

## **Institutional context, political value orientation and public attitudes toward climate policies: A qualitative follow-up study of an experiment**

Aasen, Marianne<sup>1</sup>

Vatn, Arild<sup>2</sup>

### **Abstract**

We conducted 30 qualitative interviews of car-owners in Oslo (Norway) in a follow-up study of a survey experiment showing that institutional context affects attitudes toward policies to reduce car emissions, dependent on political orientation. One context highlighted individual rationality (best for the individual) emphasizing local pollution impacting on the individual. The other highlighted social rationality (best for a group/others) emphasizing CO<sub>2</sub> emissions and global responsibility. We analyze effects of contexts on attitudes toward policies. Institutional context influenced individuals' perspectives as well as their attitudes toward policies. Value groups differed in evaluations of the contexts, not in their interpretations of them.

Keywords: institutional context, social dilemmas, climate policies, public attitudes, values

### **1 Introduction**

Recent studies show that we are far from reaching the goal set in the Paris Agreement (Le Quéré et al., 2015). Policies and instruments to reduce emissions are slow, and lack of broad public support is found to be major barrier to realizing a transition to a low-carbon economy (Wiseman et al., 2013; Pietsch and McAllister, 2010). Recent mobilization of yellow vests in France (Grossman, 2019) demonstrate an urgent need for understanding the public response to climate policies. At the core of global warming is a demanding social dilemma which

---

<sup>1</sup> CICERO, Centre for International Climate Research - Oslo. P.O. Box 1129, Blindern, NO-0318 Oslo Norway. Marianne.aasen@cicero.oslo.no.

<sup>2</sup> NORAGRIC, Department of International Environment and Development Studies, Norwegian University of Life Sciences, P.O. Box 5003, NO-1432 Ås, Norway. Arild.vatn@nmbu.no.

demonstrates the necessity of political action to coordinate behavior. Policies may coordinate action on a local or national level and may ensure that burdens of pro-environment behavior are widely shared. However, gains from avoiding climate change are global, and furthermore distant in time. Hence, agreeing with local or national policies that involve some individual costs, for the sake of mitigating climate change, also represents a social dilemma and may explain individuals' lack of support for climate policies.

A growing literature on public positions on climate policies identifies political value orientation – that is, positions on state involvement and regulation – to be important for the public's attitudes toward climate policies (Drews and van den Bergh, 2015; Unsworth and Fielding, 2014). Several authors stress the need for creating policies that are supported by people holding different values, since public support for climate policies is crucial to the viability of such policies (Bruvoll, Dalen and Larsen, 2012; Hulme, 2009).

An emergent, but diverse, literature identifies effects on attitudes toward policies from varying the institutional contexts, for instance varying the contexts emphasizing that emission-reduction is the right thing to do. According to March and Olsen (1989) human action is strongly influenced by what is considered appropriate. However, this may vary with people's identities and perceptions of the situation (Weber, Kopelman and Messick, 2004; March, 1995). There has been relatively little field research examining such effects in groups with different political value orientations. Specifically, qualitative studies are needed that aim at understanding how various institutional contexts may be perceived.

This study contributes to the above field of research. It documents a qualitative follow-up study of a survey experiment (Aasen and Vatn, 2018) which showed that institutional contexts affect attitudes to climate policies – more specifically policies related to private car use – and that this effect depended on political orientation. The aim of the present study is to get a deeper understanding of how the variation in institutional contexts influence people's attitudes toward climate policies. More specifically, we aim at understanding

respondents' perceptions and evaluations of the treatments used in the survey experiment, and the role of political orientation versus the role of institutional contexts.

In section 2 we present the theoretical literature and previous studies in this field. In section 3 we present briefly the survey experiment (Study 1). We describe the study design of the qualitative interviews (Study 2) in section 4, and the results of this study in section 5. In section 6 we discuss findings and limitations before we conclude in section 7.

## **2 Institutions as rationality contexts**

A basic proposition in institutional theory is that humans are regarded as multi-rational (Hodgson, 1988, 2007; Sjöstrand, 1995). The kind of rationality or logic involved is understood to be influenced by the institutional context. Institutions are here defined as the conventions, norms and formally sanctioned rules of a society. Institutions influence action and attitudes by defining how something is usually done (conventions), the right way to act (norms), and/or the formally sanctioned form of action (the law). Institutions create expectations and give meaning to individual action (Vatn, 2009). Simplified, institutions may support what is best for the individual (individual rationality – IR), or what is best for a group one is member of or for others as (social rationality – SR). An IR context emphasizes an “I” logic, and a SR context emphasizes “we” or “they” logic. Individuals will search for e.g., cues, consciously or unconsciously, to interpret the situation. Defining it helps the person clarify what rationality or expected actions apply. An institutional context may be explicitly defined or informationally induced.

### **2.1. Explicitly defined and informationally induced institutional contexts**

Assigning roles – for instance as citizen or consumer – is a way to specify the institutional context and hence, affect which rationality is expected (Soma and Vatn, 2010). Spence and Pidgeon (2010) provide an example of such an effect from varying the instruction of what role one should take on in a survey experiment on attitudes toward climate policies. They

asked one group of respondents to evaluate climate policies in terms of personal considerations only, and another group to evaluate the policies “in social terms,” that is, as a member of society. Those who were asked to evaluate policies in social terms were more positive toward mitigation policies than those asked to consider policies from an individual viewpoint.

