

The Importance of Contexts in Strategies of Environmental Organizations with Regard to Climate Change

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ABSTRACT / The purpose of the study was to investigate the extent to which strategies of environmental organizations depend on contexts. I examined this dependence by analyzing the strategies of five environmental organizations in the Netherlands with regard to climate change. These strategies were investigated over time and compared with the strategies these organizations had used in relation to ozone depletion and acidification. The results indicate that several

of the organizations changed their strategies with respect to climate change over time. Furthermore, different strategies were used simultaneously in relation to the three problems. The findings suggest that strategies concerning climate change were to a considerable extent determined by the dominant framing of the problem in society. This framing was defined mainly by actors other than environmental organizations. The initial framing of climate change as a CO₂ problem, which brought the issue into the energy debate, as well as the more general definition of the problem in the late 1980s as a greenhouse problem, were very important for determining the strategies of the organizations. It can be concluded that strategies of Dutch environmental organizations with regard to climate change were strongly dependent on the context.

When a problem arises, organizations consciously or unconsciously adopt strategies too deal with it. Such strategies are generally not developed independently of the context of the organization. Some organizations, such as governments, readily adapt their strategies to the context, whereas the strategies of several young organizations are highly independent of the context (Mintzberg 1988a). As far as I know, the degree to which the strategies of environmental organizations depend on contexts has never been investigated explicitly. It is assumed, however, that strategies do depend on the context in a certain way; they vary from being completely characteristic for the organization to being totally dependent on contexts.

The one extreme view is that strategies are characteristic for the organization. This assumption can for example be found in Naess (1973), who distinguished between the shallow and the deep ecology movement, or in Mitchell and others (1992), who differentiated between lobbying and nonlobbying organizations. In these cases, the strategies of environmental organizations are assumed to be qualities that do not change over time. Another group argues that the cognitive level of the strategy is characteristic for the organization, whereas the operational level of the strategy is defined

by the context. This standpoint is defended, e.g., by Norton (1991), who argued that "differences in value may lead to shifting coalitions regarding objectives" (p. 12). Hence, according to this view, the values (at the cognitive level) are qualities of the organization, whereas the objectives (at the operational level) are highly dependent on the context. A third group assumes that the strategies of the organizations are to a large extent defined by the contexts of the organizations. This position is taken up by, e.g., Jamison and others (1990). They consider that an organization adopts its strategy in interaction with its context. The importance of contexts is also emphasized in the political process theory. According to this theory, the strategy of an organization is very dependent on the political opportunity structure (e.g., Kriesi and others 1992). The members of this third group thus assume that contexts are very important for determining strategies, but that an organization adopts only one specific strategy at a time. A fourth group, finally, assumes that contexts are very important and that various strategies with regard to different issues can exist at the same time, both at the cognitive and at the operational level. This is the view expressed by, e.g., Dekker (1995). He argues that a strategy could be the result of changing circumstances as well as a function of time or a combination of both factors (p. 13). Thus, in the opinion of the fourth group, strategies can change over time and when circumstances change.

KEY WORDS: Environmental organization; Strategy; Climate change; Man-nature relationship; Problem definition; Context

This study was designed to gain empirical information on the degree of importance of contexts for strategies of environmental organizations. Could the degree of importance of contexts be related to one of the four groups mentioned above? The strategies over time of five Dutch environmental organizations with regard to the climate change problem were investigated. The climate change problem is generally seen as a problem that is much more comprehensive than other environmental problems (e.g., WCED 1987, Eikeland 1994). The main physical sources of other environmental pollution problems can currently be removed or replaced on a large scale. However, this has not yet been possible for CO₂, which was and still is regarded as the primary source of climate change. The main activity in society that leads to CO₂ emissions is the conversion of energy by the burning of fossil fuels. Therefore, the problem is directly linked with energy and thereby with nearly all aspects of society. The climate change issue is thus a very interesting case to investigate, especially when comparisons can be made with strategies with regard to other problems.

Elements of the strategy are found at the cognitive level (e.g., world view, concept, problem definition) and at the operational level (e.g., behavior, main ways of implementation) (Mintzberg 1988b, Norton 1991, Klaver 1993). I focused on two aspects of the strategy, one at the cognitive level: the approach, and one at the operational level: the method. An approach is defined as the vision on the relation between man and nature. A method is defined as concerted, logically linked forms of action aimed at the achievement of ends. These two aspects were chosen because each can be considered to be an important aspect at its level: the approach describes the background for tackling environmental issues, whereas the method describes the way in which the issues are tackled.

The purpose of this study was to determine the degree of dependence on contexts of the strategies of environmental organizations regarding climate change. For that purpose, I chose to: (1) determine approaches and methods of five Dutch environmental organizations with regard to the climate change problem; (2) investigate whether these approaches and methods change over time; and (3) compare these approaches and methods with those used with regard to ozone depletion and acidification during the same time period. Results of these three tasks provide empirical information about the occurrence of changes in the approaches and methods of the organizations over time and/or in relation to different issues. With this information, the degree to which the strategies of environmental organi-

zations in relation to climate change depend on contexts can be determined.

