

Chapter 6: The environmental movement and environmental conflicts

Overview

In this chapter, you will learn why social conflicts arise about how we treat and relate to nature and what forms these conflicts take. You will learn about different theories that are used to explain the success or failure of social movements and you will become familiar with the history of the environmental movement. You will learn how the environmental movement's perceptions of nature-related problems have changed over time and which socio-structural qualities characterise the environmental movement. Overall, you will develop an understanding of the extent to which the environmental movement has changed the organisation of society-nature relations.

In recent years, increasing concern about climate change and its impact on current and future societies has become an important motive for young people in particular to get involved in socio-political issues. The climate movement is one of the most influential social movements of the last decade. The climate movement thus joins a history of social movements that have attempted to change social conditions. The French sociologist Alain Touraine described social movements as the central driver of the transformation of post-industrial societies (Touraine 1981). This assessment may seem exaggerated to some people. However, it is undisputed that social movements such as the women's movement, the civil rights movement, the peace movement, the labour movement and, last but not least, the environmental movement have changed our society. The history of the environmental movement dates back to the late 18th century: Concern for nature has its roots in the cultural era of Romanticism in Europe, which occurred in the late 18th and early 19th centuries (Radkau 2014). Romanticism developed as a countermovement to the experiences of the Enlightenment, urbanisation and secularisation and was against processes that Max Weber described as the "disenchantment of the world" (Weber 2015 [1919]: 30). Contrary to the claim that nature could be mastered through science and technology, the Romantics attributed nature with subjective qualities and emphasised the spiritual connection between humans and nature (Safranski 2014). Based on these roots, the environmental movement has developed into a key social movement of our time – the sociologist Manuel Castells even described it as one of the most influential: "If we are to appraise social movements by their historical productivity, namely, by their impact on cultural values and society's institutions, the environmental movement has earned a distinctive place in the landscape of human adventure" (Castells 2010: 168).

Before we take a closer look at the environmental movement, let us first clarify what is meant by social movements in general and by the environmental movement as part of the so-called new social movements in particular. Friedhelm Neidhardt and Dieter Rucht define social movements as social entities consisting of interconnected individuals, groups and organisations that – more or less based on collective feelings of identity – express protest through joint actions in order to change social or political conditions or to counteract impending changes (Rucht

& Neidhardt 2020: 839). Although organisations can be part of social movements, a social movement is not an organisation per se, but rather a network. According to Neidhardt and Rucht, social movements differ from organisations such as associations, clubs or parties in three respects: Firstly, there is no clearly attributable membership. For example, it is not possible to clearly determine when a person can be labelled as belonging to an environmental movement. Secondly, social movements do not have a clearly structured division of tasks and roles. For example, social movements do not have a public relations department or an elected or appointed board, but this does not mean that there are no leaders or people who fulfil certain tasks. However, this is more situational and less formalised. Thirdly, social movements rely on the intrinsic motivation of their followers to be able to act. Unlike companies, public authorities or associations, they cannot secure commitment through financial resources (Rucht & Neidhardt 2020: 840f.). In the relevant literature on social movements, the term “new social movements” is used to characterise a qualitative change in the orientation of social movements that took place primarily in the 1960s and 1970s. While the driving force behind the labour movement (an “old” social movement) was class antagonisms and the associated demand for redistribution and material gain, the new social movements are oriented towards other areas of conflict. Their demands are aimed at changing society towards a more peaceful (peace movement), more gender-equitable (women’s movement), more environmentally friendly (environmental movement), etc. society. Questions of material redistribution tend to take a back seat (Yearley 2005: 11; Della Porta & Diani 2015a: 4).

According to the above definition, the environmental movement is a social movement that focuses on environmental problems (Rootes & Nulman 2015: 730). The specific problems can be diverse: for example, people protest against waste incineration plants or nuclear power, or in favour of animal rights and climate protection. Accordingly, it makes sense in principle to speak of environmental movements in the plural, even if the environmental movement is sometimes referred to in the singular in order to emphasise commonalities between the individual strands or to point out genealogies. In the following, we will refer to the environmental movement or environmental movements, depending on the context.

This chapter is organised as follows: In the next section, we take a closer look at the concept of conflict in general and environmental conflicts in particular, as environmental conflicts of all kinds are the environmental movement’s central areas of action. We then provide an overview of the most important theories of social science movement research in order to provide an idea of how social movements can be approached analytically as an object of investigation. Building on this, we explain the history, the changing worldviews (later referred to as frames), and the main structural features and effects of the environmental movement. Finally, we provide a brief outlook on current developments in the field of environmental movements and environmental conflicts.

