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A discourse analysis of yellow-vest resistance against carbon taxes

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ABSTRACT

Carbon taxation is a core instrument for climate mitigation. Its implementation, however, faces popular resistance. In this paper we study one of the most emblematic mobilizations triggered by the carbon tax issue, the Yellow Vest movement in France. We use Q-methodology, a mixed-method approach to identify discourses (or viewpoints) held by protesters. We find four statistically-distinctive viewpoints, emphasizing respectively: a systemic critique of capitalism; environmental action that is fair; priority over incomes and purchasing power of common people; and inequality and the responsibilities of corporations. Our research points to the importance of ideology in shaping viewpoints and filtering attitudes towards carbon taxes. Yet beyond ideological differences, we find consensus among all discourses, in that there should be more consultation in energy transition policy; the rich and not the poor should pay the cost of transition; and the government should use tax revenue for the transition only. We conclude that, for bold carbon tax schemes to be implemented with less conflict, a much more participatory, transparent and equitable design would be necessary than the one experienced in France.

1. Introduction

On 17th November 2018, tens of thousands of people took to the streets in France. In the following weeks, blockades, protests and occasionally riots took place all over the country. The call to protest by a group of organizers who had met online was made simultaneously all over France (Blavier, M., May 2019, personal interview).¹ It was triggered by a hike in fuel prices – a rise in oil prices in October, and a new law to decrease speed limits from 90 km/h to 80 km/h (Blavier, M., May 2019, personal interview).

In January 2018, the carbon component of the domestic consumption tax on energy products increased from €30.5/tonne to €44.6, with an intention to reach €86.2/tonne by 2022 (Perthuis and Faure, 2018). This increase was not felt at the pump, as oil prices were low at the time (Perthuis and Faure, 2018). An additional fee on diesel was introduced in January 2018, meant to bring diesel prices to the same level as gasoline by 2022 (Perthuis and Faure, 2018). According to government sources, the lower price of diesel over gasoline was no longer justified, given its contribution to air pollution and to negative health effects (Perthuis and Faure, 2018). Yellow Vests (YVs) claim that diesel cars predominate among lower-income groups, and this additional fee fueled the YVs movement (Blavier, 2019, personal interview). According to Nicolas Hulot, then minister for ecological transition, the carbon tax revenues were to be invested in making the energy transition, but, in reality, the tax revenues were not clearly earmarked for that purpose (Perthuis and Faure, 2018). This became a further source of discontent, as many believed the money would compensate for tax cuts for the rich

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(Blavier, M., May 2019, personal interview). This suspicion was strengthened by the substitution of the solidarity tax on wealth with a more lenient tax on real estate wealth at the beginning of 2018 (*Suppression de l'ISF: Un échec politique 2020*).

The media often portrayed YVs as an anti-green movement. Environmental NGOs held a press conference in response to the actions planned by the YVs and the popular petition that they organised. The NGOs praised the government for maintaining the tax increase despite the discontent (Barroux, 2018). On Twitter, the popular hashtag #17novembresansmoi ('17th November without me'), labelled YVs as individualistic and selfish polluters. On the other hand, some commentators offered class-based analyses, painting the YVs as a grassroots movement demanding justice and better living conditions (Graeber, 2018; Guilluy, 2018). Christophe Guilluy points out that the YVs should be understood as a rebellion against much more than a tax: "if the hike in the price of fuel triggered the YV movement, it was not the root cause. The anger runs deeper, the result of an economic and cultural relegation that began in the 80s" (Guilluy, 2018).

The French tax is not the first carbon tax or pricing scheme to receive strong opposition. Other examples include a canceled Australian carbon pricing scheme in 2014 and the rejection of a ballot initiative in 2016 to levy a carbon tax in the US State of Washington (Maestre-Andrès et al. 2019). Case studies (Andersson, 2019) and cross-country econometric modeling (Best et al., 2020) demonstrate the effectiveness of carbon taxes at reducing CO2 emissions. Carbon taxes are an important instrument for a clean-energy transition, because they change the price of carbon and emissions, allowing systemwide adaptations in the economy, otherwise difficult to implement except in a piecemeal manner (van den Bergh et al. 2020). It is important, then, to understand why people oppose carbon taxes. We begin our analysis from the premise that protesters have positions that go beyond simple binaries of 'pro-ecological' vs. 'anti-ecological' that are often used by the media. The case of the YVs, emblematic as it is, can provide valuable insights. The question we therefore pose is: what are the viewpoints within the YVs movement about climate change and carbon tax?