Concepts Approach and Method

Approach

I make the approach operational by determining the degree to which the vision of the man–nature relationship emphasizes the instrumental or the intrinsic value of nature. The scale between emphasis on the instrumental at one end and the intrinsic value of nature at the other end forms a continuum between a purely anthropocentric and a purely ecocentric position. I chose a classification that is based on a distinction between only two basic approaches—anthropocentrism and ecocentrism—for two reasons. One reason concerns the content, the other is methodological. With respect to content, the degree of anthropocentrism/ecocentrism or the instrumental/intrinsic value of nature is the most essential recurrent variable in each of the classifications of man–nature relationships. It is not by accident that the order in which different man–nature relationships are presented normally coincides with a decrease/increase in anthropocentrism/ecocentrism (e.g., Baird Callicott 1986, p. 392, Fox 1994, p. 209, Achterberg 1994, pp. 148–152, Zweers 1995, pp. 58–59). The methodological reason for using the dichotomy is that data revealing approaches over time and for each organization are scarce. For several years there were only a few data indicating the approaches adopted by some of the organizations. If I were to use a more detailed classification of, for instance, six basic approaches instead of two, the number of data points through time for each organization that could be related to each of these approaches would be even smaller than it is now.

A typical anthropocentric approach to the climate change problem. An anthropocentric approach can be deduced from the way in which an organization defines the climate change problem. The problem can, for instance, be framed as a change in the environment harmful to human well-being. A typical anthropocentric assessment of the danger associated with climate change concentrates on the effects on human interests; therefore, an estimation of the risk might be expressed in terms of decreased agricultural production. With regard to the responses to the climate change problem, a typical anthropocentric approach would be to propose target levels that safeguard human health or propose measures that are intended primarily to decrease the effects on human beings or crops (e.g., a policy aimed at the reduction of changes in the climate to a level at which they are not harmful to crops).

Table 1. Classification of organizations included in this study (after Pleune 1996a)

Main method	Main orientation	
	Nature-oriented	Environmentally oriented
Influencing governmental policy	SNM: Stichting Natuur en Milieu (The Netherlands Society for Nature and Environment)	SNM: Stichting Natuur en Milieu (The Netherlands Society for Nature and Environment)
Influencing public opinion or public behavior	IVN: Vereniging voor Natuur- en Milieueducatie (Society for Environmental Education)	VMD: Vereniging Milieudefensie (Dutch branch of Friends of the Earth)
Offering alternatives	VBN: Vereniging tot Behoud van Natuurmonumenten (Society for the Preservation of Nature in the Netherlands)	DKA: De Kleine Aarde (The Small Earth)

A typical ecocentric approach to the climate change problem. A typical ecocentric approach to the climate change problem involves interpreting it as a problem for nature, not only for human beings. A typical ecocentric assessment of the danger inherent in climate change concentrates on the effects on ecosystems that are highly sensitive to changes in the environment, e.g., isolated ecosystems that are unable to follow the shift in climatic zones. With regard to the responses to the climate change problem, a typical ecocentric approach would be to propose target levels that safeguard sensitive ecosystems or propose measures that are intended primarily to decrease the effects on these ecosystems (e.g., a policy aimed at slowing down the shifts in climatic zones so much that ecosystems have time to adapt).

Method

It is common to describe the activities of environmental organizations in terms of their methods (e.g., van Noort 1988, van der Heijden and others 1992, Mitchell and others 1992, Hase 1992). By the use of one or more methods, environmental organizations can advance towards their objectives in society. They can use methods either directly or indirectly. Indirect methods can be subsequently used indirectly again.¹ In this way, indirect methods can be nested for the ultimate achievement of objectives. In the present study, I look at the methods that were actually used, without determining whether the method was direct or indirect. I do this mainly because I want to concentrate on the actual practice of organizations; moreover, because organiza-

tions usually have several objectives, methods will normally be used both for the direct and indirect attainment of these objectives.

Methods that have been frequently used by Dutch environmental organizations include the influencing of governmental policy, the influencing of public opinion or public behavior, the influencing of industry, and the offering of alternatives (Cramer 1989, Pleune 1996a,b). Means by which governmental policy can be influenced include lobbying, participation in advisory committees, and writing letters to politicians. Public opinion can be influenced by activities such as providing information and education, actions, or the setting up of local groups. Industry can be influenced by activities such as supplying information, blockading of plants, and consumer boycotts of products. Instead of reacting to specific environmental problems, organizations can offer alternatives to general environmental degradation. Such alternatives might involve organic farming or purchasing nature reserves. The public is introduced to these alternatives mainly through information and education supplied by the organizations. It is an empirical question which methods were used by the organizations with regard to the climate change problem. It is possible that they used other methods besides those presented here.

Research Design

The five organizations included in this study were selected on the basis of their wide variety of main orientation² and main methods (see Table 1). To

¹When, for example, the objective of an organization is to decrease the emissions of a power plant, it can directly close the outlets of the plant, making further emissions physically impossible. However, the organization can also indirectly influence the government to pursue a policy that forces this power plant to cut down its emissions. This can also be accomplished indirectly, e.g., by influencing the public to put pressure on the government.

²It should be emphasized that the concept "orientation" is not equivalent to the concept "approach." The orientation merely indicates the area of attention, whereas the approach reveals the value attached to that area. An orientation towards nature, for instance, is not necessarily connected with an ecocentric approach: according to van der Heijden and others (1992; and personal communication with van der Heijden 1993), nature-oriented conservation organizations employ(ed) an anthropocentric approach.

deduce the approach and method of the organizations concerning climate change, the policy performance of the organizations with respect to the problem was analyzed from the time the organizations were formed until the start of the UNCED conference in June 1992. This end point was chosen first and foremost for practical reasons, but it was also the end of a period in which there was a continuous increase in the attention given to the transboundary character of environmental problems.

