the idea of maintaining social order and rejecting qualitative social change. The same goes with religion, traditional family and gender roles. Economic conservatism includes an ideological bias toward private companies, capitalism and competition on a free market. Because capitalism is often a cause of economic inequality, economic conservatism endorses the acceptance of inequality (Thorisdottir et al. 2007). Thus, if an environmental issue is framed as a trade-off between economic growth and environmental protection, the anti-environmental sentiment among the electorates is likely to reinforce (Gemenis, Katsanidou & Vasilopoulou
For this reason, environment remains a delicate issue to influence electorates of right parties (List & Sturm 2006).

Right and leftist political ideology often prefer policies, which are diametrical to each other. The following chapter will show how these ideologies influence the attitude toward environment.

7. Environmental Behavior of Left and Right
Among political parties, there is hardly any consensus about which environmental policies are to implement and which are not. The Left is biased toward sustainable energy, which would result in a decrease of nuclear energy and the use of fossil fuels. The Right on the other hand, often considers nuclear energy as a viable alternative to sustainable energy. A study showed, that individuals, who identify themselves to the political left wing, are “more likely willing to give priority to environmental protection over economic growth, have greater confidence in the Green/Ecology movement and are more likely to selfreport pro-environmental political behavior” (Neumayer 2004: 172). The survey he analyzed also showcase that the consumer behavior of self-identified left individuals was more pro-environmental than the one of their right counterparts. However, left individuals were not more likely to state, that they have chosen a particular product in the past for environmental reasons or involved in recycling. The author argues, that left-leaning individuals may prefer state intervention over individual behavior in order to improve the environment.

Similar findings can be observed in the broadest sense in Switzerland, a traditionally conservative country. In five referendum during the period of 1994 to 2000, the dichotomous attitude toward environmental issues was striking. Each referendum targeted traffic and the use of fossil fuels. More than half of the referendum had sufficient support from the people on an aggregate level (despite the Socialist/Green party only having 30 percent of the electorate). However, the majority of the referendum faced opposition not only by right parties, but also from centre parties (Bornstein & Lanz 2008).
Environmental policies invoke distributional effects. Distributional effects can be measured on several dimensions, such as household income groups, generations or industry. Industry is an important dimension, because it is directly negatively affected by environmental policies and it is a powerful veto player (Bovenberg et al. 2005). Dunlap (1975) argues, that conservatives in the United States are not as much concerned about the environment as their leftist counterpart. This is because Republicans are more likely to be affiliated with business and industry. Restrictions in this sector will likely lead to higher costs and lower revenue. It has been revealed that Republicans are more likely to oppose to energy efficiency, as Republican legislators are significantly less likely to support pro-environmentalist issues in legislative votes.

A common governmental practice to impose burden onto the industry sector is pollution taxation or the selling of pollution permits. Ultimately, property rights over emissions are being transferred from the firms to the public sector. The expected distributional impacts can generate political opposition from the adversely affected industries. The industry sector faces higher costs for emission than other sectors do, be it through taxes/buying permits, or a decline in production efficiency, for the sake of reducing emissions (Bovenberg et al. 2005). New climate policies could reduce burning fossil fuels and therefore affect the revenue of the industry (Fullerton 2011). Among the heavy polluters within the industry sector are oil and coal companies, thus it is not surprising, that those are resisting further measures against pollution. The valuation of carbon emissions reduction stems from psychological, but also economic considerations. The conservative opposition makes it difficult to apply new energy efficiency policies and ultimately preserves the status quo for the industry as well as for the citizen (Gromet 2013).

Further, environmental agreements often include governmental intervention and control in private sectors and they call for innovative action in order to adapt to a new standard of environmental ethic. Laissez-faire governments and the status quo belong to the core ideology of conservatives (Dunlap et al. 2001). Therefore, it is rational for the industry sector to oppose new climate policies. In order to avoid
In contrast, another study show that self-identified liberals and Democrats “more accurately perceive the scientific consensus on global warming than do their respective counterparts” (McCright et al. 2013: 515). Similar findings could be shown in a study, which was conducted in England. It was examined, how values and other factors influence climate change skepticism. The skepticism scale shows twelve causes of climate change, as well as the quality of the evidence and the media coverage of climate change. The results implied that voting for the conservative Party positively correlates with climate change skepticism. Meaning that individuals of the political right or centrist spectrum are more skeptical of the reality of climate change than others, who are affiliated with parties from the liberal and left spectrum (Labor, Liberal Democrats, Greens) (Whitmarsh 2011).

Conservatives in Europe are less willing to automatically adapt to EU policies (in basically every matter). The reasons for that are easily found. The new environmental regulations are a potential threat to free market economy, weakens the democracy, because the people’s opinion is not being taken in account and disempowering domestic interest groups. In contrast, it is the voters affiliated with the
Green Parties, which can be located in the left spectrum of party ideology, which are most supportive for environmental policies within the European Union. But the importance of environmental issues differs in Europe. In former Communist countries, the environment has been a less salient political issue than it was in Western European countries, because many issues were subordinated to predominant Communist policies. The low exposure of the issue lead to practically no mobilization for the issue (Hooghe et al. 2002).

In fact, the environmental attitude does not always comply with an individuals practice. A new longitudinal study from 2018 showed interesting findings on individual level. Participants had to answer seven questionnaires within a year concerning the global climate situation. They were later categorized into three groups according to their responses. The groups were the “skeptical”, “cautiously worried” and the “highly concerned”. The findings suggested, that the group of “skeptical” was most likely to engage on individual level pro-environmental behavior than the other two groups. This finding is opposing to the general logic, but only on an individual level (Hall et al. 2018).
8. Theory
The overview about general differences on the left-right ideological dimension implied, that right wing parties or individuals are more likely to oppose environmentalism and more likely to oppose the restrictions imposed by environmental protection than their left counterparts. It has been shown that the right political spectrum is rather affiliated with business and industry, thus consider pro-environmentalist behavior to be a threat. On the other hand, left parties have support pro-environmentalist behavior without reserve. A number of studies, which uncovered those findings, were conducted on individual and party level (e.g. study by Dunlap (1975) on Democrats and Republicans) and often based on surveys. Thus, it does not help to draw conclusions on a party’s positioning on the left-right dimension or their party program. Hence, the main argument, the environment-opposing right, will be the underlying presumption of this study.