Section 2 begins with a literature review on the public acceptability of carbon taxes and discusses the theoretical motivation behind our choice of methodology. Section 3 provides an overview of Q methodology and the design of the study. Section 4 presents results in the form of four discourses or viewpoints. We discuss the results in Section 5, looking at consensual elements among the different discourses that can form the basis for a better design of carbon taxation.

2. Attitudes towards carbon taxes

Several predictors of public acceptability of carbon tax have been identified in the literature. Self-interest and perceived personal consequences have been found to deter carbon tax support. Among other things, people were found to be concerned with increases in their energy bills, losing their jobs and having lower purchasing power (Baranzini and Carattini, 2017; Carattini et al., 2017; Kallbekken and Sælen, 2011; Maestre-Andrès et al. 2019; Thalmann, 2004). People were also concerned with the negative consequences of a tax on others, such as a perceived negative impact on poor households or on the elderly (Baranzini and Carattini, 2017; Kallbekken and Sælen, 2011). (Brännlund and Persson, 2010) and Gevrek and Uyduranoglu (2015) show that people prefer taxes with a progressive cost distribution to a regressive one. Based on a Norwegian survey, Kallbekken and Sælen (2011) suggest that beliefs about environmental consequences is one of the best predictors for fuel tax acceptability. People are more favorable to a tax when they believe it can improve behavior (Kallbekken and Sælen, 2011) and increase environmental awareness (Brännlund and Persson, 2010); Gevrek and Uyduranoglu, 2015). For these reasons, earmarking a fuel tax for other environmental measures can increase acceptability. Earmarking makes taxes appear more environmentally effective and consequently more legitimate, otherwise the tax is perceived as a fiscal policy instrument (Sælen and Kallbekken, 2011; Baranzini and Carattini, 2017). The perception of politicians is another predictor of public support (Kallbekken and Sælen, 2011; Harring and Jagers, 2013; Rafaty, 2018). A Swedish study shows that both trust in politicians and in other citizens have a decisive effect on tax support (Harring and Jagers, 2013). In consequence, effective communication on the impact of a carbon tax can improve acceptability (Baranzini and Carattini, 2017).

After the YVs' events, Thomas Douenne and Adrien Fabre (2020a) surveyed over 3000 French respondents to ascertain their opinions on climate change, carbon tax and environmental policy. Among other things, the authors tested the respondents' knowledge about climate change. They found that most people do believe that climate change is man-made, but that their knowledge of climate change science was quite limited. The authors reported a correlation between knowledge and policy support. They suggest that an information campaign might increase support for environmental policy in France (Douenne and Fabre, 2020a). In relation to Yellow Vests, they show that respondents' support for the Yellow Vests is as determining of their attitudes towards carbon taxation as their left-wing or right-wing positioning. For example, support for the carbon tax and knowledge of climate change both fall among participants who identify with the YV movement (Douenne and Fabre, 2020a). In a companion paper, Douenne and Fabre (2020b) report that respondents who support Yellow Vests are more likely to overestimate the negative impact of the carbon tax on themselves. This study is more general in scope when compared to our study. Thus, our study makes a different and novel contribution to the issue of attitudes on carbon taxation.

Other studies have shown that demands for equality and better living conditions are at the heart of the YV movement (Bedock et al., 2018). Grossman (2019) states that YVs are a symptom of the chronic disappointment in performance of French presidents following their election. YVs want citizens to have a bigger say in the decisions taken by politicians (Grossman, 2019). They distrust politicians and elites, and feel that the 'ruling class' treats them with contempt (Kipfer, 2019; Lianos, 2019; Grossman, 2019). Lianos (2019) highlights the importance of shared experiences among YVs, in particular their disregard for traditional political organizations. Several articles have also addressed YVs and ecology (Kinniburgh, 2019; Kipfer, 2019; Rozenholz and Dessendier, 2020). In another study, French researchers administered over a thousand questionnaires in face-to-face interviews that included ecology-related questions. Among other things, the preliminary results indicate that YVs are not anti-ecological per se, but want more egalitarian outcomes and more effective climate action (Collectif d'enquête sur les Gilets jaunes, 2019 ; Kipfer, 2019).