1. The environment as an area of conflict

In the course of progressive social modernisation²³ it is becoming more and more clear that nature cannot be regarded as external to society – it is increasingly impossible to maintain the artificially drawn boundary between society and nature (→ chap. 1 introduction). For example, plants become social products due to genetic modification; where the natural environment begins or ends is negotiated in every planning process. So, if nature is not regarded as external, unchangeable and predetermined, then it is hardly surprising that ecological issues are politicised and the subject of social conflict (Sutton 2007: 112). In particular, the perception and politicisation of the unwanted side effects of industrial and scientific/technical processes and other processes of social development and modernisation have triggered environmental and technological conflicts since the 1960s and are regarded as a central impetus for the emerging environmental movement. The sociologists Ulrich Beck and Anthony Giddens have comprehensively addressed and analysed these developments (Beck et al. 1994; Giddens 1990) (→ chap. 5 on risk and conflicts about risk).

As conflicts are a central feature of societies, sociology has always been concerned with them and analysed their consequences for social change. Karl Marx, one of the founding fathers of sociology, is one of the most prominent figures in this field. Modern conflict sociology has its origins in the conflict theories of Ralf Dahrendorf (Dahrendorf 2011 [1992]) and Lewis Coser (Coser 2009 [1956]). Under the influence of Talcott Parsons' structural functionalism, which focused on social consensus, stability and the establishment of order, the sociological mainstream considered conflicts negative and dysfunctional until the 1950s (Saretzki 2010: 35). Ralf Dahrendorf and Lewis Coser succeeded in freeing the concept of conflict from this negative charge by working out that conflicts do not necessarily have a disintegrating effect, and can even stabilise social order and contribute to social progress (Bonacker 2005: 12f.). As with many of the main concepts in sociology, there is no standardised definition of the concept of conflict, as it varies with the theoretical perspective being used to assess conflict phenomena. However, the concept of conflict can be roughly defined as follows, loosely based on Thorsten Bonacker: A conflict is a social phenomenon characterised by the interaction of two or more conflicting parties with different, usually opposing interests and goals (Bonacker 2005: 14f.). Accordingly, the environmental movement and issue-specific environmental movements are often one of the conflicting parties in environmental conflicts. Environmental conflicts articulate opposing ideas about the distribution of environmental impacts, resources (areas of land, sinks, sources), environmental protection costs, etc., but also fundamentally different values about the relationship between humans and the environment, humans and animals, and even competing versions of the truth (Kraemer 2008: 221ff.; Bogner

23 The concept of social modernisation describes the mutually dependent processes of structural change involved in the transition from traditional to modern societies. These structural changes include, for example, urbanisation, industrialisation and later tertiarisation, rationalisation, scientification, secularisation and individualisation (Zapf 1994: 18f.).

2014). Three central types of conflict can be identified: Conflicts of interest, value conflicts and knowledge conflicts.

According to Klaus Kraemer, conflicts of interest are based on competing interests and expectations related to the utilisation of certain environmental functions. The most important environmental functions are the source and sink functions. The source function refers to the utilisation and/or consumption of natural resources (e.g., oil, water, wood, etc.); the sink function refers to the environment's capacity to absorb pollutants and waste (e.g., forests as CO₂ reservoirs, landfill sites, nuclear repositories, etc.) (Kraemer 2008: 221f.). For example, conflicts can arise over the use of the finite resource of oil or over the use of a certain area as a landfill site or local recreation area. It should be noted that scarcities (e.g., in the case of oil) or absorption capacities are also socially constructed and subjectively perceived, i.e., they do not necessarily correspond to physical conditions. This already points to the role of values in environmental conflicts.

Environmental value conflicts, on the other hand, are primarily fuelled by the questions of which forms of environmental use are considered legitimate, which environmental interventions are considered (too) risky (e.g., genetic manipulation), which environmental conditions are worth preserving and what degree of effort is justified for achieving this (Kraemer 2008: 229). Unsurprisingly, in answering these questions different values and worldviews come into conflict with one another. Competing understandings of nature and incompatible ideas about nature and the organisation of human-environment relationships play a decisive role here (→ chap. 2 on the social construction of nature), as do society-nature relations and their transformation (→ chap. 3 on society-nature relations).