Providing information about other people’s behavior and attitudes is also a way to influence what people consider to be correct behavior (Cialdini et al. 1991). For instance, in Hurlstone et al.’s (2014) experiment, informing respondents about what their peers considered to be correct influenced the respondents’ attitudes. Their peers had high acceptance of climate policies that entailed individual loss, and this information influenced the respondents’ attitudes to be closer to the attitudes of their peers (when compared with a control group). A related finding is made by Mildemberger and Tingly (2017) in their recent study of the effects from correcting so-called second order beliefs, that is, beliefs about what others think about an issue. Regarding social dilemmas, people tend to underestimate other people’s opinions about what should be contributed. Adjusting people’s second order beliefs may hence result in higher willingness to contribute to a social good such as mitigating climate change, which is what Mildemberger and Tingly (2017) found.

The institutional context may also be informationally induced. One may learn something new about environmental consequences of behavior that alters beliefs and what is considered right to do (Dietz and Stern, 2002). Information may also induce an institutional context without changing beliefs. The informational content may influence which aspect of an issue is emphasized, and cause individuals to focus on certain characterizations of an issue over others.

The kind of rationality induced is thus expected to influence attitudes and behavior. However, a person’s attitude toward policies is not dependent only on the institutional context, but also on individual characteristics, such as values.

## **2.2. The role of political value orientation for the influence of institutional contexts**

Rokeach (1973) argues that we can classify values in domains or spheres – like political values as values pertaining to the political sphere. Although they are often studied at the individual level, values are in social science understood to be a result of socialization and to be formed by an individual’s “cultural/institutional history” (Vatn, 2015). The most important phase of socialization and formation of an individual’s values occurs early in life. Yet, values may change over time because of different life stages or events, etc. Nonetheless, values are considered more resistant to change than, for instance, attitudes, and are considered the basis in a person’s system of attitudes and beliefs (Hogg and Vaughan, 2011). Values are central for evaluations of individuals’ actions and choices, and they are commonly referred to as “desirable trans-situational goals, varying in importance, that serve as guiding principles in the life of a person or other social entity” (Schwartz, 1994, p. 21).

The values individuals hold may thus be important for individuals’ interpretations of institutional contexts. Values may, for instance, influence the effect of a context on attitudes by affecting which information people care about and believe in when exposed to it. The same facts may be understood differently, and may be given different weight, by people holding different values. This difference may be due to people holding different beliefs about the world or the specific situation, or having different interests (March, 1995). It may also be caused by a biased assimilation processes which may include a propensity to judge evidence supporting one’s values and initial position as relevant and reliable, and a propensity to judge disconfirming evidence as irrelevant and unreliable (Lord, Ross, and Lepper, 1979). This bias may also be explained by people’s interest in protecting their identity and social standing, by for instance conforming their beliefs to those of people perceived to share their values (Weber et al., 2004).

### **2.3. Previous research on effects from institutional context on attitudes toward climate change policies and the influence of political value orientation**

In this study we are particularly interested in the effects from what are here defined as institutional contexts on attitudes toward climate policies. An emerging literature investigates the effects from varying the institutional contexts<sup>3</sup>. There are some exceptions, but few studies investigate the role of political values for this effect.

One exception is Petrovic et al. (2014), who provide two examples of how different institutional contexts affected attitudes toward mitigation policies in groups with different political value orientations. They conducted a survey experiment involving about 800 US residents, where they investigated how attitudes toward policies to reduce emissions were affected by emphasizing local individual health effects from emissions compared with emphasizing environmental consequences from climate change. They found that the health frame elicited stronger support for policies among conservatives and the climate frame elicited stronger support among liberals.

Another is the study of Wiest et al. (2015), who found that presenting different descriptions of climate change to groups having different political value orientations caused varying effects on behavioral intentions. For instance, presenting local effects (affecting the respondents) from climate change yielded higher scores on behavioral intention among Republican and Independent respondents than presenting global effects from climate change (not affecting the respondents) to these groups. They found no effects on behavioral intentions among Democrats (who reported stronger initial intentions than the other groups did). Wolsko et al. (2016) did a similar experiment on attitudes toward environmental protection among American respondents. They studied the impact on attitudes from a text highlighting environmental protection as patriotic support for American values, obeying authorities and defending the purity of nature, which they hypothesized would correspond with conservative

---

<sup>3</sup> Some examples are Hurlstone et al. (2014), Gifford and Comeau (2011) and Spence and Pidgeon (2010).

values. They found no effect from the text on Democratic respondents, while Conservatives who received the text were more supportive of environmental protection than were Conservatives who did not receive it.

Whitmarsh and Corner (2017) tested effects from three narratives on people's beliefs about climate change and attitudes toward climate policies in subgroups of different political value orientations. One narrative was about resource use, avoiding unnecessary waste production and degradation of resources. A second narrative was about how renewable energy production in Britain can support national industrial development and secure energy independence in addition to emission reductions. A third narrative was about climate justice, that those who cause the problem have resources to better deal with it than those who contribute least to the problem. The narratives were tested in a web survey among 2000 British respondents. These read one of the narratives and answered some questions about climate change and mitigation policies. They found that the first narratives reduced skepticism toward the existence of the climate change problem and climate policies among right-wing respondents, and that the respondents across political orientation agreed with the text. Regarding the third narrative, about climate justice, they found that the left-wing respondents agreed with the text, whereas the right-wing respondents disagreed with its content.