It remains unclear, if party manifestos do as well show significant differences in respect of pro- and anti-environmentalist attitude. If the argument holds strong throughout the analysis, it will be namely the CDU/CSU and FDP, which are more likely to show anti-environmentalist attitudes than left parties and have more negatively connotated phrases in their programs. There are two reasons, which give confidence for that presumption: firstly, the FDP and the CDU/CSU are affiliated to nuclear energy respectively strong economic performance, of which both are at odds with pro-environmentalism (Jahn & Korolczuk 2012; Klingemann 1986). In the past, the CDU/CSU and FPD have repeatedly opposed the introduction of environmental taxes. For example, when it came to introducing an ecological tax reform. The left parties, on the other hand, showed their support for it (Jost & Jacob 2004). On the other hand, there is reason to believe that the left-right cleavage is not as significant: After the establishment of the Green Party in the early 1980's, the established parties perceived the importance of environmental politics for the electorate (see Hernes et al. 2002). For this reason, even right-wing parties were not allowed to make excessively negative statements about the environment. Otherwise a party risks losing environmentally oriented voters to other parties. This
circumstance can slightly weaken possible differences in connotation. Nevertheless, one can be confident that certain differences will remain. A look at the political ideology reveals clear fronts between the five parties. There are few times when a party can be found in the opposition political camp. Particularly in recent times, the fronts have hardened considerably. These assumptions lead to the following hypothesis:

**H1:** Right parties are relatively more likely to use negatively connotated phrases toward environmental issues than left parties in their manifestos.
9. Analysis

The main objective of this study is to present a link between political ideology and environmental protection in Germany. The first part elaborated on the effect of political ideology on the connotation of environmental phrases. In a second part, it is elaborated whether political ideology has an influence on the range of a environmental phrase. A distinction is made between international and domestic.

9.1 The German case

Germany has had a leading role in respect of environmental protection in Europe. This is remarkable considering that Germany had to reinvent itself after the economic and infrastructural collapse by the end of the Second World War. Germany provides an interesting and unique history among young democracies, which is well documented. Further, the MARPOR project provides a complete collection of party manifestos from the period of 1949 to 2013. The case selection has been limited by the language proficiency of the author. In order to produce an autonomous study and provide a precise analysis of the party manifestos, the written language of the manifestos had to be either German or English. The previous reasons justify the case selection in favor of Germany. This study will only treat parties from the German Federal Republic (Bundesrepublik Deutschland). Party manifestos from the German Democratic Republic (Deutsche Demokratische Republik) are unavailable for this period. The party Die Linke is incorporated after the unification of West Germany and East Germany in 1989.

The regime type is an additional criteria for the case selection. A diverse party system, which is characterized by different ideologies is conditional to conduct a reliable manifesto-based study. Since 1945, Germany has had at least three major parties during election periods. The number increased in the 1980's to five major parties. The observation period covers roughly sixty years. This has some major implications. The transforming spectrum of political parties makes it difficult to determine the ideal time of measurement. However, it enables to analyze changes in ideology and environmental attitude over time (Laver & Garry 2000).
9.2 Textual Analysis of Political Manifestos

Many qualitative studies are based on textual analysis and a significant number of them rely on indicators provided by the MARPOR project or the manifests themselves. However, human coding of party manifests must first and foremost be critically reflected, as many scholars see constraints in the method of human coding. Some of the difficulties will be described in this section.

Manifestos are written documents, which contain a party’s position on specific issues. A major advantage of working with manifests is that political changes can be traced over time. Several studies have worked with manifests and thereby applied a range of methods. Coding of manifests can be done by computers or humans. Computers are often used “when words or phrases are coded according to some predefined coding dictionary” (Mikhaylov, Laver & Benoit 2012: 79). Human capabilities are better suited when it comes to capturing the meaning of phrases or words. However, humans often have a reliability problem, because different interpretations may be attributed to the same text. Coding errors occur when the same coder at different times or different coders at the same time, assign different coding to the same text. Independently of whether someone uses a pre-coded category of a manifesto or decides to do an own coding, for the most part, the coding has only been done by one single person. The resulting uncertainty in coding translates into a reliability problem, because no estimated error margin can be formed as there is no variation (Mikhaylov, Laver & Benoit 2012).

As mentioned earlier, party manifests do include a considerable number of environmental phrases. However, the extent of dedication toward a subject does not tell about the valuation of an issue. To name an example, the Green Party dedicated a significant number of phrases to globalization, labor market and the economic system to raise awareness for social injustice.\(^3\) Thereby, the authors of the manifests emphasize the negative impacts and weaknesses of said subjects and express their dissatisfaction on a linguistic level by making use of negative conno-

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\(^3\) Manifesto of the Green Party, Germany (1998)
tion. Anti-environmental positions by mostly right parties have been widely recognized by scholars. A study by Gemenis, Katsanidou and Vasilopoulou (2012) provides a profound insight into the framing in right party manifestos. The analysis of 13 European right-wing parties showed mostly congruent tendencies. The authors identified four specific environmental issues, which appeared in most manifestos, in the course of the qualitative reading. It was noticeable, that the parties framed environmental issues with issues of their own political interest. This being said, four parties associated immigration with higher pollution and destruction of the environment. The results of this study serve as a good example for a different use of linguistic treatment.

9.3 Data

All the party manifestos used in this study are retrieved from the MARPOR database (Manifesto Research on Political Representation). The data collection covers over a thousand parties from 50 countries in the period of 1945 to this day. The party manifestos are set out to “measure the relative emphasis placed on an issue by a party in a manifesto, not the party’s substantive position on this issue” (Laver & Garry 2000: 620). It is crucial to stress this difference. Parties can have the same position on a specific issue, but emphasize it in a different extent in their manifesto.

The availability of manifestos in electronic form lead to increased automated or semi-automated methods for estimating policy positions. Despite this transformation, the most often used method is still manual human coding. In the method applied in this study, not the odds of words is decisive, but rather the linguistic aspect gauged by the connotation. The MARPOR project has already developed its own category of environmental protection (category 501). But as in any other scale, the authors did not take in account the connotation of the single phrases. Ergo, the new method can contribute to a better understanding on the political positions on environmental protection, because human coding enables to capture nuances (Dietrich, Milner & Slapin 2018).

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9.4 Method

As a first step, all phrases related to environmental protection are isolated from the other phrases. Environmental protection includes the following categories: sustainability, noise emission, air-, soil- and water pollution, Green energy, animal- and plant protection and nature conservation. Nuclear energy and agriculture has only been included, if it was clearly mentioned in the context of environmental protection. Then, the single phrases are split by their connotation, whether it is positive, neutral or negative. This rather broad classification is sufficient to capture nuances between the three categories, since the party manifestos are very clear about their attitude on environmental protection. As environmental protection has become a global concern over the past decades, the phrases are further divided into domestic and international categories.

Examples for positive connotation\(^5\) are “We have to take immediate measures against forest dieback and the pollution of water, air and soil”\(^6\), “We want to preserve the natural basis of live for the future generation”\(^7\) and “Wildlife and plants as well as endangered ecosystems have to be protected”\(^8\). Negatively connotated phrases were quite rare and subtle, but can be found in few conservative party manifestos: “Environmental protection must not be the pretext for ever increasing taxes and duties.”\(^9\), “An ideologically motivated environmental hysteria and the sweeping demonization of certain substances and technologies is rejected by the FDP”\(^10\) and “Environmental policy has its limits where it improperly hampers human development opportunities.”\(^11\). Neutral mentions can be found in almost every manifesto: “Long-term action strategies are necessary to solve urgent problem as environmental protection”\(^12\), “The forest is the lung of natural resources”\(^13\) and “Nuclear phaseout is secured only if the Green Party is represented in the next governmental coalition”\(^14\).