More recently, Boyer et al. (2020) studied the geographical determinants of YV mobilizations. They mapped mobilization both online and offline, and show correlations between the two. By mapping YV mobilizations, they found, among other things, a negative correlation between the level of YV mobilization in a department and how many people voted for Emmanuel Macron in the first round of the French presidential elections. Yet, on the contrary, YV mobilizations are positively correlated with abstentionism. According to the authors, this suggests that the movement might be expressing a rejection of the electoral process and of the current government (Boyer et al., 2020).

Our research complements and contributes to this literature on YVs and carbon taxation in two ways. Firstly, unlike earlier peer-reviewed studies on opinions about carbon tax, which focused on the general population, our study involved actual protesters – those people who reacted against a carbon tax and succeeded in stopping it. We therefore probed the beliefs of those most likely to oppose a tax, and searched for elements that could make a carbon tax more acceptable among these most ardent opponents. Secondly, we used a methodology (Q) that allows the deciphering of the integrated discourses that such protesters hold. Complementing surveys and statistical analyses, Q allows a deeper insight into the less or more coherent viewpoints held by protesters. Unlike surveys, which assess views issue by issue, Q allows the capturing of full viewpoints with ordering/interrelations between different views. We explain this in more detail below.

Q methodology and surveys have different goals and different strengths. One of the strengths of Q is exhaustivity of opinions among populations on a specific issue. When using surveys and semi-directed interviews, researchers predetermine which possible predictors of acceptability to study (Maestre-Andrés et al., 2019; Savin et al., 2020). In Q methodology, the themes presented to the participants – in the form of a set of statements called the Q set – are drawn from the corresponding population (via preliminary interviews, social media, articles, etc.). The Q set is constructed through a careful and systematic process that allows the capture of all that is being said by the population on the research question at a given moment and in a given context. The first step is to collect all opinions encountered until full saturation. The researcher then eliminates repetition and overlap from the set. In the Q set, each statement can be thought of as an individual carpet-tile. “Taken together, the items must cover all the ground within the relevant conceptual space” (Watts and Stenner, 2012). This means that each statement has to make an original contribution to the Q set, in that “in their totality, all sit neatly side by side without creating unsightly gaps or redundant overlaps” (Watts and Stenner, 2012). The researcher’s influence is, of course, still present, but Q leaves more room for participants’ own concerns and experiences to emerge (Robbins and Krueger, 2000).

Additionally, respondents evaluate and rank ideas in relation to one another, and not one by one separately, which ensures that respondents maintain their frame of reference (Robbins and Krueger 2000). In Q, as explained in the methods section below, respondents are free to associate and organize statements as they see fit, allowing them to establish for themselves the meaning of statements “devoid of a priori operational definitions, categories, or correct responses imposed by the researcher or measurement” (Robbins and Krueger, 2000). Participants are also asked to explain and comment on their choices, which provides tools for interpretation and helps researchers to better understand participants’ viewpoints. Surveys, no doubt, can uncover correlations between predictors and tax support, but the meaning of the correlation can be harder to tease out. Because participants connect different statements and explain their choices in Q, it may be easier to understand the relationship that exists between ideas. In a Q study, the researchers do not interpret a statement individually, nor do they pre-assign a meaning. To use the tile analogy again, we do not look at any tile individually and interpret its meaning. It is the final pattern produced by the positioning of all the tiles that we are interested in; that is, the position of the tiles in relation to one another also has a meaning. Q therefore allows us to capture participants’ viewpoints as a whole, together with their internal coherence (and contradictions).

Q methodology is an effective tool to deepen and nuance understanding of the discourses behind carbon tax opposition. Others before us have noted that Q methodology is particularly suited for the study of environmental policy opposition (Barry and Proops, 1999). It elicits a range of different opinions, accounts and subjective experiences on a given subject, which makes it critical for helping to understand complex situations involving conflict and contestation. Knowing *what* discourses exist is key to policy-making, and particularly democratic policy-making, which seeks to be inclusive of different visions about a policy issue, and tries to understand these visions instead of reducing them to simplified, preconceived ideas concerning, for example, opposition to policy. Part of the complexity of democratic policy-making involves achieving compromise through negotiation of opposing views, which cannot happen without such nuanced and empirically-obtained knowledge of differing viewpoints about policies (e.g. the implementation of carbon tax in our case). One advantage of Q compared to other methods is that it allows scoping the room for potential consensus among different viewpoints (see below for more on so-called consensual statements).