These above-mentioned experiments demonstrate the role of political values for the effects of institutional contexts on attitudes. We aim at understanding *how* such effects may come about, applying a qualitative study.

### **3 Study 1**

The survey experiment focused on Oslo city residents and emissions from private cars. Two different contexts were presented as text treatments in the surveys. The motives for doing something with emissions from transport are presented as alluding to different rationalities –

an individual (emphasizing local pollution effects impacting on the individual) and a social (emphasizing CO2 emissions and global effects).

We conducted a web-based survey experiment of about 1500 car owners in Oslo since they would experience an individual loss from policies aimed at reducing car emissions. We randomly assigned participants to one of three groups of 500 respondents each. One group received the text emphasizing an individual rationality (IR) context, a second group received the text emphasizing a social rationality (SR) context, and a control group received no such texts.

Both texts concerned emissions from private car transport (see Supplementary material A). They differed regarding which perspective to take, i.e., explicitly defining institutional context by a sentence encouraging either IR or SR. We also aimed to informationally induce the two institutional contexts. The IR text contained numbers and facts about the contributions of car transport to local air pollution. In being a local environmental problem, this topic concerns unavoidably other people in the local environment. However, in the IR treatment we emphasized that the effects from emissions hit “you” (the reader), that local pollution reduces the length and quality of life not only for those who are considered vulnerable (such as asthmatics and persons with heart diseases). The SR treatment informed about the contributions of private car emissions to the total national climate-gas emissions, and the respective shares of rich and poor nations in contributing to global emissions. It also emphasized the benefits from mitigating climate change for future generations and for people in countries more vulnerable to climate change.

The dependent variables were attitudes toward policies, a) “We ought to make petrol and diesel so expensive that we choose to drive less,” and b) “We ought to develop bicycle lanes and public transport, even if doing so means less space for driving cars.” We constructed an index on political value orientation – the degree of support for state involvement and regulation – using common items (see Aasen and Vatn, 2018). In our results

we refer to those who scored above 12 on the index as “individualists”, and those who scored below 12 as “non-individualists”.

The results from regressions showed that the IR treatment affected attitudes toward ‘less space for cars’ in both value orientation groups. Hence, both non-individualists and individualists who received this text, were more likely to agree with the statement than the respondents in the control group were. The SR treatment affected only the non-individualists’ attitudes toward an ‘increase in petrol prices’.

## **4 Method**

One way to achieve a better understanding of the meanings of underlying statistical associations found in a quantitative study is to conduct qualitative interviews of subsamples (Brannen, 2005).

To gain deeper insight into the results of Study 1 we conducted 30 semi-structured in-person interviews.

### **4.1. The sample**

Study 1 provided the sample in Study 2; we selected respondents from a group of 309 individuals who had indicated in the survey experiment that they were willing to be contacted for an interview. The respondents’ scores on the political value orientation index was used as recruitment criteria. Eight months after the survey experiment was run, we sent emails to 47 respondents scoring higher than 12 on the index (most of them above 17) to 47 respondents scoring lower than 12 (most of them below 7) on the same index. About 20 respondents in each value group responded that they could meet for an interview in the period suggested. From these we selected 15 respondents from each value group, ensuring a certain spread in both groups regarding gender, age (30–59 years), and geographical distribution (east/west in Oslo). In total, we interviewed 14 women and 16 men. The interviews took place where the respondents preferred, and they were compensated with a universal gift card worth 400

Norwegian kroner. Each interview lasted about an hour. They were recorded, and we took detailed notes.

#### **4.2. The interviews**

The interviews consisted of structured and open-ended questions. They gave scope for categorizing the empirical material into predefined concepts, but also for exploring whether the results came about according to the theory of institutions as rationality contexts or not.

The interview guide consisted of five parts (see Supplementary material B). We explained the aim of the study and asked whether the interviewees remembered Study 1. In the first part of the interview we asked about their background, education, work situation, family, etc., their general engagement with environmental issues and about their car use. We devoted the second part of the interview to their thoughts on emissions from road traffic (Whether it is a problem; How? What to do; Who are responsible to solve it? etc.). Thereafter we asked about their attitudes toward two statements (dependent variables) about policies as formulated in the in Study 1: “increase in petrol prices” and “less space for cars.” Here, we asked about their positions concerning these statements, and asked them to elaborate on their answers.

In part three, we introduced (in random order) one of the two texts used in Study 1 to the respondents, on paper. We asked them to read it carefully and give their thoughts on the text (Was the issue well-known to them? Did they agree with the way the topic was presented? Did it make sense? Why/why not?). We also asked whether the text made them think differently about car emissions from what they answered earlier in the interview. We also asked about what they thought about solutions and about the responsibility for emission cuts (if they considered these emissions to be a problem) after having read the text. We moreover asked if the text influenced their attitudes toward “increase in petrol prices” and “less space for cars,” and to elaborate on their answers. We then asked them to read the other text, and we repeated the questions we asked to the first text.

We devoted the fourth part of the interview to the respondents' perceptions of the two texts, and their reflections on the contents. We moreover wanted to expand the qualitative investigation of the influence of the treatments beyond their effect on attitudes toward the two specific policies. We therefor asked respondents to elaborate on which of the texts would motivate them the most to reduce their own car use and to accept restrictions on car use in general.