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\(^5\) The following phrases are translated from German to English
\(^6\) Manifesto of the Green Party, Germany (1983)
\(^7\) Manifesto of the CDU/CSU, Germany (1998)
\(^8\) Manifesto of the PDS, Germany (2005)
\(^9\) Manifesto of the FDP, Germany (1994)
\(^10\) Manifesto of the FDP, Germany (1998)
\(^11\) Manifesto of the FDP, Germany (2005)
\(^12\) Manifesto of the SPD, Germany (1980)
\(^13\) Manifesto of the CDU/CSU, Germany (1949)
\(^14\) Manifesto of the Green Party, Germany (2009)
10. Results

Figure 1 illustrates the distribution of environmental phrases and other phrases for each relevant year since 1949. The number of phrases range between 348 in 1957 for the lowest and 14’702 in 2013 for the highest number. One could say that two facts attract attention. The after-war period is characterized by a deficiency of environmental issues in the manifestos. Even though a total of ten parties published a manifesto in 1949, the number of environmental issues remained small. Dominant issues have been reconstruction, the establishment of the economy, patriotism and pacifism, to name a few. It wasn’t until 1980, that environmental issues gained more attention throughout manifestos. The second characteristic is the peak in 1990, when an average of 14.71 percent was dedicated to environmentalism. This can be partially be explained with the presence of the Green Party. The first “green” manifesto in 1983 has considerably less dedication toward environmentalism than the subsequent manifestos. Environmentalism experienced significant increases in 1972 as well as in 1980. The student protests in West Germany in the 1960’s had a considerable impact on the political agenda of the following years. The leftist revolution peaked in 1968 and brought a variety of issues into the spotlight, inter alia environmentalism (Schmidtke 1999). The social-liberal coalition between the FDP and SPD in the early 70’s was substantially involved in the processing of a major environmental agenda. As a result, a range of environmental statutes have been implemented (Schönhoven 1999). The 1969-1972 slope exists, because the SPD extensively discusses the new environmental agenda in its 1972-manifesto.

The increase in 1980 is likely to be a reaction of the three ruling parties toward the announcement of the Green Party, which was founded in the same year. The CDU/CSU, FDP and SPD almost doubled their share on environmental phrases compared to 1976.16

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15 13.5 percent in 1983 compared to 20.4 percent in 1990.
The next chapter is devoted to the question of how ideologies and parties correlate with environmental protection. Figure 2 clearly shows that the parties on the left report more frequently on environmental policy issues. However, it should be noted that the left-wing parties have been outnumbered since 1990. In order to maintain proportion, the environmental phrases were given in percent to the other phrases and not the number of environmental phrases. It quickly becomes apparent that the proportion of phrases devoted to environmental protection increases over the years. This is true of both ideologies. What can explain this marked increase up to 1990? In the first Bundestag elections in 1949, ten parties stood for election. The content of the manifestos shows relatively quickly that the focus was not on environmental protection, but on political affairs. Shortly after the war, practically all the parties had various demands, which they then brought to bear in the Bundestag elections. It is characteristic of the time after the war that the political landscape was completely fragmented.
The national-conservative parties like the Bavarian Party, German Party and German Reich Party were opposed by leftist parties like the Communist Party of Germany and the Centre Party. In spite of political discrepancies, the same topics are in the foreground of practically all parties: economy and democracy. As an example, the German Party stated in regard of democratization the following phrase in their 1949-manifesto: “Safeguarding the constitutional guarantees of personal freedom and equality as fundamental requirements of a liberal democracy in the Federal Constitution”\(^{17}\). Left parties express similar views on the democratization of Germany: “The centre is the camp of the German People’s Community. It calls to its ranks all those who want to go with it the hard way of the reconstruction of what is in fact a democratic and social Germany.”\(^{18}\) From 1980 there is a steep increase for the left parties, which is no coincidence, as the Green Party ran for the second time for the Bundestag in 1983. In the same year, the Green Party was able to overcome the 5 percent hurdle for the first time and thus enter the Bundestag after only 1.6

\(^{17}\) Manifesto of the German Party (1949)
\(^{18}\) Manifesto of the Centre Party (1949)
percent of all votes were won in the 1980 election (Klingemann 1986). Since this party had aligned its program very environmentally-centered, the competing parties urgently had to adapt their program in order not to lose "green" voters. The Greens were generally perceived negatively by voters as a party because they were too radical and left-wing. But the extensive efforts to protect the environment were very well received by voters. It was perceived as positive by 91 percent. In the field of environmental policy, the Greens clearly set themselves apart from the other parties and developed their own arguments and positions. Of all the environmental arguments put forward in 1983, 91 percent fell to the Green Party (Klingemann 1986).

The first significant increase for right parties can be observed in 1969 and was a result of the emerging movements on environmentalism. This movement was perceived by politicians and had a corresponding effect on party programs. From 1976, one sees a rapid increase for both ideologies. Whether it is a coincidence that both lines are rising so sharply at the same time is difficult to determine. The party programs, however, offer some explanations.

So it is likely that the established parties have learned from the 1980 elections and see the Greens as serious competitors. A study confirms that Green voters welcome environmental protection. A survey showed that 89 percent of Green Party voters consider environmental protection to be very important. Among the established parties, only between 40 and 51 percent consider environmental protection to be a concern that must be supported. This difference could have led to environmentally oriented voters turning away from the established parties because they feel better represented by the Green Party. Even CDU/CSU and FDP voters had little confidence in a governing coalition between the two parties to find solutions to environmental problems. Only half of the CDU/CSU voters and 41 percent of the FDP voters believed that the coalition was capable of this. The voters of the left parties saw this coalition even more pessimistically, with 2 percent (SPD) and 0 percent (Greens) respectively (Berger et al. 1983). It can therefore be said that there is a link between the priority given to environmental protection and the voters' expectations of its implementation.
In the 1987 Bundestag elections that followed, the environment was still an important political concern. Compared to 1983, it became even more important. This can be seen not only in the party manifesto, where environmental policy occupies an ever larger part of the text, but also in the importance of the issue. The reasons for this were the meltdown of Chernobyl in April 1986 and the pollution of the Rhine later that year. Since these events took place only one year before the elections, the environment gained significantly in importance. Before the elections, there were 5 main issues that were of most political concern and dominated by economic issues. In 1983 environmental protection was in fifth place, in 1987 in second place. The split between the two political camps remained roughly the same as four years earlier. The CDU/CSU and FDP focused on economic issues, the SPD and the Green Environment as well as disarmament. This is also reflected in the content of the manifestos. In percentage terms, the value for the left-wing ideological parties rose from 9.43 (1983) to 10.05 (1987) percent (see Figure 2). This increase is possible because the absolute number of sentences for the Green Party has almost tripled since 1983, although the relative share has slightly decreased. The two curves are very similar until they peak in 1990 and then fall steeply. That year's election is the first to be held after reunification and with the new Linkspartei.PDS party.