3. Methods

Q is a mixed methodology. Its results should be understood differently from survey-based studies. The objective of a Q study is to uncover what is being said about a specific issue and not who is saying it (Watts and Stenner, 2012). Representativeness in Q concerns **the statements (Q-set), not the type and number of individuals interviewed**. Unlike standard survey and regression analysis, Q methodology establishes patterns within and across individuals and their views, not across individual traits (e.g. socio-demographics, etc.)¹. In Q “it is not the ‘constructors’ – the participants – who are the focus. but the ‘constructions’ themselves”³. In other words, people are variables and Q statements are cases. Thus, the method does not require large numbers of participants to produce valid results². The objective is not to interview a sample representative of a larger population, but a focused, yet varied set of people with well-informed but different views, in order to capture as much as possible about the diversity in the universe of thoughts and opinions. To this end, the tendency is to use non-probability, purposive sampling to select interviewees that can capture a variety of opinions.

By using Q Methodology to elicit protesters’ accounts, we leave room to consider not only how taxes can be implemented more

effectively, but also to explore other possibilities of climate action, while including the voices and insights of citizens in the process. Q is a subjectivist methodology, whereby meaning is constructed, multiple and subject to one's experiences and interpretation (Durning, 1999; Barry and Proops, 1999; Robbins and Krueger, 2000). Thus, Q attempts to include respondents at every step, from the design of the study to the interpretation of results. The stakeholders who experience a particular situation are likely to have a type of knowledge and understanding that the scientists or researchers do not necessarily possess. They are also the ones who will bear the consequences of any action taken to address the issue.

To collect the data, we followed a standard Q methodology procedure (Watts and Stenner, 2012). The first step is to construct an extensive pool of statements (the *concourse*) meant to represent the diverse opinions existing on the studied issue (Watts and Stenner, 2012). Following good practice in Q-methodology, we used a combination of press reviews, social media reviews, preliminary interviews and participatory observation to extract our statements. We first went through the content of a dozen of the most popular social media pages and groups of Yellow Vests. We compiled press articles on the subject. Finally, we met with two protesters who were central in the organization of the first Yellow Vests' action and subsequent protests. These two participants were chosen because of their extensive knowledge of the movement (one of them represented yellow vests on radio and TV programs and in a meeting with the prime minister). We went to the region of Provence to meet with the two protesters. We conducted in-depth semi-directed interviews to learn more about the movement, its relationship with ecology and the diverse people and opinions it encompassed. In addition to the formal interviews, we met with the two protesters and their friends on several occasions over the course of three days, collecting more direct observations. This allowed us to include opinions from participants themselves in the *concourse*, instead of constructing it exclusively from secondary sources.

From this process, we compiled a draft of 150 statements. The goal here is to collect all that is being said by the population about the research question. When constructing the *concourse*, the researcher's main concern is exhaustivity, and this step ends when the *concourse* reaches full saturation. This means that this initial pool of statements has many repetitions and overlaps. The reduction process aims to eliminate these repetitions and overlaps, while maintaining the statement set's exhaustivity. Our 150 initial statements were then reduced to a set of 49 (see Table 2), a standard ratio in Q methodology (Watts and Stenner, 2012). To carry the reduction process, we used a 4 × 4 *concourse* matrix with categories of agents on the Y-axis (government, market and corporations, civil society or groups, individuals) and environmental themes on the X-axis (French fuel tax, climate change and consumption, ecological transition and environmental policy, living conditions). The use of a matrix serves to organize the statements into categories and to easily find repetition or overlap. If the reduction process is well done, the final Q set should be as exhaustive as the initial *concourse*, but without repetition and overlap and with clearer statements.