While conflicts of interest are caused by competing usage claims and value conflicts by different normative ideas about how to manage environmental goods and services, knowledge conflicts are about the quality and situatedness of environmental knowledge. Knowledge conflicts revolve around key questions such as: "Which knowledge is the true knowledge? How can this knowledge be determined? And how reliable are the respective knowledge claims?" (Bogner 2014: 124). This involves mutually exclusive truth claims and their (scientific) justification. Examples of knowledge conflicts include disputes about risk, such as conflicts over the assessment of the risks of nuclear energy or genetic engineering, but also conflicts of interpretation about climate change and the appropriateness of various measures and courses of action. In knowledge conflicts, expertise and counter-expertise are typically pitted against each other and thus also different scientific approaches, paradigms and convictions (which are in turn determined by competing values, among other things).

Since environmental problems usually become visible and understandable through a scientific approach, many conflicts in which environmental movements are involved are knowledge conflicts. However, it is obvious that the three types of conflict overlap and can only be separated from each other at an analytical level. In this mixed situation, environmental movements represent specific ideas about society-nature relations, which will be considered in more detail in the course

of this chapter. Ultimately, these conflicts always feature different worldviews, because environmental problems and risks are always identified on the basis of values, different scientific approaches and/or competing usage claims, or are selected as problem or conflict areas with disputed truth claims.

2. Theories of social movements

Research on social movements is a separate, interdisciplinary field of research that is located at the interface between political science and sociology (overviews of the theories of social movements and the current state of research can be found here: Della Porta & Diani 2015b, 2020). Numerous theoretical approaches have been developed to analyse the emergence and progression of social movements. This chapter does not have sufficient scope to provide a comprehensive overview of the current state of knowledge and the full theoretical repertoire of this area of research. Therefore, we will only provide a cursory overview of the most prominent theoretical approaches in order to demonstrate how the social sciences approach social movements as a research subject.

Resource mobilisation theory, the theory of political opportunity structures and framing theory form – as Donatella Della Porta and Mario Diani put it – the core of the “classical agenda” of research on social movements (Della Porta & Diani 2015a: 5). In short, the research programme on social movements encompasses both theoretical and empirical work on a) the organisational and entrepreneurial preconditions for the mobilisation of collective action (resource mobilisation), b) cultural meaning-making with regard to the reasons, strategies, goals and identities of social movements (framing) and c) the possibilities and limits of collective action resulting from the structures of the respective political system (political opportunity structures).

2.1. Resource mobilisation theory

While research on collective action has long emphasised the irrationality and spontaneity of mass phenomena, following on from Gustave Le Bon’s work “Psychology of Crowds” (Le Bon 2009 [1895]) (Mertig et al. 2002: 465), the theory of resource mobilisation is the first to take a different approach (McCarthy & Zald 1977). This theory emphasises the planned, rationally calculating aspects of actions and decisions in the context of social movements. Bob Edwards and John McCarthy differentiate between five types of resources that social movements can mobilise and use strategically to achieve their goals: material (money, premises, equipment, etc.), cultural (symbols, videos, magazines, specialist knowledge about how to organise a demonstration, etc.), moral (legitimacy, solidarity, sympathy, prominent supporters, etc.), human (manpower, leadership skills, individual experience, etc.) and socio-organisational resources (infrastructure, social networks, etc.) (Edwards & McCarthy 2004: 125ff.). The importance of resources is emphasised because “dissatisfaction with the status quo” is not a sufficient condition for protest and its success or failure: Without staging that effectively attracts media attention, without material and moral support and social networks, the

current Fridays for Future movement would not have been able to become so enormously significant. Just because a certain group is dissatisfied with a certain situation does not automatically lead to the emergence of a successful social movement. Rather, social movement organisations or even individual movement entrepreneurs must have or be able to acquire relevant resources and be able to use these resources in a targeted manner to mobilise protest (Rucht & Neidhardt 2020: 857). In resource mobilisation theory, the type and scope of available resources becomes the central explanatory variable for the decisions and actions and ultimately the success or failure of social movements (Della Porta & Diani 2020: 15).

2.2. Framing

Framing theory, on the other hand, places the socio-cultural definition of problems and their resonance at the centre of the analysis of social movements. It draws on Erving Goffman's work "Frame Analysis: An Essay on the Organization of Experience" (Goffman 1974), in which the concept of the frame is developed as a central element for the interpretation of social situations and thus for interpretative sociology. Goffman uses the concept of frames to describe a collective, mostly unconscious organising principle for everyday experiences (Goffman 1974: 22) that enables people to interpret everyday situations and act meaningfully in them. In Goffman's words, a frame "allows its user to locate, perceive, identify, and label a seemingly infinite number of concrete occurrences defined in its terms" (Goffman 1974: 21).