The data contained both written material and personal communications. The material of the organizations consisted of: available reports, notes and brochures on climate change; annual reports; available policy plans; monthly (or quarterly) magazines; available notes of the working groups on energy (policy supporting groups consisting of both staff-members and external experts) of Vereniging Milieudefensie (VMD) and Stichting Natuur en Milieu (SNM); personal files of staff members of VMD, SNM, and De Kleine Aarde (DKA), mainly containing letters on the subject (personal files were not available for the other organizations); reports of members' meetings of VMD (except 1978); reports of members' meetings of the two other unions [Vereniging tot Behoud van Natuurmonumenten in Nederland (VBN) and Vereniging voor Natuur en Milieueducatie (IVN)] were not available; however, the purpose of these meetings was not the formulation of organization policy; interviews with (former) staff members and board members of SNM, IVN, VMD, VBN and DKA; for SNM these were: Vonkeman, Fransen, and Henselmans; for IVN: Bouwhuijzen; for VMD: Schöne, Taekema, Buitenkamp, and Lamers; for VBN: van Tooren and van Schaijk; for DKA: Knobbe; written correspondence with Olthof (SNM) and Juffermans (DKA). Where possible, information obtained at interviews and via correspondence was checked against published material.

The magazines of the organizations have a different character. Unlike the magazines of the other organizations, the magazine of VMD does not necessarily reflect the opinion of the organization. Therefore, information from the magazine of VMD is used only when it concerns articles from staff members that emphasize information rather than discussion. The different character of each of the organizations has consequences for the character of the material of the organizations. SNM, VBN, and DKA are quite centralized organizations, whereas VMD and IVN operate much more through groups at the local level. The local IVN groups in particular are very independent of the central office, and their activities are not always easy to trace. An

elaborate description of the policy performance is given in Pleune (1995).

Environmental Organizations in The Netherlands and Climate Change: Some General Trends

There are two periods in which much attention was given to the climate change problem. One was around 1980 and the other was from 1987 to 1992 (end of the period studied). It appears, however, that there are considerable differences in the way the problem was looked at in the two periods. In the first period the problem was seen as a possible occurrence, connected with energy use. Only CO₂ was mentioned as a source of the climate change problem, while effects on agriculture were considered. The problem was framed as the CO₂ problem. Only preventive solutions were considered. In the second period the uncertainty of occurrence of the risk was hardly discussed. It was assumed that climate change would be taking place. At this stage the global character of the problem and the connection with other environmental problems were emphasized. Several greenhouse gases were considered to be responsible for a variety of effects. The problem was now framed as the greenhouse problem. Possible solutions were concerned with preventive, adaptive, and offset³ options. Unlike several other environmental problems,⁴ the problem was never defined in terms of its effects. However, a possible sea-level rise in the Netherlands was often used by VMD to frame its actions in the second period of attention.⁵

SNM and VMD paid considerably more attention to the problem than did the other organizations. In the first period the problem was mainly taken up by SNM and VMD as an extra argument to promote energy saving and renewable energy. These options had already been proposed in the nuclear energy discussion, to which the organizations were giving most of their

³Options that offset sources of climate change are, for instance, reforestation or underground storage of CO₂.

⁴For instance, acidification was framed as a "dying-forest" problem, and ozone depletion as a problem of "spray cans causing human skin cancer" by environmental organizations (Pleune 1996b).

⁵Some actions relating to possible future flooding were: the delivery of a bucket of water—symbolizing sea-level rise resulting from the greenhouse effect—to the head of the Governmental Commission for Economic Affairs (Buitenkamp 1989); several local actions, e.g., diving down to flooded towers, forming a line of sand-bags or making a bid on a Dutch mountain (VMD 1991c); the action day "in sea/at sea" on 25 May 1991, when in 32 places in the Netherlands the municipality names were extended with . . . in sea/at sea (depending on their location with regard to the future coastline) and several local actions were organized (de Rijk 1991).

Table 2. Approaches and methods of environmental organizations regarding climate change^a

	Approach	Method
SNM: Stichting Natuur en Milieu (The Netherlands Society for Nature and Environment)	1974: A	1979–1981: <u>NG</u> , P
	1981: A	1984–1986: <u>NG</u> , P
	1982: A/E	1987–1992: <u>NG</u> , P
	1986–1991: A/E	<u>IG</u> , P
IVN: Vereniging voor Natuur- en Milieueducatie (Society for Environmental Education)		1981–1990: (P)
		1991–1992: P
VMD: Vereniging Milieudéfensie (Dutch branch of Friends of the Earth)	1979: A	1979: P
	1981: A	1981: P, NG
	1987–1988: A	1982: NG
	1989: A/E	1987: P
	1990–1991: A/E	1988–1989: P, NG 1990–1992: P, LG
VBN: Vereniging tot Behoud van Natuurmonumenten (Society for the Preservation of Nature in the Netherlands)	1985: A	1981–1988: O
	1988: A	1989: O, NG
	1989: A/E	1990–1992: O
DKA: De Kleine Aarde (The Small Earth)	1991: (A/E)	1977–1983: O
		1984: O, P
		1985–1990: O
		1991–1992: <u>O</u> , P

^aWith respect to approaches, A stands for anthropocentric, E for ecocentric. With respect to methods, NG stands for influencing the national government, IG for influencing international governments, LG for influencing local governments, P for influencing the public, and O for offering alternatives. Underlining indicates that these performances are more important. Parentheses are used when the indications are not clear, or when only a few data are available.

attention at that time. The reasons why SNM and VMD picked up the problem again in the second period were the interest of the government in the issue, the notion of a growing scientific consensus on the problem, and a decrease in activities relating to the nuclear energy issue (Pleune 1995).