In part five we asked them to indicate their general view on state involvement and regulation. We drew a line on paper and explained that the politically left-oriented was placed to the left of the mid-point and right oriented was placed to the right of the mid-point. We asked them to indicate their position by pointing on this line and about their view on the state's role regarding environmental issues compared with its role in other policy areas.

## **5 Results**

None of the respondents remembered the answers they gave in the survey experiment (not the treatment they received, nor the questions). When reflecting on emissions from car transport in their city, respondents from both groups – individualists and non-individualists – mentioned local pollution and climate change as problems. The non-individualists reported in general stronger environmental engagement, and a stronger individual effort to minimize environmental damage, for instance through recycling and taking fewer flights. All respondents, both individualists and non-individualists, that had some concern about environmental issues stressed that politicians have the main responsibility for facilitating low-emitting transportation, but also mentioned everyone's responsibility to reduce his or her own emissions. In the coming sections we describe how the treatments were perceived and how they affected the respondents.

### **5.1. Equal perceptions of the text treatments**

The respondents' positions on general state involvement and regulation as indicated in the qualitative interviews are consistent with their scores as found in Study 1. This value orientation of our respondents seems thus to be quite stable throughout the data collection period. When we asked the respondents to compare the treatments, we found no differences between the value groups in how they perceived the texts. Both individualists and non-individualists noted that they perceived the IR treatment to encourage them to think of how policies would benefit them personally, while the SR treatment encouraged them to think of global injustice and the negative effects on others from car driving. They referred to both the emphasis on what perspective to take and the content of the information in this respect. Most respondents found the texts unproblematic, although they did not necessarily agree with the formulations. They were familiar with the content and although none of them knew the exact numbers referred to in the texts, the general information and messages were not new to them, except for one respondent. When we asked respondents to elaborate on how the texts affected them, however, the two groups deviated in their answers.

### **5.2. Different evaluations of the texts' content**

We asked respondents about which of the texts was most appealing to them. We also asked which of the texts was most motivating for the respondents in accepting other kinds of policies that restrict car use than the two mentioned, and in reducing car use voluntarily. The individualists mentioned the IR treatment as being generally more appealing than the SR treatment was. The non-individualists found both texts appealing, but they said that they were more motivated to act because of climate change than because of local air pollution.

We asked respondents about their thoughts on the state's role regarding environmental problems. We found no difference between the value orientation groups regarding their position on general governmental restrictions on car use, exemplified by, for instance, road pricing. Most individualists deviated from their general position on state involvement and

regulation regarding environmental issues, in that they would accept some state regulation such as road pricing, they said, for the purpose of decreasing car emissions. When asked if this in any way influenced their general political value orientation, these individualists said they would still answer in the same way as before the interview.

### 5.3. Effects from treatments on attitudes toward policies

Before we turn the findings on how the texts influenced the respondents' attitudes, we summarize their initial attitudes and changes in attitudes after having read the texts.

#### 5.3.1. Overview over attitudes toward the policies and source of attitude changes

Table 1 below summarizes the respondents' attitudes before and after they read the text. As expected, the individualists are generally less positive toward the policies, and "Less space for cars" is more popular than "Increase in petrol prices". We see that some individuals in both value groups change attitudes due to one or both texts. The table indicates source (either SR or IR or both) of changes in attitudes.

**Table 1: Changes in attitudes in the two value orientation groups**

	Attitudes toward "Increase in petrol prices"		Attitudes toward "Less space for cars"	
	Before text	After text	Before text	After text
Non-individualists	5 positive 10 negative	2 changed due to SR 1 changed due to IR 1 changed due to SR/IR	10 positive 5 negative	1 changed due to SR 2 changed due to SR/IR
Individualists	3 positive 12 negative	2 changed due to IR	11 positive 4 negative	1 changed due to SR/IR 2 changed due to IR

#### 5.3.2. Mostly non-individualists being reminded about the "distant they"

All respondents except for one said that the texts did not influence their attitudes because of learning or changes in beliefs, but because the texts reminded them of what was important to them.

Several of the non-individualists, and only one of the individualists, referred to the SR treatment as being a reminder of something they do care about, such as global poverty and

inequality, which they wanted to act upon, regardless of the small effect from their individual behavior. For instance, one non-individualist said, “I do whatever I can in my own consumption decisions; compared with other Norwegians I can’t do more (...). My consumption versus the consumption of a person in Bangladesh makes a stronger impression. Perhaps those of us who use cars very seldom could drive even less.”

Another respondent described how she initially was negative to an increase in petrol prices because of distributional concerns: that people who are dependent on car driving will experience increased costs and may become less mobile. The rationale for being negative about an increase in petrol prices was social, she had a local “they” (people more dependent on car use than this respondent was) in mind. Reading the SR treatment reminded her about a “distant they,” and she stated that she became strongly positive about an increase in petrol prices from reading the text. “It’s downright unfair. [...] It feels a bit pathetic complaining about high fuel prices when our emissions are affecting people’s basis of existence.” “We can resolve the issue of distribution in Norway.” The normative sentence in the SR treatment stating that “We cannot expect poorer countries with lower emissions per person to reduce emissions more than we do” influenced her attitude by shifting her focus.