In the field of research on social movements, perspectives that emphasise the importance of interpretative processes have existed since the late 1960s. However, it was not until the 1986 publication of the article "Frame Alignment Processes, Micromobilization, and Movement Participation" by David Snow and his colleagues (Snow et al. 1986) that this focus on the embedding of individual values and interests in superordinate interpretative frameworks gained greater significance (Snow 2004: 386). Framing theory (for an overview see: Snow 2004) takes a social constructivist perspective and focuses on the collective processes of meaning-making and definition that are necessary to legitimise the actions of social movements for their members and ultimately for society as a whole. Three types of frames are of particular importance here: diagnostic, prognostic and motivational frames. Diagnostic frames serve to identify the causes of certain grievances. They provide a definition of the problem in which perceived injustices play a major role and certain actors or groups of actors are assigned the roles of victims or culprits. Prognostic frames contain the description of a solution to a problem and are used to formulate goals for action. They indicate what needs to be done with regard to possible desired and undesired events. Prognostic frames are often derived from the diagnostic frames and are therefore limited by them. Motivational frames comprise a vocabulary of motives for action (e.g., urgency, dangerousness, necessity, etc.) that are intended to incentivise action (Benford & Snow 2000: 615ff.). Framing processes also serve the formation of collective identities by offering overarching interpretations, formulating orientations for action

and lending greater significance to individual convictions. This defines who you are and who is to be regarded as an opponent and for what reasons.

2.3. The theory of political opportunity structures

Peter Eisinger introduced the concept of political opportunity structures to research on social movements in his 1973 essay “The Conditions of Protest Behavior in American Cities” (Eisinger 1973). At its core, the theory of political opportunity structures (for an overview see: Kriesi 2004) assumes that political opportunity structures are the decisive factors influencing the course and success of social movements (Kitschelt 1986: 58). While the framing theory and resource mobilisation theory focus on the internal conditions of social movements, the theory of political opportunity structures focuses on the external conditions within which social movements emerge and act. From this perspective, the decisive factor is the degree of openness or closedness of a political system, influenced by the degree of its democratisation, but also, for example, by the extent of its federal decentralisation; the stability or instability of political structures; the assertiveness of political elites; the availability or lack of alliances and support groups (Rucht & Neidhardt 2020: 858). In addition to such political opportunity structures, discursive opportunity structures (primarily the media) also play an important role. A social movement’s opportunities for action are significantly influenced by its access to the media system and the way its actions are reported, as well as the conditions of digital public spheres (Kriesi 2004: 86; Della Porta & Diani 2020: 224ff.). The theory of political opportunity structures thus emphasises the importance of structural configurations that influence the frequency of protests, the type of protest (e.g., violent or peaceful) and the success of protests. For example, social movements have a greater chance of success if there is a free and diverse press landscape and a broad spectrum of competing interest groups with which alliances can be forged (Rucht & Neidhardt 2020: 858).

3. The structure and progress of the environmental movement

As already mentioned, it is not possible to speak of “the environmental movement” in a strict sense; there are various environmental movements with different emphases and locations. Nonetheless, there are uniform elements in this diversity, which become clear when we look at the historical development of environmental movements. The following overview of this movement’s development over time and its changing structures and focal points also provides insights into the changes that have occurred in relation to the social construction of nature (→ chap. 2 on the social construction of nature).

3.1. A brief history of the environmental movement

As already mentioned at the beginning, Romanticism, with its emotionalised, romantic and aesthetic perception of nature (Brand & Stöver 2008: 220), formed the ideal basis for the nature conservation that emerged in the 19th century. An unease with industrialisation and its consequences for nature gave rise to the desire for the – at least partial – preservation of the “sublimeness” of natural land-

scapes. The main demand of conservationists initially related to the establishment of nature reserves (Rucht & Neidhardt 2020: 847). One particularly influential organisation in this context is the Sierra Club, which was founded in the USA in 1892 and was dedicated to the protection of the wilderness and the establishment of national parks. The Sierra Club still exists today and claims to have 3.8 million members²⁴. On the threshold of the 20th century other issues came into play, such as air pollution control, animal protection and a particularly strong push for bird protection that originated in England (Radkau 2014). In this early phase the environmental movement, which strictly speaking could be characterised more as a nature conservation movement, was largely politically neutral, if not apolitical, and its demands were quite reserved. With the outbreak of the First World War in 1914, the Second World War that soon followed and the phase of European reconstruction that began in 1945, environmental issues initially receded into the background of public attention across all countries (Mertig et al. 2002: 450). Humanity turned its attention to more pressing problems.