Results

The approaches and methods of the organizations in relation to the climate change problem over time are summarized in Table 2.

Approaches

Approaches in relation to climate change show in the data of SNM for the first time in 1974. In relation to climate change, it was argued that “the carrying capacity limits of the environment will be reached before the energy stocks are used” (Vonkeman 1974). In 1981, the

effects on agriculture were emphasized (e.g., SNM 1981a), pointing to an anthropocentric approach. Moreover, the rising CO₂ content was considered to be an environmental threat “admissible under no condition,” because it was believed to “pose a threat for large groups of people” (SNM 1981b, p. 11). Besides such anthropocentric statements, ecological shifts were mentioned as effects in 1982 (Turkenburg 1982). VMD expressed an anthropocentric approach in the first period, e.g., by predicting “unforeseeable consequences for food supply” (Otten 1979).

In the second period of high attention to climate change, a clear mixture of the two approaches was visible in the data of SNM. For instance, Reijnders drew attention to the impact of climate change on plants and animals on the one hand and on agriculture and the drinking-water supply on the other (Reijnders 1986, 1989). Whereas Brouns (1989) concentrated on the possible advantages of climate change for nature in the Wadden Sea, the annual report of SNM over 1988 regarded the warming of the earth as one of the almost insoluble problems for future generations (SNM 1989). VMD again underlined the effects of climate change on agricultural production in the second period of attention. Furthermore, the movement of many people because of sea-level rise and salt intrusion was highlighted (Bakker and Hoogelander 1987, VMD 1987). An anthropocentric emphasis on our existence as human beings also appears in Schöne (1988) and VMD (1988). In 1989, Schöne made some elaborate risk assessments. In these assessments both anthropocentric concerns, such as the effects on agriculture and waterworks (Schöne 1989), and ecocentric concerns, such as the “dislocation of many ecosystems and the extinction of species” (Schöne 1989) are mentioned. Increased attention in mankind occurred again in 1990, namely in the statement that the greenhouse effect “could even have impact on the survival of humanity” (Schöne 1990). This shift towards anthropocentrism continued in 1991, when the data showed clear anthropocentric concerns, such as the endangering of the “survival of humanity” (VMD 1991b) and the poor prospects for children (VMD 1991c).

In the course of the period studied, the approaches of SNM and VMD shifted from anthropocentrism towards a mixture of ecocentric and anthropocentric concerns. In the first period of attention, approaches were anthropocentric, whereas after 1988 mixed approaches became visible. Although less information on approaches could be inferred from the data of VBN and DKA, the approaches adopted by these organizations fit into the general pattern of a shift from anthropocentrism towards more mixed approaches. Concern about

the effects on humanity and on the social and economic order (VBN 1985) and the fear for the environment we live in (in Dutch: *leefmilieu*) (VBN 1988) demonstrated an anthropocentric approach. The concern for “the future of us and our children” (de Boer and van Grondelle 1989) and the statement that these environmental disasters could hit mankind “directly and catastrophically” (VBN 1989) were examples of anthropocentric approaches in 1989. Some authors, however, also reflected mixed concerns in that year. Maas (1989), for instance, drew attention to both the world of plants and animals and to agriculture. Concern about the possible extinction of plant/animal species and about the effects on agriculture also appeared in an impact assessment published by DKA (de la Court 1991).

Methods

SNM. The main solutions proposed by SNM in relation to climate change have always been a reduction in energy use and the use of renewable energy. Generally, SNM relied very much upon influencing governments to implement these solutions in society. Information dissemination has always been an important way in which SNM sought to influence the government and the public. Several articles in the magazine of SNM⁶ were (partly) about climate change (e.g., Reijnders 1980, 1986; Rozema 1989a, Nijhoff 1991), and the organization published a brochure on the greenhouse effect in 1987 (SNM 1988). Press conferences were organized to influence governmental climate policy (SNM 1991, 1992).

Governmental policy was also influenced by means of letters, mainly concerning electricity plans and energy saving (e.g., Vonkeman 1979, 1980, 1985, SNM 1990, 1992). In the second period, these letters emphasized the possibility of using financial incentives. Towards the end of the period studied, attention gradually shifted to EU policy: letters were sent to governments in EU countries, either directly, or via the environmental organizations in place, or to the European Commission (e.g., SNM 1988, 1992). They all pleaded for the introduction of anti-greenhouse measures. SNM was able to influence other governments directly by participating in both the Intergovernmental Negotiating Committee for a Framework Convention on Climate Change and the Dutch UNCED delegation (SNM 1992, 1993). Several reports (on energy saving, traffic and livestock) (SNM 1989) were drafted to support the above-mentioned activities. Together with VMD, a response assessment in relation to climate change was published

in 1990 (Albers and others 1990). SNM attended several conferences set up to tune the activities of the international nongovernmental organizations (NGOs); in 1989 SNM itself organized an NGO environmental conference on “Prevention of Climate Change” (Smit 1989).

It appears that in the period 1979–1986 the foremost method used by SNM consisted of influencing the national government. From 1987, it also influenced other (especially EU) governments. Throughout the period some attention was given to influencing the public.