We found a change from a “local they” logic to a more “distant they” logic among all these respondents. Two non-individualists also made this change in logic from reading the IR-context. One respondent, for instance, was, as the others, concerned about distributional effects from an increase in petrol prices in Norway. This argument fell short, she said, when compared with the argument about the consequences to others’ (local and distant) health and wellbeing, and this shortfall became clearer to her from reading both treatments. She interpreted the IR treatment to emphasize individual benefits. However, this interpretation did not influence her initial perspective: “It concerns me; not because of concern for my own health, but for others’ health.”

The individualist who reported this experience in change of logic from reading the SR treatment was initially negative toward “less space for cars” because he thought that the car should be part of the future transport alternatives. The SR treatment made him think of his own car use as unnecessary, when reminded about its effect on the global climate. Furthermore, he mentioned that people in other countries need to increase their consumption and emissions to enhance their standard of living, which is not necessary in Norway; he said, “Quite a lot of Norwegians’ car use is a luxury.”

### **5.3.3. Health benefits for “me” and for “others”**

Respondents in both value orientation groups mentioned that they think of climate change as a more complex problem than local air pollution, since effects are global and individuals’ efforts to reduce emissions have a smaller effect on climate change than on local air pollution. The respondents had different thoughts about the small effect on the climate of each individuals’ behavior. Some individualists thought of their own car driving as being insignificant and thus irrelevant in the global perspective. This lack of perceived relevance of local and individual effort for global climate change mitigation was more apparent among individualists than among non-individualists.

One individualist who changed his mind (about “less space for cars”) serve as an illustration of what the individualists reported. He was influenced by the IR treatment. This respondent was more concerned about climate change than local air pollution, he said, and there was nothing new to him in the texts. But he considered private car use to be of little relevance to mitigating climate change and referred to large structural changes such as international trade agreements and energy production from coal in other countries as being important to solve the issue of climate change. He pointed to the sentences that encouraged him to think of himself and his own health, both to the explicit institutional context and to the informationally induced institutional context. Being reminded about the positive

consequences for himself from reduced air pollution and more biking made him supportive of “less space for cars,” he stated.

Another example is an individualist respondent who was generally against all policies that restricted her individual choices, and initially negative to reducing space for cars. She uses a car four times a week and was initially negative because this policy would make car driving more difficult for her. Both the explicitly formulated institutional context and informationally induced institutional context in the IR treatment affected her attitude: “This text [IR treatment (authors’ note)] makes me think about the consequences this has for me personally... I think it’s embarrassing to say it, but it’s sheer selfishness.” She said the individual benefit to her health from biking more and breathing clean air outweighed the negative effect on her life from having “less space for cars.”

However, also non-individualists were influenced by the IR treatment. One respondent said that both the IR treatment and the SR treatment made her change her mind regarding “less space for cars”. Regarding the IR treatment, she referred to emphasis both on what perspective to take and to the information in the texts as having affected her attitude toward “less space for cars.” The IR treatment made her think of her own benefits, which made her more positive. She was the only respondent who stated that she learned something about the severity of local air pollution from the text. This respondent was also influenced by the SR treatment. She said it reminded her that she should do more: “The small things that I can do, like using a bike more, are very small contributions compared with what poor people lose because of climate changes.” She thus switched between individual rationality and social rationality depending on which treatment she read.

The IR treatment also caused changes in attitudes toward petrol prices among two individualists. One of them was initially partly positive toward an increase in petrol prices because of the societal gains from reduced health risk and reduced emissions of greenhouse gases but hesitated because of the negative effects for car users. The reason he gave for

becoming strongly positive was that the IR treatment provided convincing additional arguments. Although he was familiar with them, they did not come to mind when he considered increased petrol prices. He pointed to the benefits for his own health from breathing better air. He said the text reminded him about individual benefits, and that these outweighed the negative effects from an increase in petrol prices. He also said that both the explicit emphasis on which perspective to take and the general focus on individual benefits in the IR treatment influenced his attitude.

#### **5.3.4. Concrete and experienced reference to local pollution**

The text in the IR treatment reminded respondents of their own experiences finding black dust in eyes and nose and windows. Respondents in both value groups mentioned the concreteness of the information when elaborating on how the text influenced their position on policies.

For instance, one non-individualist respondent stated was more concerned about climate change than about local air pollution, also after having read the texts. Nonetheless, the IR treatment affected him more regarding attitudes toward policies, since it was “concrete and local,” and relevant for his life and his city, he said. Regarding the SR treatment, he said that effects on climate change from this small change in car space in Oslo were difficult to perceive. Both the individual health gains and other people’s health gains emphasized in the IR treatment were important for the change in his attitude toward “less space for cars.” The answers from this respondent are one more example of activation of both social and individual perspectives from reading the IR treatment. However, he said that the concrete and perceivable effects from a decrease in emissions as described in the IR treatment were also important for the change in his attitude and referred to his windows with and without black dust on them.

One individualist mentioned the concreteness of the information in the IR treatment when elaborating on how the text influenced his position on an increase in petrol prices. He was initially negative to an increase in petrol prices. He did not refer to the sentence

emphasizing explicitly which perspective to take. The text reminded him of how he had experienced finding black dust in his eyes and nose some winter days. He was worried about climate change, but said it was easier to accept policies when they were connected to local circumstances, not because he was more concerned about his own health or locals' health more than the health of people outside Norway. He referred to how the descriptions helped him grasp both the problem and the effects of reduced emissions. As another respondent said: "I picture the street outside my house with less cars and more bikes, and that the black dust on my windows is gone."