The origins of the modern environmental movement, which was only loosely linked to the preceding (and comparatively conservative) nature conservation endeavours, lie in the USA at the end of the 1960s and beginning of the 1970s. After the Second World War, optimism about progress weakened significantly in the 1960s and ecological problems gained greater attention. There were three main reasons for this (Kern 2008: 104f.): Firstly, numerous regional citizens' initiatives emerged that opposed the construction of roads, dams, airports, open-cast mining and deforestation – a development that was likely nurtured by the general social climate of protest. Secondly, a public debate about radioactive environmental contamination from nuclear bomb tests began, primarily fuelled by the peace movement. Thirdly, the increasing use of risky technologies in the 1950s and 1960s led to more and more environmental problems. In this context, Rachel Carson, an American biologist and science journalist, became an important spokesperson for the environmental movement with her book “*Silent Spring*”, published in 1962. In it, Carson describes the devastating consequences of herbicides and pesticides for flora and fauna and the ecological balance. No less influential was the study commissioned by the Club of Rome²⁵ on the state and future of humanity, published in 1972 under the title “*Limits to Growth*”. Based on computer simulations, the authors of the study came to the conclusion that with continued population growth and corresponding industrialisation, environmental pollution, food production and the exploitation of finite resources, the planetary limits to growth will be reached within a hundred years (Meadows et al. 1972: 23). Both publications became widely known in Western Europe and North America and thus also sensitised politicians to environmental issues. The focus of the environmental movement thus shifted in the 1960s and early 1970s away from the “old” nature conservation issues towards a problematisation of the negative side effects of technical and economic progress and growth. Joachim

24 See here: <https://www.sierraclub.org/about-sierra-club>, checked on 03.04.2024.

25 The Club of Rome is an association of experts founded in 1968 to address issues relating to the future of humanity and sustainability.

Radkau describes the period between 1965 and 1972 as the “Ecological Revolution” (Radkau 2014) in which an enormous mobilisation for environmental issues took place on the basis of a new frame of the environmental movement (Mertig et al. 2002: 450). This ecological revolution was initially driven primarily by local citizens’ initiatives, which campaigned for an improvement in living conditions in the neighbourhood (Brand & Stöver 2008: 224). Larger organisations only gained increasing influence in the following period.

In the 1980s and 1990s the institutionalisation of the environmental movement continued to progress. Around the world, cross-sectoral cooperation between states, companies and environmental protection organisations to tackle environmental problems and adopt environmental policies became established under the heading of “governance”. Environmental protection organisations were accredited as formal partners in more and more international consultations (e.g., UN climate conferences) (Brand & Stöver 2008: 230). At the same time, the environmental movement turned its attention to issues of environmental justice, particularly in the USA. This made the environmental movement compatible with movements critical of globalisation that problematised the consequences of neoliberal globalisation, particularly for the Global South (Kern 2008: 108), and also helped the environment movement to grow its international network. At the end of the 1990s and beginning of the 2000s, some authors note a decline in the dynamism of the environmental movement or even problems finding new adherents. Many young people preferred to get involved in the more active and more visible movement critical of globalisation, which certainly took up environmental problems, but did not make them a priority (Brand & Stöver 2008: 243). With the emergence of global climate movements, above all the youth protest actions of Fridays for Future, this trend has reversed in recent years and people are once again protesting in favour of climate protection measures, sometimes in more radical and confrontational movements such as Extinction Rebellion, which use civil disobedience to force governments to take measures against climate change, species loss and environmental destruction. The threat to the foundations of a liveable future has contributed to a far-reaching mobilisation of both younger and older population groups around the world.

Both the early conservation-focused environmental movement as well as the new environmental movement that emerged in the late 1960s and early 1970s were, in line with the theory of resource mobilisation, always able to mobilise extensive material (e.g., financial donations from supporters), moral (e.g., sympathy from large sections of the population), human (e.g., a large number of scientists who supported the environmental movement with their expertise) and socio-organisational resources (e.g., alliances with other social movements such as the anti-nuclear movement). In terms of the theory of political opportunity structures, the responsiveness of Western governments, social elites and international organisations (e.g., the UN) to environmental problems also contributed to the institutionalisation of the environmental movement over the decades. It has also already been mentioned that the dominant frames – i.e., the patterns of perception and interpretation described by the framing theory explained above – have changed

throughout the history of the environmental movement. In the following, we will take a closer look at the frames that can be identified.