How has Linkspartei.PDS, later in 2007 renamed Die Linke, changed the party landscape and influenced environmental policy? As the party comes from a socialist milieu, it is traditionally left-ideological and could therefore be one reason why attention to environmental issues reached a temporary peak in 1990. Environmental issues accounted for 9.14 percent of the 1990 Manifesto of the PDS, which was lower than that of the other left parties. The environmental program partly overlaps with those of the other parties. In waste policy and landscape protection, all parties agree that there must be changes. In other areas, too, there are overlaps with parties from the conservative political camp. There would be the promotion of protective associations (FDP, Green Party, SPD) or a better water protection (FDP, Green Party). It is striking that only left-wing parties speak of a necessary "ecological turnaround". One could interpret this as calling for a complete rethink
to solve the environmental problem, while the right-wing parties mainly propose selective solutions.

This peak in 1990 can thus partly be explained by the fact that a third left-wing ideological party entered the scene, which brought with it a solid environmental program. The environmental program of the PDS, formerly the SED, had to be worked out hard. The environmental policy of the GDR was not very consistent. In a first phase until 1960, environmental policy was still poorly coordinated and was mainly the result of individual initiatives. The SED, however, promised some financial support. Until the early 1970s, environmental policy was at a peak, as it was declared a matter of state and the efforts resulted in a state cultural law. After that, the government chose a path that was oriented towards the economy and thus also pushed the environment into the background. While in West Germany the environmental goals, e.g. the reduction of carbon dioxide emissions, were achieved, this was not the case in the GDR. Even international obligations could not be met. As a result, the SED regime withheld or falsified data. After reunification a dilapidated infrastructure was left behind, leading to high levels of air pollution (Huff 2014). The economic policy driven by socialism allows the conclusion to be drawn why the PDS has a lower share of environmental policy than the SPD (19.85 percent) and the Greens (20.43 percent).

But what exactly could explain that the Conservatives reached their peak in 1990? The CDU Social Affairs Committee noted deficits in the party's program. Among other things, the environmental program was criticized and revised in order to give it its own profile. The aim was to make the economy more environmentally friendly and to invest more in nature conservation projects. Consequently, in February 1989, the federal executive of the CDU adopted a revised environmental program. It can be seen that the salience of the environment for the year 1990 (10.5 percent) is slightly higher than in 1987 (8.34 percent) and the prior years (von Winter 1990).

For the FDP, the increase for 1990 was smaller, but still positive. This resulted in an increase of 2.22 percent for the entire right-wing ideology. In this context, the decline after 1990 is just as interesting. For the left-wing parties this means a
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decline of 50 percent by 1998, for the right-wing parties it was even 71 percent by 2002, before the share rose again. The decline in the number of sentences can be observed above all among parties in the political left. The number of sentences even declined until 2002, before rising again. The year 1994 is particularly noteworthy. Here, two conservative parties have more environmental phrases than three left-wing parties combined. This is mainly due to the FDP, which is responsible for almost four fifths of all environmental phrases.

1994 has been a so-called "super election year", during which other important local and EU elections were also held. This prompted the parties to reconsider their proven strengths. The CDU/CSU, for example, concentrated on economic policy, the fight against crime and foreigners policy. The SPD, on the other hand, focused on combating unemployment, environmental policy and housing policy (Schultze 1995). Against this background, it is all the more remarkable that the FDP surpasses all other parties in terms of the number of sentences.

Measured in terms of the number of sentences, the right-wing ideology has not followed a clear trend since 1994. Beyond the right-wing ideology, however, the proportion decreases. This can be explained by the fact that the number of party programs increased sharply. In other words, fluctuations cannot always be explained by an increase or decrease in interest in environmental issues, but simply by an increase in the size of the program.

After a phase of decline, the number of sentences suddenly increases significantly. For the left parties, the share rose to over 10 percent for the 2009 election. For the right parties, it rose to roughly 6 percent. But what are the reasons for this rapid increase? The fact that 2009 was again a so-called "super election year" could lead to a possible explanation.

If one looks at the parties individually, one will notice the following: All parties except for Die Linke have a higher proportion of environmental phrases for 2009 than in the elections four years earlier. It is also noted that the total volume of party programs has almost doubled. The CDU/CSU’s program received the largest
percentage increase, an increase of 147 percent (from 710 to 1752 phrases). Since at the same time the number of environmental phrases rose from 35 to 127 (an increase of 263 percent), the proportion of environmental phrases increased. This increase is not so pronounced for all parties. In the SPD, the number of environmental phrases increased from 43 to 69, but as the total volume of the program doubled, this positive effect evaporated, resulting in a minus of 1.92 percent in terms of environmental phrases compared to the total volume. It can be stated that all parties made additional efforts in the area of environmental policy in the "super election year" of 2009.
10.1 Connotation

It is assumed that conservative parties tend to make more negative statements about the environment than left-wing parties. Since the party programs show that the environment has become more relevant over time, it can be safely assumed that the parties have understood the importance of environmental policy and will therefore beware of making overly negative statements. The first graph shows the CDU/CSU as an example of what the division by connotation could look like. The values are given in percent for the respective year and rounded to whole values. It can happen that the bar is missing completely for a volume. This can happen if the party did not address the issue of the environment that year.

![Figure 3 Connotation by CDU/CSU (1949-2013)](image)

With the graph, which shows the development of the CDU/CSU, no typical pattern can be recognized. An increase is often followed by a decrease in the number of environmental phrases. The highest number of phrases was reached in 2013, which was also used as the reference year. That year the number is 153 records, which is the third best of all five parties. If one focuses on connotation, one sees that the proportion of neutral phrases decreases in favor of positive phrases. The ratio is also most unequal in 2013, when 125 positive sentences faced 28 negative.
sentences. Another exciting aspect is the relationship to the negative sentences. Negative statements can only be found during 4 years, namely 1976, 1994, 2005 and 2009. Obviously negative sentences always make up the smallest part where they appear. In this context, it is worth mentioning that the CDU/CSU has moved back and forth between the two ideologies several times. This was especially the case in the first years after 1949. The CDU/CSU could be found five times in the left-wing political spectrum. In these years, however, there were no negative sentences. This was not explicitly to be expected, because the Union parties were basically both born out of conservatism. The highest proportion of negative sentences can be found in 1994, when the proportion was 8.6 percent. It is exciting that two of the four years in which the Union parties expressed themselves negatively fall on the "super election years" of 1994 and 2009. It is not easy to say whether this was a lime scale to convince voters of their own environmental policy or whether the environmental policy of the other parties should be badmouthed. The two statements made in 1994 are as follows (translated to English):

“A red-green ecodirigism would be the wrong way to go: excessive planning and approval procedures not only inhibit general economic and technological development, but also often lead to unnecessary environmental pollution.”

“The use of nuclear energy is indispensable from an economic and ecological point of view.”

The first statement is to be seen more as a side blow to the red-green opposition, but the second statement is a way for the Union parties to promote their own cause. In the manifesto of 2009, the Union does not oppose other parties, but opposes a law at European level.