#### **5.4. Lack of legitimacy - a topic across value groups**

This study also gave insights into some explanations for why the contexts did not affect all respondents' attitudes. Particularly interesting is the finding that some respondents in both value orientation groups rejected the texts because of their perceptions that the texts were written by a political elite they felt distant from. Four respondents, two individualists and two non-individualists, said they were provoked by the content and that they discarded the texts. These respondents did not deny the existence of environmental problems, but they were not so worried about such issues. These respondents grounded their distance to the perceived messenger in a large and unfair difference between themselves and the elite regarding control over own life conditions and consumption levels. These respondents said that they themselves were doing more for the environment than any politician in having low private consumption levels. Common for these respondents were low education and low income, and thus little flexibility in their own lives, and two of them received social benefits because of health problems.

## **6 Discussion**

### **6.1. The role of value orientation versus institutional context**

The data in this study revealed that individuals may switch between social and individual rationalities depending on the institutional context. Emphasizing what perspective to take, but also the informationally induced institutional contexts influenced attitudes, the latter having more profound influence in our case. Some respondents pointed to the sentences that emphasized which perspectives the respondents should take. However, the information content caused respondents to focus on certain characterizations of car emissions, such as for instance health effects, as opposed to other effects. The information in the texts seems to play an important role regarding the perspectives the respondents grounded their attitudes on, whether individual or social.

The study also revealed how rationalities may be flexible (March, 1995) depending on identity and different perceptions of contexts. The qualitative data gave insight into how the differences in effect from the treatments on attitudes in the two value orientation groups may have come about. The differences between the two groups did not come from different interpretations of the texts, but from different evaluations of them.

Respondents in the two value groups deviated in their views on the two coordination problems, that of climate change and that of local air pollution. The relatively small size of each individual's contribution to the problem of climate change (outcome-efficiency) made individualists demotivated to act and accept the policies, whereas non-individualists did not question the relevance of their own behavior or local policies for the global problem of climate change, but grounded individual action in a moral imperative. This finding reminds us that different motivations to act makes it challenging to find legitimate solutions on society level.

Given the need for rapid cuts in climate gas emissions, it seems crucial to understand the different motivations, and what solutions can provide meaning for a public with different value orientations.

The results in this study point to an optimistic finding in that respect. The IR treatment influenced respondents' views on policies because it referred to their concrete experiences with local air pollution (e.g., Scannell and Gifford, 2013). Respondents in both value orientation groups referred to local air pollution as easier to relate to and act upon than global climate change. This latter finding implies an important message for communicating policies; local and perceivable effects from or attributes of policies (e.g. earmarking of taxes, building local communities) may resonate across political value orientation groups.

However, the sum of solutions for local challenges may not be enough to solve the global problem of climate change. Co-benefits may be exhausted. It seems from our study, that engagement with a global and distant "them" is an unrealistic basis for broadly supported national and local climate policies. This position between "me-logic" and "they-logic", which is neither purely altruistic nor purely self-oriented, may be a better normative imperative for policies. As the next section shows, a "we-logic" (solidarity) is relevant for both political value groups.

## **6.2. Strong demand for fairness**

Some respondents in both value orientation groups expressed strong negative reactions to the texts and rejected them because of their perceptions that the texts were written by a political elite they felt distant from. Hence, resistance to pro-environmental messages and politics must be understood, at least partly, in the context of social identities (Kahan et al. 2010; Weber et al, 2004; Cohen, 2003). This finding illustrates that lack of a class perspective when designing climate policy instruments may lead to objections to these instruments, but also to the general appeal about lowering consumption of goods resulting in climate gas

emissions, if the message does not contain some sensitivity to the uneven consumption levels of these goods in the population.

Fairness considerations also played an important role for the attitudes toward the specific policies, often referred to as policy specific beliefs (e.g., Hammar and Jagers, 2007). But, in contrast to the type of fairness issue just mentioned, fairness considerations about the effects from the policies came out differently depending on political value orientation. Individualists put more weight on local distributional effects from policies, whereas non-individualists were more concerned with global distributional effects from climate change. Yet, the least popular policy – tax on gasoline – was also most often mentioned as unfair among both groups. These findings support results from other studies' in that beliefs about distributional effects of the policies are important for attitudes toward such policies (e.g., Baranzini and Carattini, 2017; Kallbekken and Aasen, 2010; Hammer and Sverker, 2007). This seem to be the reason why a decrease in space for cars is more popular than a fuel tax. Economic instruments can be very effective (see e.g. Sterner. 2007), but if people do not believe in the effect and they are perceived as unfair, strict legal instruments or physical barriers might be more attractive and effective in changing people's environmentally unfriendly behavior.

More profoundly, these results about strong sense of fairness for the local “we” also provide some hope that institutional contexts may have the capacity to change perspectives from “me” to “we” or remind people of the relevance of a “we”. A challenge, then, will be to develop policies and actions that appeal and create solidarity with a larger “we” than the local.