IVN. From 1981, the central IVN office had the intention of widening the education field from the perception of nature towards environmental problems such as climate change. However, at the local level this widening took a while (interview with Bouwhuijzen, 1 June 1993). It was not until 1991 that responses to climate change began to be formulated and implemented at local level. These responses involved drawing attention to the problem at exhibitions and by educational activities; on several occasions these responses related to trees or deforestation (IVN 1992, 1993). Hence, the method used was to influence the public.

VMD. The main solutions proposed by VMD in relation to climate change have always been a reduction in energy use and the use of renewable energy. In the first period of attention, responses of VMD consisted of organizing a public campaign to introduce renewable energy (“sun-day”) (e.g., Boeve 1979) and reactions to the governmental plans for increasing the use of coal energy (e.g., Lammers 1982).

Most of the activities in the second period took place in the framework of a greenhouse campaign in 1991. The greenhouse campaign was considered to be different from the earlier campaigns. The problem, the causes, and the remedies were addressed more extensively than they had been in other campaigns. The plan was that initially the greenhouse campaign would alert people to the seriousness and the causes of the problem and that later the causes would be tackled (e.g., Campaigneteam Broeikas 1990). Part of the alerting was a mobilization of social movements to “carry on campaigns and to lobby for a responsible greenhouse policy” (VMD 1990). Much attention was given to the translation of this part to the local level. Following similar initiatives in Germany, Italy, and Austria, VMD decided to use the Climate Treaty (Klimaatverbond) at the local municipality level (VMD 1991b). The Climate Treaty is an agreement between European municipalities and native people in the Amazon area. The municipalities promise to drastically reduce their carbon dioxide emissions, and the native people promise to do their best to save the rain forest (VMD 1992). This

⁶The magazine of SNM is distributed not only to its supporters, but also to all members of Parliament.

Climate Treaty became very important. Although never reported explicitly, the (planned) tackling of the causes was replaced by activities relating to the Climate Treaty. Pressure was put on municipalities—directly or through local groups—to sign the Climate Treaty and to formulate a local greenhouse policy (e.g., van den Heiligenberg 1990). In its attempts to influence municipalities, VMD worked together with VROM (Ministry of Environment) and the VNG (Society for Dutch Municipalities) (Schöne 1991). Several published reports describe societal solutions for the climate change problem (Schöne 1988, 1989, VMD 1991a). Together with SNM, VMD published a response assessment in relation to climate change in 1990 (Albers and others 1990). Brochures and information material were distributed to inform people about climate change and about the possible ways of reducing their CO₂ emissions (e.g., VMD 1987, van den Einde 1990, Borg and others 1991). In 1991, the targets in the Climate Treaty were translated into a concrete municipal greenhouse policy (Schöne and others 1991). In order to elaborate the Friends of the Earth⁷ global warming campaign, VMD organized a workshop in Amsterdam in the same year (Buitenkamp and Gerdes 1991).

It can be concluded that in the first period the methods of VMD consisted of influencing the public and the national government. No responses were formulated or implemented from 1983 to 1987. In the second period, the foremost methods were the influencing of the public and the government. After 1990, the latter shifted from the national government to the local governments.

VBN. The only response of VBN directly related to climate change was to draft a reaction to the Government Paper on Coastal Defense (Maas 1989). This reaction was formulated because it directly concerned the nature areas of VBN located near the coast. It is a general policy of VBN not to perform activities in relation to climate change until effects appear in the nature reserves of VBN (interview with van Tooren, 29 July 1992). Thus, the method of VBN is not to concentrate on the climate change problem, but to concentrate on its nature reserves. Instead of concentrating on the problem, they focused on offering alternatives. In 1989, the organization also influenced the national government.

DKA. Responses of DKA directly relating to climate change were very much related to a change in personal life-style (such as choice of food, personal energy use). The opening of a cold frame, in which no fossil fuels are

needed for the growing of crops, was connected to the greenhouse effect (DKA 1984), and a possible way of calculating one's consumption and CO₂ emission was given twice in the DKA magazine (Juffermans 1991, DKA 1992). Generally, DKA tried to concentrate less on problems, and more on the solutions. "The solutions we advance are not related to a specific problem"⁸ (interview with Knobbe, 28 April 1993). "Because of the integrated policy [concerning problems], DKA did not organize specific activities concerning climate change"⁹ (letter from Juffermans, 6 February 1995). It appears that DKA generally concentrated on offering solutions (alternatives), but they also influenced the public in 1984 and again in 1991 and 1992.

Approaches and Methods Summarized

Approaches. It seems that over time approaches changed from being rather anthropocentric before 1986 to being more mixed after 1988. Approaches were not always easy to deduce from the data. Approaches could best be deduced in the cases of SNM and VMD, which were the organizations most involved with the climate change problem.

Methods. The organizations most involved with the problem (SNM and VMD) both concentrated on influencing governments and the public. However, for SNM influencing governments was much more important. Whereas initially both organizations mainly influenced the national government, SNM extended this method to international governments, and VMD shifted its attention to local governments. Since 1981 the central level of IVN has had the intention of influencing the public, but the method was not apparent at the local level until 1991. VBN and DKA chose to concentrate mainly on offering alternatives.¹⁰ It can be concluded that the methods of SNM and VMD changed over time whereas the methods of the other organizations generally remained constant.

Comparison of Climate Change Case with Ozone Depletion and Acidification Cases

The approaches and methods of the organizations with respect to ozone depletion and acidification are

⁸Dutch: We benadrukken die oplossingen niet vanuit één specifiek probleem.