Having completed the *concourse*, the next step is to recruit participants for the interviews. One of the advantages of Q methodology is that it only requires a small number of respondents. (It might help to think of respondents in Q as the equivalent to independent variables in R – and a Q with 30 respondents to a survey that tests 30 variables.) As Q literature states, respondents are not selected to be a representative sample of the population, but to encompass as much diversity of viewpoints as possible (Brown 1993; Van Exel and De Graaf, 2005; Robbins and Krueger, 2000; McKeown and Thomas, 2013). Previous research on Q has confirmed that there is a limited number of discourses in a population, and an exhaustive and representative collection of viewpoints (the *concourse*), coupled with a set of knowledgeable interviewees who hold different views and through which these discourses can be consistently deciphered (Brown, 1980; Thomas and Baas, 1992).

For this study, we conducted 33 interviews from May 2019 to September 2019. To recruit participants, we first went to Saturday protests in Paris and its surroundings, to YVs' meetings, general assemblies, and social and political events (e.g. picnics). The second part of the fieldwork was in Lyon, where we joined protests. These were mainly choices of convenience, as the movement was not tied to any geographical region (Blavier, M. May 2019, personal interview). Big cities gave us access to a greater diversity of protesters (which was our intention), despite limited means of transportation. Paris being the capital, there were many protesters from surrounding rural areas and from as far away as Marseille.

In terms of diversity of opinion, we focused on the rural versus urban divide, which reflected the opinion among protesters that there is a certain divide between the demands and opinions of protesters from the city and those from the countryside (Blavier, M. May

Table 1
Interviewees' distribution based on gender, age, residential area and start of protest period.

Gender	Male	17
	Female	16
Age	[20–30]	5
	[30–40]	1
	[40–50]	8
	[50–60]	8
	[60–70]	8
	[70–80]	2
Area of residence	Urban	16
	Rural	17
Date at which participants joined the protests	First month	21
	Second month	6
	After second month	3
	Unknown	3
Total number of participants		33

2019, personal interview), as well as on age, gender, and duration of involvement in the movement, factors that we expected to influence views (see Table 1).

Interviews were conducted in the location preferred by participants. In most cases, we were invited to participants' homes, while some interviews took place in libraries or cafés. Respondents were given a sorting grid and asked to sort the 49 statements in the order that most represented their opinions. The grid ranged from most disagree (−6) to most agree (+6). What Q allows, in this visual way, is for participants to position opinions in relation to one another, grouping and ordering viewpoints according to how important they find them. In this way, a particular sort emerges from each interviewee, giving a glimpse into her or his subjectivity.

For the 15 respondents who lived too far away, we used QSortware, a freely available software for conducting Q studies online, which allowed respondents to sort the statements into the grid from their computers. The sorting lasted from 30 to 60 min, with most participants taking around 40 min to complete the grid. Subsequently, we conducted semi-directed interviews with each participant to understand the reasons for their choices. The post-sort interviews lasted 45 min on average. In keeping with Q Convention, respondents were mainly asked to explain their statements at the extremities of the grid. In addition, all respondents were asked about their opinions on carbon taxes and more specifically on the French carbon tax and additional fee on diesel. Finally, respondents were given the opportunity to add any comments on the themes included in the study. These post-sort interviews are used during analysis to interpret the factors extracted from participants' sorts (Watts and Stenner, 2012).

The results of the participants sorts were formulated into a set of factors (clusters) of similar viewpoints. To extract the factors from the 33 sorts, we conducted factor analysis through PQ-Method, a commonly-used software for Q studies. PQ-Method computes and analyzes the correlation between all participants' sorts and extracts common variance between sorts. Common variance can be understood here as pieces of shared meaning which can explain the correlations between sorts. The resulting factors are then rotated to clarify the distinctions between them. In this case, we did a Varimax rotation followed by a manual rotation. Varimax provides the best statistical solution by maximizing the variance explained by the study. Manual rotation aims to maximize the theoretical significance of factors. This combination allows a balance between the effectiveness of Varimax and the researchers' knowledge or hunch (Watts and Stenner, 2012). At this point, PQ-Method provides a loadings table, containing the correlations between each sort and each factor. Sorts that load significantly on a factor are flagged, meaning they are included in the final factor estimate. The cutoff point above which sorts are flagged is calculated using the standard formula ($2.58 (1/\sqrt{n})$, where n is the number of statements), with a significance level of 0.01. Sorts not loading significantly on any factor (nonsignificant sorts) are not flagged. Sorts loading significantly on more than one factor (confounded sorts) are not flagged, but corresponding interviews can still be used for interpretation (Watts and Stenner, 2012).