### **6.3. Comment on methods**

It is important to be aware that some mechanisms that may cause results in the quantitative study, may not be revealed through qualitative interviews, such as for instance information assimilation bias (Lord et al., 1979; Cohen, 2003). Similarly, when an interviewee is asked to read and reflect upon a text in a face-to-face interview, other interpretations of the text may

come about than those that occur when the interviewee reads the text in solitude on a screen as an introduction to a web survey. In addition, to create a clear rationality context is more difficult in an experiment referring to real-life settings, where people have different associations with a topic. We realize that to create a “clean” IR context was not possible as there will always be a “we”, however local we make an environmental problem. This does not influence on our general conclusion, though.

## 7. Conclusion

In this paper we conduct a qualitative follow-up study of a survey experiment (Aasen and Vatn, 2018). The survey experiment investigated *whether* different institutional contexts, emphasizing individual rationality (IR) as opposed to social rationality (SR), affect attitudes toward emission-reducing policies in groups of people with different value orientations in sense of their positions on state involvement and regulation. It revealed effects from the institutional contexts on attitudes, and these differed among the two value orientation groups. In this paper we analyze *how* the institutional contexts influence these attitudes based on data from qualitative interviews of subsamples from the survey experiment.

This study supports the observation that individuals may switch between social and individual rationalities depending on the institutional context. The contexts did not provide new information to the respondents but reminded them of what was important to them. Emphasis on what perspective to take, but also the informationally induced institutional contexts influenced attitudes, the latter having more profound influence in our case.

This study also demonstrates the importance of understanding how institutional contexts are perceived and work. The differences between the two groups did not come from different interpretations of the texts, but from different evaluations of them. Respondents deviated in their views on the two coordination problems, that of climate change and that of local air pollution. Individualists were more demotivated to act and accept the policies from

reading about climate change, whereas non-individualists did not question the relevance of their own behavior and local policies. In addition, we found that inequality among the target population in general is referred to when respondents report perceived illegitimacy of climate policies.

The effects on attitudes from the contexts in the survey experiment (Aasen and Vatn, 2018) and in this current study are modest. However, the expected effects of an experiment like this are small considering all the information individuals are exposed to in their daily lives. More interestingly, this study gives insights into how two common strategies of grounding climate policy measures are received. The text treatments were very effective means to get access to the respondents' reflections on dilemmas when designing climate policy instruments. In the future, one should especially prioritize field studies that can provide insights into the complex dynamics between situational factors and individual characteristics in order to understand their influence on attitudes and behavior that is relevant for mitigating climate change. The last years protests on gasoline tax raise among "yellow vests" in France (Grossman, 2019), but also the mobilization this year against congestion charges in the Norwegian context where this study was conducted (The Guardian, 2019), underlines the urgency of developing this knowledge.

## References

- Aasen, M. and Vatn, A. 2018. Public Attitudes Toward Climate Policies: The Effect of Institutional Contexts and Political Values. *Ecological Economics* **146**: 106–114. DOI: 10.1016/j.ecolecon.2017.10.008
- Baranzini, A., and Carattini, S., 2017. Effectiveness, earmarking and labeling: Testing the acceptability of carbon taxes with survey data. *Environmental Economics and Policy Studies*, **19(1)**: 197 – 227.

- Brannen, J. 2005. 'Mixing methods: The entry of qualitative and quantitative approaches into the research process'. *International Journal of Social Research Methodology*, **8**: 173–184.
- Bruvoll, A., Dalen, H. M., and Larsen, B.M. 2012. 'Political motives in climate and energy policy'. Discussion paper Statistics Norway. No. 721 December 2012, Retrieved January 2016 from <https://www.ssb.no/a/publikasjoner/pdf/DP/dp721.pdf>.
- Cialdini, R., C. Kallgren, C. and R. Reno, R., 1991. 'A Focus Theory of Normative Conduct: a theoretical refinement and re-evaluation of the role of norms in human behaviour'. *Advances in Experimental Social Psychology* **24**: 201–234.
- Cohen, G. L. 2003. 'Party over policy: The dominating impact of group influence on political beliefs'. *Journal of Personality and Social Psychology*, **85**: 808–22.
- Dietz, T. and Stern, P.C. 2002. 'Exploring new tools for environmental protection'. In T. Dietz and P.C. Stern (Eds), *New Tools for Environmental Protection. Education, Information and Voluntary Measures* (pp. 3–15). Washington, DC: National Academy Press.
- Drews, S. and van den Bergh, J.C.J.M. 2015. 'What explains public support for climate policies? A review of empirical and experimental studies'. *Climate Policy*, 1469–3062.
- Gifford, R., Comeau, L.A. 2011. 'Message framing influences perceived climate change competence, engagement, and behavioral intentions'. *Global Environmental Change* **21**: 1301–1307.
- Grossman, E., 2019. France's Yellow Vests – Symptom of a Chronic Disease. *Political Insight*, **5**: 30–34.
- Hammar, H. and Jagers, S.V. 2007. 'What is a fair CO<sub>2</sub> tax increase? On fair emissions reductions in the transport sector'. *Ecological Economics* **61**: 377–387.
- Hodgson, G.M. 1988. *Economics and Institutions: A Manifesto for a Modern Institutional Economics*. Cambridge, UK: Polity Press.