⁹Dutch: door de geïntegreerde benadering organiseerde DKA niet zozeer specifieke activiteiten t.a.v. climate change.

¹⁰Within similar methods, however, organizations put emphasis on different aspects. This is most striking in the case of VBN and DKA. Whereas the nature-oriented VBN offered nature reserves as an alternative, the environmentally oriented DKA offered another personal life-style. By influencing the public VMD also aimed to mobilize the public to put pressure on municipalities, whereas with IVN influencing the public was the only aim.

⁷VMD is the Dutch branch of the international network of environmental organizations known as Friends of the Earth.

Table 3. Approaches and methods of environmental organizations regarding ozone depletion and acidification^a

	Approach		Method	
	Ozone depletion	Acidification	Ozone depletion	Acidification
SNM	A/E	A/E	1975–1986: G, P 1987–1992: G, P, I	1978–1982: I, G 1983–1992: <u>I</u> , <u>G</u> , P
IVN	1987–1990: E	1965–1983: A/E 1984: A 1988–1992: (E)	1975–1979: P, O 1980–1992: P	1983–1992: P
VMD	A	1980–1984: A 1984–1992: A/E	<u>I</u> , <u>P</u> , G	<u>I</u> , <u>P</u> , G
VBN	1989: (E)	1979–1989: A/E 1989–1992: (E)	O	1984–1989: G, O, P 1989–1992: <u>G</u> , <u>O</u> , I
DKA	A	1982–1985: (A) 1986–1987: A/E 1989–1992: E	O	1984–1989: <u>P</u> , <u>O</u>

^aWith respect to approaches, A stands for anthropocentric, E for ecocentric. With respect to methods, G stands for influencing governments, I for influencing industries, P for influencing the public, and O for offering alternatives. Underlining indicates that these performances are more important. Parentheses are used when the indications are not clear, or when few data were available (Pleune 1996a, b).

summarized in Table 3. Approaches and methods adopted in the ozone case did not change much over time, whereas considerable dynamics showed up in the acidification case. Approaches with respect to acidification generally shifted towards ecocentrism. The number of methods used by VBN and DKA in relation to acidification was increased compared to the methods used in relation to ozone depletion. These observations were explained by the framing of the problems in society. Ozone was framed as a spray-can problem causing human skin cancer; acidification was formulated as a dying-forests problem. Because of these framings, only environmentally oriented organizations were concerned specifically with ozone depletion, whereas both nature-oriented and environmentally oriented organizations were involved with acidification (Pleune 1996b).

Approaches. When the approaches of SNM adopted regarding climate change are compared with those in relation to ozone depletion and acidification, differences can be detected in the period before 1986. In this period, SNM adopted mixed approaches regarding ozone depletion and acidification, whereas (a tendency to) anthropocentrism appeared in relation to climate change. The mixed approaches of VMD regarding climate change around 1990 are different from its approach with respect to ozone depletion, whereas the anthropocentric approach in other years is similar to the approach with regard to ozone depletion. The anthropocentric approach of VBN in relation to climate change before 1989 differs from its mixed approach with respect to acidification.

In general, the approaches of SNM, VMD, and VBN (the organizations whose approaches could be inferred) to climate change differ from their approaches

to ozone depletion or acidification. The pattern of approaches in relation to climate change over time seems to be a kind of intermediate pattern compared with the approaches to ozone depletion and acidification. In the ozone depletion case, the pattern of approaches is essentially static, because only environmentally oriented organizations were involved in the problem. In the acidification case a dynamic pattern in approach directed towards ecocentrism was visible. Because of the way in which the problem was framed, nature-oriented organizations also became concerned with the acidification problem. The cognitive influence of these organizations probably caused a shift in approach towards ecocentrism. In the climate case, the differences in the approaches of the organizations seem smaller than in the case of the other two problems. Furthermore, the approaches with respect to climate change are always similar or more anthropocentrically oriented than those with respect to acidification.

This intermediate pattern in the climate case can perhaps be explained by the origin of the issue. Initially, climate change was defined as a CO₂ problem. Hence, the problem was not framed by a specific impact, as was the case for acidification (forests) and partly for ozone depletion (skin cancer). The problem was framed by a source, as in the other part of the ozone depletion framing (spray cans). Unlike the ozone depletion case, however, the framing of climate change did not concentrate on a specific product, but on an emittant. In society, this source was connected with the use of energy. Climate change was therefore taken up in the energy debate as an extra argument for the introduction of energy saving and renewable energy. This energy debate was shaped very much by the nuclear energy

discussion, which was largely human-oriented, and did not receive much attention from nature-oriented organizations.¹¹ In the second period, the problem got a more general framing as a global greenhouse problem, connected with other environmental problems. The framing of the problem, however, never became nature-oriented. The broader interest in the problem in society caused several environmental organizations to give some attention to it. This could explain why some ecocentric arguments were used as well. As the framing never became nature-oriented, there was never any serious involvement of nature-oriented organizations. This seems to be the reason why the approaches never became ecocentric. The data do not suggest that, conversely, the involvement of organizations determined the framing of the problem. I will elaborate on this in the discussion section.

Methods. The method of IVN with respect to climate change is similar to its methods with respect to ozone depletion and acidification. However, the methods of the other organizations with regard to climate change are very different from their methods in relation to ozone depletion and acidification.