“We reject an EU directive on soil protection.”

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19 Manifesto of the CDU/CSU, Germany (1994)
20 Manifesto of the CDU/CSU, Germany (1994)
21 Manifesto of the CDU/CSU, Germany (2009)
The pattern for the FDP (see Figure 4) is even less clear than for the Union parties. The common denominator is that there were very few environmental phrases at the beginning and more and more in the course of time. The year with the largest share is 1994, which is a "super election year". Compared to the CDU/CSU, the FDP has more environmental values. The median is 42 for the FDP and 18 for the Union parties.

Consequently, the FDP also has the upper hand when comparing the number of records. Here, 1042 are compared to 641 phrases. The comparison of positive and neutral sentences between the two predominantly conservative parties is also interesting. With regard to positive sentences, the CDU/CSU has a considerable lead with a total of 57.88 percent (371 out of 641). The FDP only has a share of 42.61 percent (444 of 1042). It is obvious that the ratio of positive to negative phrases only turns in favor of positive phrases in the last two elections.

The negatively connotated phrases show some interesting findings. For the first time in 1987, the FDP expressed a negative view of an environmental issue. In the years that followed, the liberal party repeatedly expressed itself negatively, with
the exception of 2013. In total, it did so 22 times. And always when, according to RILE index, the FDP positioned itself in the right spectrum. Like the Union parties, the FDP has made numerous changes in political ideology. The last, however, took place from 1980 to 1983. In percentage terms, in 2002 the FDP had the highest percentage of phrases in which it expressed itself negatively about environmental policy.

Of the total of five phrases, four concerned national politics and one international politics. The FDP largely defends nuclear energy as a substantial part of energy policy. As a liberal party, it also opposes an increase in the eco-tax, as it condemns it as unjustified. The last point it condemns is the disproportionate promotion of organic farming without the corresponding consumer demand. At the international level, the FDP rejects the idea that social and environmental standards for participation in world trade should become the only valid prerequisite. In order to draw parallels with the CDU/CSU, it can be said that even the FDP in the two "super election years" does not renounce criticism of environmental policy and both defend nuclear energy as part of a successful environmental policy.

The SPD, as the longest-serving left-wing party, can best be compared with the other two established parties (see Figure 5). It is noticeable that the SPD also had years where no mention could be made of environmental policy (1949, 1953 and 1969). As expected, the SPD speaks more positively about the environment and environmental policy than the two conservative parties.

The positive phrases account for 51.82 percent of the total. There are no negative phrases. An exciting finding is that the SPD has a deeper median (35) than the FDP and also has a lower number of phrases (658). Thus, it wasn't the SPD that gave the most attention towards environmental policy until 1983 (when the Green Party joined), but the FDP. In 2002, the SPD was found in the right-wing spectrum. At first glance, however, this had no direct impact on the environmental issue. The
connotation of the sentences was predominantly positive and the number was also above the median.

As with other parties, including CDU/CSU, Green Party and Die Linke, the SPD is also making this leap up in 2009. One explanation for this is the "super election year", because it took place in 1994. Compared to the previous elections, the number of environmental phrases may have increased immensely in 2009. However, this effect disappears immediately if one looks at it in relation to the whole Manifesto. The environment has a share of less than 5 percent.

The 2009-manifesto also shows that the SPD did not try to catch votes with environmental issues. The nuclear phase-out had already been decided at that time and therefore gave the party the opportunity to reflect on the original values. These included above all a social market economy as well as a social democracy, equality within society and better protection for employees. In the introduction of the manifesto, environmental issues are mentioned as purchase. However, the orientation towards the core values was also important in 2009, as it was difficult for the SPD to mobilize voters. This had the reason that controversial and emotional campaign
issues were missing. Another reason was the involvement of the SPD in the 2005 Grand Coalition. The Chancellor had a low-risk election campaign conducted, in which any political polarization had to be avoided. Thus the SPD hardly succeeded in exposing its own issues (Korte 2010). As in the case of the FDP, it can be observed with the SPD that, over time, environmental policy and the environment are becoming increasingly positive connotations. This indicates the importance of this policy area.

The Green Party has a shorter history than other parties in terms of environmental policy, but one that is all the more effective. Overlooking all manifestos, the party has a median environmental rate of 172, by far the highest among the five parties.

![Figure 6 Connotation by Green Party (1983-2013)](image)

At 50.03 percent, the proportion of positive phrases is not quite as high as might have been expected. However no negative expressions are found. In 1994, the Green Party recorded a decrease in environmental phrases (from 234 in 1990 to 172 in 1994). This is atypical, as there was an increase for each of the previous parties. Other patterns are similar to those of the other parties. The most striking
are the two outliers to the top in 2009 and 2013. In terms of numbers, the Green Party is right at the top. In eight manifestos, the party brings it to almost 2000 sentences devoted to environmental issues. This is, for example, three times as much as SPD and CDU in eighteen manifestos.

From the outset, the Green Party had identified the environment as its core issue. In the context of the Manifesto as a whole, environmental issues reached their highest share in 1990 (20.35 percent). The lowest share was reached in 1998 with 8.02 percent. The median is only 10.86 percent. In the years 2009 and 2013, when the Greens had the highest number of phrases, things look quite different. In 2009 the share is 15.12 percent, but in 2013 only 9.08 percent with almost the same number of phrases. One of the reasons for this is that the priorities have shifted over time. Although the Green Party was the third highest party in the first Bundestag elections in which it took part, at 13.45 percent, the Green Party was still the third highest party. In the 1983-manifesto, the party focused above all on pacifism and military disarmament, the ecological turnaround and the strengthening of democratic thinking. In the 2013 Manifesto, it becomes particularly clear how the Greens' thematic areas have diversified over time. It is difficult to explain which topic is most covered by the Greens. Some issues are recurrent (anti-militarism, fair distribution within society), others have arisen over time (e.g. protection of minorities, LGBT). However, the Greens try to include an environmental aspect in each of the different themes:

“*We want to anchor sustainability aspects more firmly in sport and support and promote programs and initiatives for a climate friendly and environmentally friendly sport.*”\(^{22}\)

“*The switch to resource-efficient management and closed material cycles not only benefits the environment, but also strengthens the competitiveness of our economy and secures jobs.*”\(^{23}\)

\(^{22}\) Manifesto of the Green Party, Germany (2013)
\(^{23}\) Manifesto of the Green Party, Germany (2013)
Although the Die Linke party is the youngest party, it has been committed to environmental issues from the outset. The connotation is also largely positive (70 percent). There are also no negative statements. However, it should be noted that, unlike the Green Party, this issue is not at the core of the ideology.