- Hodgson, G.M. 2007. 'The revival of Veblenian institutional economics'. *Journal of Economic Issues* **2**: 325–40.
- Hogg, M.A. and G. M. Vaughan, G. M. 2011. *Social psychology*. Edinburgh, UK: Pearson Education Limited.
- Hulme, M. 2009. *Why We Disagree About Climate Change*. Cambridge, UK: Cambridge University Press.
- Hurlstone, M.J., Lewandowsky, S., Newell, B.R. and Sewell, B. 2014. 'The effect of framing and normative messages in building support for climate policies'. *PLoS ONE* **9**(12), e114335. doi:10.1371/journal.pone.0114335
- Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Larrimore Ouellette, L., Braman, D., and Mandel, G. 2012. 'The polarizing impact of science literacy and numeracy on perceived climate change risk'. *Nature Climate Change* **2**: 732–735.
- Kallbekken, S., and Aasen, M. 2010. 'The demand for earmarking: Results from a focus group study'. *Ecological Economics* **69**: 2183–2190. 10.1016/j.ecolecon.2010.06.003
- Le Quéré, C, et.al. 2015. Global Carbon Budget 2015. *Earth System Science Data* **7**: 349-396. DOI:10.5194/essd-7-349-2015
- Lord, C.G., Ross, L., and Lepper, M.R. 1979. 'Biased assimilation and attitude polarization: Effects of prior theories on subsequently considered evidence'. *Journal of Personality and Social Psychology* **37**: 2098–109.
- March, J.G. and Olsen, J.P. 1989. *Rediscovering Institutions. The Organizational Basis of Politics*. New York: Free Press.
- March, J.G., 1995. *A Primer on Decision Making*. New York: Free Press.
- Mildenberger, M., and Tingley, D. 2017. 'Beliefs about Climate Beliefs: The Importance of Second-Order Opinions for Climate Politics'. *British Journal of Political Science* 1-29. doi:10.1017/S0007123417000321

- Petrovic, N., Madrigano, J., and Zaval, L. 2014. 'Motivating mitigation: When health matters more than climate change'. *Climatic Change* **126**: 245–254.
- Pidgeon, N. 2012. 'Public understanding of, and attitudes to, climate change: UK and international perspectives and policy'. *Climate Policy* **12**: 85–106.
- Pietsch, J. and McAllister, I. 2010. 'A diabolical challenge': public opinion and climate change policy in Australia'. *Environmental Politics* **19**: 217–236.
- Rokeach, M. 1973. 'The nature of human values'. New York, NY: Free Press.
- Scannell, L. and R. Gifford 2013. 'Personally Relevant Climate Change. The Role of Place Attachment and Local Versus Global Message Framing in Engagement'. *Environment and Behavior* **45**: 60–85.
- Schwartz, S.H. 1994, 'Are there Universal Aspects in the Structure and Content of Human Values?' *Journal of Social Issues* **50**: 19–45.
- Sjöstrand, S-E. 1995. 'Towards a Theory of Institutional Change'. In Groenewegen, J., C. Pitelis and S-E. Sjöstrand (Eds.), *On Economic Institutions. Theory and Application* (pp. 19–44). Cheltenham: Edward Elgar.
- Soma, K. and Vatn, A. 2010. 'Is there anything like a citizen? A descriptive analysis of instituting a citizen's role to represent social values at the municipal level'. *Environmental Policy and Governance* **20**: 30–43.
- Spence, A. and Pidgeon, N. 2010. 'Framing and communicating climate change: the effects of distance and outcome manipulations'. *Global Environmental Change* **20**: 656–667.
- Sterner, T. 2007. Fuel taxes: An important instrument for climate policy. *Energy Policy*, **35**: 3194–3202. doi:10.1016/j.enpol.2006.10.025
- The Guardian 2019. Driven to despair: road toll charges take centre stage in Norway vote. September (<https://www.theguardian.com/world/2019/sep/08/road-rage-norway-goes-to-polls-split-over-environmental-policies>)

- Unsworth, K.L. and Fielding, K.S. 2014. 'It's political: How salience of one's political identity changes climate change beliefs and policy support'. *Global Environmental Change* **27**: 131–137.
- Vatn, A. 2015. *Environmental Governance. Institutions, policies and action*. Cheltenham: Edward Elgar.
- Vatn, A. 2009. 'Cooperative behavior and institutions'. *Journal of Socio-Economics* **38**: 188-196.
- Weber, J.M., Kopelman, S., and Messick, D.M. 2004. 'A Conceptual Review of Decision Making in Social Dilemmas: Applying a Logic of Appropriateness'. *Personality and Social Psychology Review* **8**: 281–307.
- Whitmarsh, L., and Corner, A. 2017. 'Tools for a new climate conversation: a mixed methods study of language for public engagement across the political spectrum'. *Global Environmental Change* **42**: 122-135.  
doi:<https://doi.org/10.1016/j.gloenvcha.2016.12.008>
- Wiest, S., Raymond, L. and Clawson R.A. 2015. 'Framing, partisan predispositions, and public opinion on climate change'. *Global Environmental Change* **31**: 187–198.
- Wiseman, J., Edwards, T. and Luckins, K. 2013. 'Post Carbon Pathways: A Meta analysis of 18 large scale post carbon economy strategies', *Environmental Innovation and Societal Transitions* **8**: 76–93.
- Wolsko, C., Ariceaga, H., Seiden, J. 2016. 'Red, white, and blue enough to be green: effects of moral framing on climate change attitudes and conservation behaviors'. *J. Exp. Soc. Psychol.* **65**: 7–19.