It is striking that in the case of SNM and VMD, the influencing of industry, an important method in relation to ozone depletion and acidification, was not used in the climate case. Furthermore, whereas it appeared that SNM and VMD adopted each other's methods in the ozone and acidification case, a divergence appeared in the climate case: to influence the government, both organizations initially concentrated on the national level, but in the second period of attention, SNM extended its efforts to international governments, whereas VMD concentrated on the local level. The methods of VBN and DKA with regard to climate change differ from their methods in the acidification case but are rather similar to their methods with regard to ozone depletion.

The fact that SNM and VMD omitted industry as an actor to be influenced can be explained by the broad and complex way the problem was framed. The organizations assumed that there were no clear sources that were mainly responsible for the problem and could be tackled without a drastic change in consumption patterns. Such sources were spray cans in the ozone depletion case and refineries in the acidification case. In the words of Schöne (former staff member of VMD): "It is probably a very diffuse route we followed, and sometimes I think that you do not have one particular issue that you can highlight. It could be energy taxes, but still this is perhaps much more difficult to highlight

than something like a nuclear power plant"¹² (interview with Schöne, 19 May 1992).

It seems that such a pattern was also seen in the US; Eikeland (1994), for example, concluded that in the case of global climate change, the US environmental NGOs tended to apply cooperating strategies rather than conflict-oriented strategies, because of the extensive scope and complexity of the problem.

The divergence of the methods used by SNM and VMD is perhaps related to the origin of the climate problem in the (nuclear) energy issue. In this energy issue, SNM and VMD traditionally had different roles (although there was a continuous tuning of activities): SNM was involved with lobbying at the national level, whereas VMD was active in the actions taking place locally.¹³ An extra impulse for VMD to change attention to local governments was probably the success of the tropical wood campaign, when the local policy of several municipalities was an important means of pressure towards the national government. Furthermore, no other organizations were cooperating actively in the climate change issue at that time, whereas in the case of ozone depletion and acidification there was a broad platform of cooperating organizations.

VBN has not been involved specifically with climate change, because climate change was not expected to affect their nature reserves. This argument is of course linked closely to the framing of the problem (and its effects) in society. When effects were used to frame the problem, they concerned mainly sea-level rise. Therefore, the only activities of VBN specific for climate change were related to coastal management.¹⁴ Despite the broad definition of climate change, which includes various working areas of DKA, the organization was not specifically involved with the problem because of DKA's orientation towards solutions. This orientation might have been strengthened after their experiences with acidification. Knobbe (former director of DKA) stated that it was difficult to link the acidification problem with the emphasis on solutions within DKA (interview with Knobbe, 28 April 1993).

The differences in approaches and methods employed regarding the three problems can be explained

¹²Dutch: Het is een hele diffuse weg waarschijnlijk die je bewandelt, en soms denk ik ook je hebt niet één zo'n issue waar je stampij over kunt maken. Energieheffing zou dat zijn. . . . maar misschien is het toch veel moeilijker daar stampij over te maken dan over een kerncentrale of zo.

¹³This does not mean that no common activities were developed: e.g., there were joint election campaigns against nuclear energy and joint stands at local hearings (Letter of Ludie Olthof, 21 October 1994).

¹⁴This also appeared from contacts with a staff member of VBN involved with the management of nature reserves. The possible relation between the migration of animals and plants and climate change was unclear to him (interview with van Tooren, 29 July 1992).

¹¹SNM was not involved in this discussion publicly before 1974 (SNM 1975).

by the dominant framing of the climate change problem in society, compared to the way ozone depletion and acidification were framed. In the first place, the framing of the problem was very important in determining whether the environmental organizations should be involved. Secondly, the framing was a meaningful factor in relation to the approaches and methods adopted with regard to the problem. Eikeland (1994) also noticed a connection between strategies and the kind of problems targeted by NGOs. According to him, however, a certain group of problems (such as global climate change) is targeted by a certain group of organizations. In other words: each organization still uses its own characteristic strategy. The results of the present study indicate that one cannot really speak of characteristic approaches and methods and that different approaches and methods can often be employed simultaneously in relation to different problems.

Discussion

The objective of this study was to determine the degree to which the strategies of environmental organizations with regard to climate change depend on contexts. The dominant framing of the climate change problem in society appeared to be an important factor in determining the approaches and methods adopted with regard to the problem. One therefore needs to find out to what degree the problem framing can be considered as a contextual factor. Problem framings are generally a result of the input, evaluation, selection, and combination of different problem perceptions of different actors in society. It is therefore not obvious in advance whether the framing of the problem should be considered part of the context. Are framings of the climate change problem more or less defined by the environmental organizations themselves or largely by other actors (the context)?