![Figure 7 Connotation by Die Linke (1990-2013)](image)

Rather, in its 1983 manifesto, the party describes itself as an association of people with different backgrounds, such as the peace movement, feminism, pacifism, trade unions, and even ecology. Also with the declared main points environmental protection is only one of many. In addition to democratization/demilitarization and an ecological market economy, social issues dominate. In none of the manifestos do environmental issues account for more than ten percent. That is why Die Linke is the party of the left ideological spectrum that is least concerned with environmental issues. The median of 44 sentences is higher than that of the SPD. However, this is due to the fact that the SPD was already active at a time when the topic of the environment was hardly relevant.

---

24 Manifesto of Die Linke, Germany (2013)
Figure 8 summarizes the distribution of environmental phrases per party grouped by their connotation. What immediately catches the eye is the dominance of the Green Party. The second, surprisingly, is a traditionally conservative party in the form of the FDP. This is followed by the CDU and SPD, which are practically on par. The Left Party has been defeated, which was not surprisingly unable to make up for this deficit within this short period of time. Die Linke, however, has the highest proportion of positive statements in relative terms. In other words, it most frequently expresses itself in favor of active protection of the environment and proposes corresponding measures. Surprisingly, the conservative CDU followed and then the SPD. It is therefore reasonable to suspect that the FDP and the Green Party, while expressing their views on the environment in more detail, often fail to address specific measures.

![Figure 8 Total Environmental Phrases by Party](image_url)

In order to better investigate the relation between ideology and connotation, a number of regressions is performed. The basic premise from the first hypothesis is that right parties less positively about the environment than left-wing parties. Left and right are defined by the proven RILE index. The unit of analysis are the indi-
individual manifestos, which can be divided by year and party. For the following regressions, the number of environmental phrases forms the dependent variable, which is grouped by connotation. The political ideology measured by the RILE index is the independent variable.

A set of control variables is added for the regression. The first control variable is the core topic of a party. The effect of this variable is unclear. If it is a conservative party, it can probably afford to devote less attention to environmental issues without losing a large part of its electorate. A left-wing party that has the environment as a core issue, on the other hand, would probably have to devote more attention to environmental issues in order not to lose any of its electorate. Considering the general importance of the issue, I argue that environment is of particular significance, so it cannot be neglected by any of the parties. The numbers are retrieved from the party manifestos. According to prior knowledge of environmental shares, a threshold is set at 10 percent. Every manifesto, in which the share of environmental phrases exceeds the threshold, is coded with 1, else 0.

The second control variable is the Environment Minister. It cannot be ruled out that the party that is the minister during this period will emphasize the environment in its manifesto in order to be credible. In other words, the number of environmental sentences and probably also the positive connotation would be increased. A list of the former environmental ministers since 1986 could be found on the official site of the ministry. 25 The variable is a dummy and lagged. Meaning, the minister, which has been in office since 1987, would have a potential influence on the party manifesto of the next election period of 1990.

A third variable is the country's economic situation. When the economic situation in a country is stable, voters are more willing to vote for parties that address issues that do not directly serve the economic prosperity of a country. Therefore, parties may choose to devote more time to the environment in good economic times. Also

because this behavior is legitimized by the voters. In static economic times, environmental protection could be perceived as a luxury problem and parties are less likely to extensively address environmental issues in their manifestos. Therefore, the log of GDP per capita is included in 1000 U.S. dollars. The numbers are received from Statista. Unemployment (in percent) is the second variable included. The effect is similar to what was stated before. The higher the unemployment, the less dedication toward environment can be expected. The numbers are retrieved from the Statistisches Bundesamt of Germany.

The last control variable is party strength. This is measured by the share of the respective party in the Bundestag. The data are taken from the Bundeszentrale für politische Bildung and Statista. It is conceivable that especially parties with a low share in the Bundestag will focus on the issue of the environment, as it is a matter of time and is becoming more and more relevant. A descriptive statistics of the control variables can be found in the Appendix (Table B).

The regression is first performed as OLS regression. Ideology has been found to have a significant effect on positive and negative phrases (Table 1). The direction of the coefficients would provide support to the hypothesis, which states that right parties are relatively more likely to implement negatively connoted phrases. The positive coefficient for negative phrases indicates, that an increase of ideology on the RILE index would lead to an increase of negative phrases. However, these results are not conclusive, as unobserved party specific are not controlled for. For this reason, a LSDV regression is performed and therefore party fixed effects applied to control party-specific effects and limit selection bias (Mummolo & Peterson 2018). A number of tests has shown that no time fixed effects are necessary for the

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LSDV regression, as the reduction of the variance would have been severe. The party CDU/CSU serves as a reference variable.

Table 2 shows that the directions of the coefficients for positive and negative phrases remain the same as in Table 1. The strength of the coefficients slightly decreased. However, there is no statistical significance, therefore ideology has no significant effect on neither positive nor negative phrases. Thus, it does provide little support for the first hypothesis.
### Table 1: Regression Results with OLS

<table>
<thead>
<tr>
<th></th>
<th>Positive Phrases</th>
<th>Negative Phrases</th>
<th>Neutral Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td><strong>Ideology</strong></td>
<td>-0.330*</td>
<td>0.074***</td>
<td>0.234</td>
</tr>
<tr>
<td></td>
<td>(-0.670)</td>
<td>(0.030)</td>
<td>(-0.081)</td>
</tr>
<tr>
<td><strong>Minister</strong></td>
<td>0.175</td>
<td></td>
<td>1.003</td>
</tr>
<tr>
<td></td>
<td>(-14.030)</td>
<td></td>
<td>(-12.201)</td>
</tr>
<tr>
<td><strong>GDPpc (log)</strong></td>
<td>1.653***</td>
<td>0.006</td>
<td>-1.722***</td>
</tr>
<tr>
<td></td>
<td>(0.520)</td>
<td>(-0.119)</td>
<td>(-2.776)</td>
</tr>
<tr>
<td><strong>Bundestag</strong></td>
<td>0.528**</td>
<td>-0.036</td>
<td>-0.512**</td>
</tr>
<tr>
<td></td>
<td>(0.113)</td>
<td>(-0.087)</td>
<td>(-0.898)</td>
</tr>
<tr>
<td><strong>Core topic</strong></td>
<td>-0.238</td>
<td></td>
<td>-0.540</td>
</tr>
<tr>
<td></td>
<td>(-17.358)</td>
<td></td>
<td>(-16.453)</td>
</tr>
<tr>
<td><strong>Unemployment</strong></td>
<td>0.532</td>
<td>0.091</td>
<td>-0.572</td>
</tr>
<tr>
<td></td>
<td>(-2.440)</td>
<td>(-0.263)</td>
<td>(-3.334)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-3.249</td>
<td>1.140</td>
<td>103.665***</td>
</tr>
<tr>
<td></td>
<td>(-54.157)</td>
<td>(-4.044)</td>
<td>(56.348)</td>
</tr>
</tbody>
</table>

|                  | Observations   | 35 | 35 | 35 |
|------------------|----------------|------------------|-----------------|
| **R^2**          | 0.395          | 0.318            | 0.425           |
| **Adjusted R^2** | 0.265          | 0.227            | 0.302           |
| **Residual Std. Error** | 15.730 (df = 28) | 2.051 (df = 30) | 14.621 (df = 28) |