3.2. Frames of the environmental movement: Conservation, environmental protection and ecology

The fact that the central frames of the environmental movement have changed repeatedly over the course of its history does not mean that one frame has always been replaced by another. The different frames coexist, sometimes overlap and are of varying importance in different parts and phases of the environmental movement (Mertig et al. 2002). In the relevant literature, a distinction is usually made between the three frames of conservation, environmental protection and ecology (Mertig et al. 2002; Rootes 2004; Giugni & Grasso 2015).

At the beginning of the environmental movement nature conservation was the dominant theme. It still exists today and mainly revolves around the preservation of natural landscapes, species protection and the avoidance of overusing natural resources. Since, historically, conservation endeavours usually related to relatively narrowly defined, locally confined problems, solution strategies in this frame were often clear and obvious (e.g., more environmentally friendly management of a certain forest or designation of a certain area as a national park or nature reserve) (Mertig et al. 2002: 451f.). In the 1960s, or at the latest at the beginning of the 1970s, a new frame became established with the emergence of the modern environmental movement: the environmental protection frame. In this frame, the focus on the local preservation of nature was replaced by a much broader perspective on environmental problems. The impact of environmental problems on quality of life, human health and societies as a whole came to the fore, e.g., in relation to the risks posed by pesticides and herbicides. The diagnoses and definitions of problems are more complex in the environmental protection frame, the cause-effect relationship is often not clearly identifiable and is conveyed in a more technological and scientific manner. Although the problematised phenomena can often still be localised (e.g., oil spills), they are regarded as fundamental problems that occur everywhere and at all times and can have far-reaching indirect consequences (Mertig et al. 2002: 451ff.). At the end of the 20th century, a third frame finally emerged, which we refer to as the ecology frame. This frame became established alongside the previously dominant environmental protection frame. An ecological perspective, which focuses on the interconnectedness and relationships between different elements, was already included in the environmental protection frame, however this integrative perspective only gradually gained greater significance. Global perspectives are now coming to the fore (e.g., global effects of climate change or the hole in the ozone layer) and the effects of ecological problems in the Global South are increasingly being addressed, with greater attention being paid to issues of justice. The ecology frame's political demands are more explicit and far-reaching than those of the conservation and environmental protection frames: It proclaims that a system and lifestyle change is necessary in order to counter global socio-ecological crises (Mertig et al. 2002: 455ff.).

The different framings of the environmental movement are associated with different strategies and forms of action, whose importance and usage has fluctuated throughout the movement's history and among its different organisations and groups. While conservation groups and organisations mainly used and still use lobbying strategies, the range of different actions grew with the emergence of the environmental protection frame. In addition to lobbying, environmental protection groups and organisations have relied and continue to rely primarily on legal action, petitions and civic engagement. The emergence of the ecology frame brought with it a further differentiation in terms of the forms of action used by the movement. The main focus shifted further towards the practical testing of alternative ways of life (linked to the perceived need for a general change in lifestyle), the election of Green parties and politicians, and direct action (demonstrations, blockades, sabotage, occupations, boycotts, etc.) (Mertig et al. 2002: 452). In particular, organisations and groups that are close to "deep ecology"²⁶ as an extreme form of the ecology frame (e.g., Animal Liberation Front, Sea Shepherd or Earth First!) resort to confrontational, direct forms of action (Mertig et al. 2002: 473).

Due to the environmental movement's diversity of focal points and its different approaches and instruments, Marco Giugni and Maria Grasso identify heterogeneity as one of the key characteristics of environmental movements (Giugni & Grasso 2015). As the previous sections show, environmental movements are extremely diverse in terms of their dominant frames, objectives, degree of professionalisation and internationalisation, preferred forms of action and organisational constitution. In terms of resource mobilisation, this can be seen as a strength, as it makes it possible to access different types of resources from different sources. With regard to the formation of a uniform collective identity, however, this is a hindrance, as shown by the parallel existence of different frames and their varying consequences for mobilisation and identity formation (Giugni & Grasso 2015: 354f.).