In the first period the dominant framing of the climate change problem in society was the CO₂ problem connected with energy use. At that time, the problem was taken up by SNM "because of alarm and the increasing signals from science that this was going to be a serious problem. [This is] an extra argument for working on energy saving and renewable energy"¹⁵ (letter from Olthof, 21 October 1994). VMD also looked upon the problem as an extra argument in favor of energy saving and renewable energy (VMD 1979). Other actors, however, also connected the problem with energy use. An example can be found in the report on

the Conference on the Combat of Air Pollution by Factory Emissions included in the magazine of NVWBL (Dutch Association against the Pollution of Water, Soil, and Air; one of the precursors of SNM). According to this report, Dr. Poncelet, Chief of the Climatology Department of the Belgian Meteorological Institute, linked combustion processes with the increasing CO₂ concentration at the conference (NVWBL 1954). A connection between increasing CO₂ concentration and energy production was made by Wessels of the KNMI (Royal Netherlands Meteorological Institute) at the annual meeting of NVWBL in 1971 (Wessels 1971). In 1978 the Dutch Parliament wondered whether the increase in the global use of coal might not increase the greenhouse effect too much. The answer of the minister also referred to the IIASA conference "Carbon Dioxide, Climate and Society" in 1978, at which the CO₂ problem was explicitly linked with energy (Dinkelman 1995, pp. 161, 165). Hekstra (1978), employed at the Ministry of Environment, described effects on climate and ecosystems of energy production and energy use, notably in the magazine of SNM. Hence, the dominant framing of the problem in the first period of attention was not created exclusively by the environmental organizations. The framing seemed rather to be defined largely by scientists working on the problem.

In the second period of attention, the climate problem was dominantly framed in society as a global greenhouse problem, connected with other environmental problems. The renewed interest in the problem in the second period was the result of a government initiative (Dinkelman 1995, pp. 205–206).¹⁶ According to Dinkelman, the perception of the problem in this period did not differ from the perception in the first period of attention (p. 202). A new way of framing of the problem can be observed, however, both in the data on the environmental organizations as well as in Dinkelman's description of the governmental policy arena.¹⁷

¹⁶One of the illustrations of this statement in the data of environmental organizations can be found in the policy plan of SNM for 1987: "also because of the interest of the Minister of VROM (Public Housing, Physical Planning and Environment) much attention will be paid to this problem [greenhouse effect/ozone depletion] in 1987" (SNM 1986). Furthermore, the observation was confirmed by personal communication with Lammers (interview Lammers, 31 October 1994), former staff member of VMD.

¹⁷The climate problem was linked directly with energy in the first period of attention. It is not without good reason that the problem was called the CO₂ problem; see also Dinkelman (1995). In the second period of attention, the global character of the environmental greenhouse problem was emphasized, as argued by Dinkelman as well (p. 206). This perception of the problem fitted in with the new emphasis on the global scale of environmental problems (see e.g., Brundtland). One reason why Dinkelman does not observe differences in perception is perhaps connected with her emphasis on solutions; in both periods solutions did indeed relate to (the saving of) energy.

¹⁵Dutch: Uit verontrusting en uit de toenemende signalen vanuit de wetenschap dat dit een serieus probleem wordt. Een argument extra om te werken aan energiebesparing en duurzame energie.

In this period, the dominant framing of the problem was thus largely created by actors other than the environmental organizations. Hence, the framing of the climate change problem in the two periods was defined mainly by other actors. The framing of the climate change problem can therefore be considered a contextual factor.

The above-mentioned findings indicate that strategies of environmental organizations in relation to climate change are to a large extent dependent on the context. This view on strategies shows considerable agreement with the opinion expressed by the group that believes that contexts are very important and that strategies can change both over time and in different circumstances (see introductory section). A prominent contextual factor with respect to climate change was the dominant framing of the problem in society.

The important role of problem framing does not rule out the possibility that approaches and methods can also be influenced by other contextual factors. It appears, however, that the way in which the climate change issue was framed is so important that approaches and methods can be regarded as depending largely on contexts. The existence of other contextual factors can only strengthen this dependence.

Conclusions

The approaches of environmental organizations in the Netherlands to the climate change problem seem to have changed slightly over time, shifting from a rather anthropocentric approach before 1986 to a more mixed approach after 1988. The methods of two of the organizations changed over time, while those of the other three organizations generally remained constant. The two organizations whose methods shifted were also the ones most involved with the problem.

A comparison of the approaches and methods with regard to climate change with approaches with regard to ozone depletion and acidification revealed that different approaches and methods were employed simultaneously for the three problems. The approaches relating to climate change seem to be more parallel than those relating to the other two problems. Furthermore, the approaches with respect to climate change tend to be more anthropocentrically oriented than those regarding acidification. A comparison of methods used in relation to the three problems showed that in the climate case no attempt was made to influence industry—an important method in relation to ozone depletion and acidification. Furthermore, whereas the methods of the organizations with regard to ozone depletion and acidification converged over time, the

methods of the organizations with regard to climate change diverged over time.

Explanations for the findings can be found in the dominant framing of the climate change problem in society. In the first period of attention to the problem around 1980, climate change (the CO₂ problem) was taken up in the energy debate as an extra argument for introducing energy-saving measures and renewable-energy sources. This energy debate was very human-oriented. In the second period of attention around 1990, the problem received broader interest in society, and a more general framing (the greenhouse problem). This meant that the debate shifted from its exclusively human orientation. The general, broad framing of the climate issue also made it difficult to highlight a specific source for the problem. This could explain the lack of attempts to influence industry. The fact that the climate problem was rooted in the energy issue was perhaps responsible for the divergence of methods. The two organizations most involved with climate change traditionally played different roles in this energy issue. They played these different roles again with regard to climate change.

The findings indicate that approaches and methods in relation to climate change were to a large extent defined by the dominant framing of the problem in society. The problem framing was found to be critical both for the involvement of environmental organizations and for the part of the problem that was addressed. The dominant framings of the climate change problem in society in the two periods were determined largely by actors other than environmental organizations. In the case of climate change, therefore, the framing of the problem can be considered as a contextual factor. Hence, the strategies of Dutch environmental organizations in relation to climate change appeared to be highly dependent on contexts.

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