*Note:*  
* p<0.1; ** p<0.05; *** p<0.01
Table 2: Regression Results with LSDV

<table>
<thead>
<tr>
<th></th>
<th>Positive Phrases</th>
<th>Negative Phrases</th>
<th>Neutral Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.160</td>
<td>0.019</td>
<td>0.165</td>
</tr>
<tr>
<td></td>
<td>(0.444)</td>
<td>(0.023)</td>
<td>(0.413)</td>
</tr>
<tr>
<td>FDP</td>
<td>-1.864</td>
<td>1.893</td>
<td>0.181</td>
</tr>
<tr>
<td></td>
<td>(24.351)</td>
<td>(2.045)</td>
<td>(22.674)</td>
</tr>
<tr>
<td>Green Party</td>
<td>-0.544</td>
<td>0.171</td>
<td>2.216</td>
</tr>
<tr>
<td></td>
<td>(28.997)</td>
<td>(2.091)</td>
<td>(26.999)</td>
</tr>
<tr>
<td>Die Linke</td>
<td>6.069</td>
<td>0.283</td>
<td>-2.829</td>
</tr>
<tr>
<td></td>
<td>(31.745)</td>
<td>(2.193)</td>
<td>(29.558)</td>
</tr>
<tr>
<td>SPD</td>
<td>5.459</td>
<td>-0.492</td>
<td>-3.130</td>
</tr>
<tr>
<td></td>
<td>(16.302)</td>
<td>(0.899)</td>
<td>(15.179)</td>
</tr>
<tr>
<td>Minister</td>
<td>1.289</td>
<td>-0.145</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(8.525)</td>
<td></td>
<td>(7.938)</td>
</tr>
<tr>
<td>GDPpc (log)</td>
<td>1.734***</td>
<td>0.035</td>
<td>-1.812***</td>
</tr>
<tr>
<td></td>
<td>(0.677)</td>
<td>(0.029)</td>
<td>(0.630)</td>
</tr>
<tr>
<td>Bundestag</td>
<td>0.412</td>
<td>0.043</td>
<td>-0.438</td>
</tr>
<tr>
<td></td>
<td>(0.727)</td>
<td>(0.059)</td>
<td>(0.677)</td>
</tr>
<tr>
<td>Core Topic</td>
<td>3.116</td>
<td>-3.516</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(12.188)</td>
<td></td>
<td>(11.349)</td>
</tr>
<tr>
<td>Unemployment</td>
<td>0.328</td>
<td>0.100</td>
<td>-0.612</td>
</tr>
<tr>
<td></td>
<td>(1.984)</td>
<td>(0.085)</td>
<td>(1.848)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.655</td>
<td>-1.944</td>
<td>106.067***</td>
</tr>
<tr>
<td></td>
<td>(37.558)</td>
<td>(2.740)</td>
<td>(34.971)</td>
</tr>
<tr>
<td>Observations</td>
<td>35</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>R²</td>
<td>0.402</td>
<td>0.232</td>
<td>0.430</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.153</td>
<td>0.131</td>
<td>0.192</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>16.887 (df = 24)</td>
<td>1.975 (df = 61)</td>
<td>15.724 (df = 24)</td>
</tr>
</tbody>
</table>

Note: *p<0.1; **p<0.05; ***p<0.01
In order to observe a potential link with political ideology, it makes sense to test the correlations between the dependent and independent variables (Appendix Table A). This is done using a Pearson correlation test. Here, the significant, positive correlation coefficient (0.37) between negative phrases and political ideology becomes clearly visible. Although the correlation is not strong, it is not surprising. In the manifestos, negative statements on environmental policy were made exclusively by the traditionally conservative CDU/CSU and FDP. These statements only occurred when the party had a positive value on the RILE Index, i.e. was part of the right-wing political spectrum.
10.2 International and domestic phrases

The distinction between domestic and international sentences is made to elaborate whether party ideology affects discrimination against global environmental concerns. Examples for international sentences are “We will set up policies within the European Community to guarantee an effective protection of nature, environment and health”\textsuperscript{31}, “We will promote harmonization of environmental standards on the European and global level”\textsuperscript{32} and “The goal must be for Europe to reduce its emissions by 20 percent by 2020”\textsuperscript{33}. It is uncertain, if a difference between left and right parties can be found. It is mostly right parties, which show isolating tendencies, but parties from the leftist spectrum do show anti-globalist tendencies as well. However, these are foremost driven by the efforts to prevent exploitation by large conglomerates. Consequently, the left targeted the winners of the economic globalization (Voelz 2017).

Nevertheless, environmentalist issues in an international context are very much supported by left parties, whereas right parties show contrary tendencies. Anti-environmentalist behavior has been a counter reaction to the intense environment protection propagated by green parties since the 1970’s (Ignazi 1992). A recent study suggests two reasons why right parties may not share the concerns with global environmental protection. It became apparent that a number of European right-wing parties does not believe in man-made global warming and because of that do not consider action. And secondly, right-wing parties do not consider nationalism and environmentalism to be contradictory. The terms energy independence and self-sustainability are often mentioned in the context of environmentalism. For instance, the French Front National goes one step further and explicitly opposes the idea of a global eco-government (Gemenis, Katsanidou & Vasilopoulou 2012).

\textsuperscript{31} Manifesto of the CDU/CSU, Germany (1987)
\textsuperscript{32} Manifesto of the CDU/CSU, Germany (1998)
\textsuperscript{33} Manifesto of the Green Party, Germany (2002)
Figure 9 depicts the ratio for international and domestic phrases, which have been related to environmental protection, for all manifestos combined.

International phrases only make for a small part of the entity of environmental phrases. In the first years, there has been strong volatility, considering that some years do not include international phrases at all. The share of international phrases starts to show consistency as of 1972, on average 12.9 percent. The year 1972 experienced a major shift in respect with environment, as the first UN Conference on the Human Environment took place in Stockholm in the same year. Environmental problems were acknowledged to have a global dimension and consequently the problem solving became an international interest (Dunlap 1994). This trend has been adopted by the ruling German parties, foremost the leftist SPD, which plead for intensified cooperation between OECD, NATO and the European Community.34 Both conservative parties, CDU/CSU and FDP are more cau-

34 Manifesto of the SPD, Germany (1972)
tious regarding international cooperation. Thus, it does not surprise, that the Social-Democrats have the highest share of international phrase in the 1972-manifesto.

Figure 10 shows the timeline of international phrases split by ideology. The values displayed were calculated from the total of environmental phrases of the parties of the same ideology. Here, the focus is on right parties, as these are expected to show a lower average than left parties.