3.3. The structural features of the environmental movement

Alongside the changing frames and backgrounds found in the environmental movement, there are also certain structural features that characterise this movement as a whole. These characteristic structural features include an increasing degree of institutionalisation, a typical social structure and a certain relationship to science.

With regard to the development of social movements, it is generally assumed that, after a dynamic mobilisation phase, they go through a phase of bureaucratisation and institutionalisation, which ultimately leads to ossification and the loss of the movement's character. However, this does not appear to be the case for the environmental movement (Rootes 2004: 633). Despite its institutionalisation and

26 The concept of deep ecology was developed primarily by the Norwegian philosopher Arne Naess and is characterised by a radically biocentric position. This means that nature is ascribed an intrinsic value regardless of its usefulness to humans.

the successes, it has been able to achieve (we will return to this in the next section), it has not lost any of its momentum. The global Fridays for Future movement has been one of the most impressive examples of this. Ultimately, the institutionalisation of the environmental movement can be identified by two characteristics: a) the establishment of concern for the environment in all areas of society, at least on a rhetorical level, and the associated establishment of environmental policy as an independent and important policy field, and b) the emergence of large and established environmental protection organisations and Green parties (Giugni & Grasso 2015: 355). Karl-Werner Brand and Henrik Stöver therefore assumed that institutionalisation does not necessarily have to be associated with bureaucratisation and/or oligarchisation, but that in the case of the environmental movement, a form of institutionalisation has prevailed that is primarily based on the everyday, professional and situational engagement of citizens (Brand & Stöver 2008: 242). In Germany in particular, there was a coexistence of civil society organisations with large memberships and the Green Party on the one hand and confrontational, sometimes even violent protests, particularly in the context of nuclear energy conflicts, on the other (Rootes 2004: 625). However, this coexistence of institutionalisation and protest varies from country to country depending on the political opportunity structures. All in all, when it comes to the environmental movement, institutionalisation does not appear to be an insurmountable barrier to the further mobilisation of protest.

The environmental movement is often described as a social movement that is mainly driven by the so-called “new middle class”. This new middle class is made up of people who are highly educated and work in the education or care sector, in the civil service or in the creative industries. Furthermore, this group of people shows post-materialistic rather than materialistic values. The connection between environmental awareness and direct involvement in the environmental movement appears to be less pronounced (Rootes 2004: 617; Giugni & Grasso 2015: 342f.). This can be seen as further evidence that there is no direct causal relationship between environmental awareness and ecological action (→ chap. 4 on environmental attitudes and action). The stronger connection between post-materialist values and involvement in the environmental movement is probably due to the fact that post-materialism is more strongly associated with education than environmental awareness, and that education is also an important influencing factor for the willingness to become involved in civil society and politics (Rootes 2004: 619f.). A relatively high level of education among activists is therefore not an exclusive characteristic of environmental movements, but rather a constitutive feature of many social movements.

Finally, there is a special connection between the environmental movement and the sciences. This close relationship is inherently contradictory, as many environmental problems are only made visible and understandable through science, but at the same time technoscience is also partly responsible for the emergence of many environmental problems (→ chap. 10 on transdisciplinarity). The environmental movement relies heavily on scientific expertise and the interpretation of scientific information in order to make its concerns heard and to justify them, but is also

critical or even mistrustful of technical and scientific progress. As already mentioned, many research institutes emerged from the environmental movement and exemplify the close connection between scientific research and the environmental movement to this day. The Fridays for Future movement, with its demand that politicians should finally take the findings of climate research seriously, is another example of this connection, although it typically ignores the diversity of voices within the sciences. However, both scientific expertise and the lack of scientific evidence are also used by business and politics to justify a wait-and-see, inactive attitude towards certain problems pointed out by the environmental movement. This can lead to a confrontation between expertise and counter-expertise, resulting in a politicisation of scientific findings and their interpretation (Yearley 2005: 19ff.). Nevertheless, scientific knowledge remains one, if not the most important resource of the environmental movement, which it mobilises effectively for its own purposes time and again.