![Figure 10 International Sentences by Ideology](image)

The statistics show, that parties were highly volatile in respect of their political beliefs. The most volatile has been the liberal FDP, switching between political camps eight times between 1949 and 1983, according to the RILE index. After 1983, the FDP has settled in the conservative camp. The graph shows that for most years, left parties are more likely to embed environmental phrases in an international context than the opposite camp. In total, the right parties are averaging at
16.88 percent, whereas the left remains at 20.64 percent. The FDP shows an outlier in 1961, which favors the Left. The graph shows, that both lines have similar trends. The conservative parties are tracing their political opponents, but on a lower scale. The past decades however show mixed trends with small deviations between the two political camps. Both lines peak in 1990 (left) and 1998 (right). Beside 1961, the year 1990 shows the biggest gap between the two ideologies in terms of international phrases.

One of the most striking features on Figure 11 is the ambivalence of the two conservative parties. Those parties show more outliers than the left parties. Values for the FDP are ranging between 0 and 33.3 percent, the CDU/CSU between 0 and 31.6 percent. The left parties have more consistency in their values, with only few outliers. However, it has to be taken in account, that the Green Party and Die Linke only came up, when German environmental politics has already been partly
internationalized. All parties mention the importance of transnational and international cooperation to reach environmental goals, be it within the European Community/Union or a greater context. However, certain topics can be assigned to an ideology. The left-wing parties focus on international nuclear disarmament and the responsibility of industrialized countries towards the Third World. A thematic focus of the left parties is social responsibility in order to improve the development opportunities of Third World countries. This has to do with the environment to the extent that industrialized countries should make their economies environmentally friendly and not exploitative.

In order to test a possible effect between ideology and international phrases, a regression is performed. Here again it is controlled for unobserved party specific effects. In addition, there is the control variable *Globalization*, which measures the political globalization of Germany in percent. The numbers are retrieved from a dataset by Gygli et al. (2019). A high level of globalization could have the effect that parties express themselves more frequently in an international context in their party programs. As already discussed, right wing party can have anti-globalist tendencies. This premise leads to the second hypothesis:

\[ H2: \text{Right parties express themselves relatively less on environmental issues in an international context than leftist parties.} \]

35 e.g. Manifesto of the *Die Linke*, Germany (1990)
36 Manifesto of the SPD, Germany (1990)
Table 3: Regression Results with International/Domestic Phrases

**Dependent variable:**

<table>
<thead>
<tr>
<th></th>
<th>International Phrases</th>
<th>Domestic Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
</tr>
<tr>
<td>Ideology</td>
<td>-0.153</td>
<td>0.117</td>
</tr>
<tr>
<td></td>
<td>(0.162)</td>
<td>(0.169)</td>
</tr>
<tr>
<td>FDP</td>
<td>0.308</td>
<td>2.248</td>
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<tr>
<td></td>
<td>(3.926)</td>
<td>(9.272)</td>
</tr>
<tr>
<td>Green Party</td>
<td>-7.768</td>
<td>8.699</td>
</tr>
<tr>
<td></td>
<td>(6.089)</td>
<td>(11.069)</td>
</tr>
<tr>
<td>Die Linke</td>
<td>-11.963</td>
<td>13.061</td>
</tr>
<tr>
<td></td>
<td>(8.152)</td>
<td>(12.096)</td>
</tr>
<tr>
<td>SPD</td>
<td>-10.572*</td>
<td>10.360</td>
</tr>
<tr>
<td></td>
<td>(5.802)</td>
<td>(6.206)</td>
</tr>
<tr>
<td>Minister</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>(0.554)</td>
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<td>GDPpc (log)</td>
<td>0.077</td>
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</tr>
<tr>
<td></td>
<td>(0.277)</td>
<td></td>
</tr>
<tr>
<td>Bundestag</td>
<td>-0.130</td>
<td>0.886</td>
</tr>
<tr>
<td></td>
<td>(3.116)</td>
<td>(3.239)</td>
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<td>Core Topic</td>
<td>-2.042</td>
<td>-0.174</td>
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<td></td>
<td>(4.288)</td>
<td>(4.660)</td>
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<tr>
<td>Unemployment</td>
<td>0.825</td>
<td>0.006</td>
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<td></td>
<td>(0.705)</td>
<td>(1.036)</td>
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<td>Globalization</td>
<td>-0.291</td>
<td>-0.361</td>
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<td></td>
<td>(0.272)</td>
<td>(0.617)</td>
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<td>Constant</td>
<td>38.864</td>
<td>99.622**</td>
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<tr>
<td></td>
<td>(25.812)</td>
<td>(41.145)</td>
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<tr>
<td>Observations</td>
<td>35</td>
<td>35</td>
</tr>
<tr>
<td>R²</td>
<td>0.297</td>
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<tr>
<td>Adjusted R²</td>
<td>0.044</td>
<td>-0.046</td>
</tr>
<tr>
<td>Residual Std. Error</td>
<td>6.173 (df = 25)</td>
<td>6.416 (df = 23)</td>
</tr>
</tbody>
</table>

*Note:* *p<0.1; **p<0.05; ***p<0.01
The direction of the coefficients coincides with the basic premise and would also confirm the hypothesis e.g. an increase in political ideology would result in a decrease in international phrases. Table 3 shows no significant effect on both dependent variables whatsoever. Due to a lack of significance, this hypothesis must be rejected. It can therefore be concluded that ideological differences are not decisive for the extent of international phrases. It is likely that in today's globalized world political isolation is hardly possible for a democratic country. Since environmental pollution or other ecological problems often transcend national borders, conservative parties are also forced to cooperate internationally.
11. Discussion

The aim of this study was to show whether there is a connection between political ideology and environmental protection. To investigate this, party programs were analyzed and all environmentally relevant phrases were grouped by connotation. Various studies have shown that right-wing parties tend to reject environmental policy reforms or even deny climate change. They are therefore more critical of environmental protection. One reason for this is that conservative individuals are often associated with business and the economy. Environmental protection is receiving much more encouragement from left-wing parties. It was above all the Green Party that triggered a real boom in Germany. The results reflect the findings of previous studies only to a limited extent. The evaluation of the manifestos revealed some surprising findings. For example, the ratio of neutral to positive phrases was roughly the same for all five parties. The two traditionally right-wing parties also do not lag behind in the number of environmentally relevant phrases. However, no significant connection could be found for political ideology, neither with negative nor with international phrases. It is possible that environmental protection is too important a topic for all parties to comment negatively on. Even if this happens occasionally, it is mainly positive or neutral statements about environmental protection that are made.

Overall, this study has helped to better understand that political ideology alone is not always decisive. Although the ideological gaps are sometimes significant, the reality is sometimes quite different. This is reflected in the fact that the FDP, a traditionally conservative party, is the second most frequently expressed about environmental protection.
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of Nuclear Energy in Germany!” *Environmental Politics* 21(1): 159–64.


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Appendix

A. Correlation Matrix for Ideology and Connotation

![Correlation Matrix Diagram](image_url)
### B. Descriptive Statistics of Control Variables

<table>
<thead>
<tr>
<th>Statistic</th>
<th>Min</th>
<th>Pctl(25)</th>
<th>Median</th>
<th>Mean</th>
<th>Pctl(75)</th>
<th>Max</th>
<th>St. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minister</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.2</td>
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<td>1.0</td>
<td>0.4</td>
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