3.4. The social and political impact of the environmental movement

Since social movements are concerned with changing social or political conditions or counteracting impending changes, the question arises from a scientific perspective as to how successful certain social movements were and are as drivers and initiators of social change and learning processes. The environmental movement as a whole is considered to be one of the most influential social movements of all (Rucht & Neidhardt 2020: 850). The environmental movement has succeeded in sensitising politicians and the public to environmental problems and achieving concrete goals (e.g., protection of certain animal species and natural landscapes, restriction of waste disposal on land and at sea, bans on hazardous chemicals) (Rootes 2004: 633; Yearley 2005: 9). At the same time, it is clear that environmental problems, particularly those related to anthropogenic climate change, have continued to worsen in recent decades and that new environmental problems are constantly being added (e.g., the social and ecological consequences of the increased extraction of critical raw materials linked to the spread of renewable energy technologies). It is also obvious that the successes often credited to the environmental movement by various parties cannot simply be causally attributed to the impact of the environmental movement, but that other factors played a role – factors that cannot be fully controlled within the framework of empirical analyses. Accordingly, it is difficult to empirically determine the impact of the environmental movement itself or issue-specific environmental movements in particular (Rootes & Nulman 2015: 729). Christopher Rootes and Eugene Nulman propose different dimensions for determining a movement's impact, namely its influence on a) problem definitions, b) policy formulation, c) policy implementation and d) international agreements.

In terms of socio-cultural problem definitions, the environmental movement can be credited with bringing many ecological problems into the public consciousness. In addition, it has helped to maintain political and public attention on ecological issues even in times of economic or social upheaval (Rootes & Nulman 2015: 734). The environmental movement has also repeatedly been able to influence

the formulation of sector-specific policy goals. In Germany, for example, local protests led to the inclusion of a state clause in the Carbon Capture and Storage Act (KSpG) passed in 2012, which enabled federal states to prohibit CO₂ storage in certain regions (Rost 2015).

As with policy formulation, there are numerous examples relating to policy implementation in which certain political projects have been prevented or politicians have been forced to take action. Environmental activists have successfully blocked the transport of nuclear waste or prevented the construction of nuclear power plants, roads, landfill sites or other environmentally hazardous facilities. They have also repeatedly succeeded in securing the establishment of nature reserves or the protection of endangered animal species. As these examples show, the effects of the environmental movement can be most precisely identified in the area of policy implementation.

In the area of international agreements, environment-related non-governmental organisations in particular have been able to exert their influence. Non-governmental organisations have been formally granted consultative status in the United Nations system, meaning that they can participate in intergovernmental meetings and negotiations and contribute civil society perspectives. This has enabled non-governmental organisations to influence the formation of numerous international conventions on species conservation, whaling, and forestry policy (Rootes & Nulman 2015: 737). In the long term, however, their actual influence seems to be rather small compared to that of other interests and their associated lobbying, as the example of the UN climate conferences repeatedly shows.

4. Outlook

Since the modern environmental movement began in the 1960s, it has not lost any of its mobilising capacity and dynamism. The ongoing exploitation of resources, global networking and scientific and technical innovations are constantly generating new ecological problems and giving rise to conflicts and the emergence of local and supra-regional protests. One current example is the increasing use and spread of hydraulic fracturing (fracking for short), a process that can be used to tap into natural gas and oil wells in previously inaccessible geological formations. Local fracking projects have led to protests by citizens and environmentalists around the world over the past decade. The intensifying anthropogenic climate change, probably the greatest ecological challenge, is also having a strong and growing mobilising effect. Global climate movements such as La Via Campesina, Climate Justice Now! and Fridays for Future are prominent examples of a changing environmental movement that is becoming younger, more involved in justice issues, directly attacking commercial enterprises, organising itself in new ways on social media as well as in camps, and holding its own educational events that are unlike previous formats in order to advance the fight against climate change, species extinction and environmental destruction. At the same time, we are also seeing the rise of a kind of anti-environmental movement that is spreading doubts about climate research and the urgency of taking action. In this mixed situation,

transformation projects such as energy or mobility transitions continue to cause environmental conflicts. Protests against the construction of wind farms or bans on diesel cars are well-known examples. Conflicts over the shaping of society-nature relations and the role that social movements play in this will therefore certainly continue to occupy environmental sociology in the future.

What students can take away from this chapter:

- Knowledge about different types of conflicts and how they are connected
- Knowledge about different theories to explain the success or failure of social movements
- Knowledge about the history of the environmental movement and how its framing of problems has changed over time
- An understanding of what characterises the environmental movement in terms of social structure

Recommended reading

- Della Porta, D. & M. Diani, 2020: Social movements. An introduction. *Comprehensive and easy-to-understand introduction to the theory and empiricism of research on social movements*.
- Radkau, J., 2014: The age of ecology: A global history. *Comprehensive and detailed account of the history of the environmental movement*.

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