When analyzing the data, PQ-Method can deliver solutions that have between one and eight factors; that is, one to eight different groups of discourses/viewpoints among the set of participants interviewed. It rests on the researcher to choose the most relevant solution. It is standard procedure to use a combination of statistical and theoretical criteria to determine the best solution (Watts and Stenner, 2012). Firstly, it is recommended to keep only those solutions where all factors have at least two sorts loading onto them; that is, that all factors include at least two interviewees whose views contribute significantly to the discourse. For this reason, we eliminated solutions with 6 factors or more; that is, six or more discourse representations of our results.

It is also standard to choose solutions that have a variance explained superior to 50%. The one- and two-factor solutions were excluded for this reason. The variance explained was low for those two solutions (43% and 48% respectively). Additionally, those solutions did not represent the diversity of viewpoints indicated by the post-sort interviews. Q is a mixed method, and the chosen solution should be sound qualitatively. Therefore, all factors are also examined with the help of the post-sort interview and the researcher's observations from fieldwork. This ensures that the final solution is representative of the viewpoints that exist in the population overall (Brown, 1980; Kramer and Gravina, 2004; Newman and Ramlo, 2010; Ramlo 2015; Ramlo, 2016).

Among the three options left, the four-factor solution (four discourses) was chosen because it offered the best insight into the YV movement, although the solution presents a high correlation between Factor 1 and Factor 2 (54%). Low inter-factor correlation is regularly preferred, because it ensures that factors are clearly distinct from one another. But when choosing a solution, it is important to verify that all factors are not only distinct, but also reveal important oppositions to each other: two discourses might agree on several things but disagree on one important element that makes the two viewpoints very different. In this case, we discerned that all four factors were distinct in meaningful ways, and verified that this was well supported by the post-sort interviews. The five-factor solution had a lower correlation between factors (43%), but the factors did not match post-sort interview data equally well.

Based on this and our fieldwork observations, the four-factor solution is the most relevant to understand the diversity of opinion in the YV movement. This solution explains 56% of the variance in the study.

As mentioned, the sample of participants in Q is not representative of the population. Q informs us that each discourse exists in the population but not how common it is. Thus, the number of participants loading onto a factor has no statistical significance (Watts and Stenner, 2012). What Q can claim, in terms of representativeness, is that the discourses uncovered by a Q study are the main viewpoints that existed in the population at that moment. This claim rests on the following arguments. Firstly, the results of a Q study are replicable in the same context. This is not surprising if we keep in mind the premise in Q that only a limited number of discourses exists on a given issue. Indeed, the sorting grid offers an enormous number of possible configurations to participants. The fact that common variance emerges and that a small number (often 3 or 4) of reliable factors are extracted strongly suggests that the viewpoints do exist and that their number is limited. Otherwise, the consistent emergence of a small number of meaningful factors in Q studies would be statistically improbable (Watts and Stenner, 2012; Van Exel and De Graaf, 2005; Brown, 1993).

4. Results

What follows is a categorization of the four discourses according to two key concepts: a presentation of the consensual statements

among all factors, and a detailed account of each of the four discourses.

Two key concepts structure the four YVs discourses (Table 2). Protesters are divided into: who is primarily to blame for environmental and social problems (state or corporations); and whether taxation is part of the solution to tackle inequality and climate change.

In sum, the *Critique of capitalism* (D1) and the *Corporate responsibility* (D4) discourses claim that the main culprits are the big corporations: they hold the power and structure the production system and the way the economy works. Corporations also influence the decisions taken by the government. As such, corporations are the ones causing environmental degradation. The key distinction is that D1 has no interest in reform and expresses a desire to end the whole system, whereas D4 advocates for more responsibility and regulation of corporations. This explains why in D1 taxes appear as useless, while in D4 they are seen as a big part of the solution to regain control over corporations.

On the other hand, in *State Environmentalism* (D2) and *Purchasing Power* (D3) discourses, the government appears as the one at fault. In these discourses the state has a duty towards the population and should tackle social issues. In D3, the government is blamed for the loss of quality of life; by failing to provide services to the population equally and ensuring good living conditions. In D3, taxes are opposed because of the loss of purchasing power of lower-income groups. On the other hand, in D2, the government is blamed because it is not tackling climate change and inequalities. For D2, taxes, when they are fair, are a way to address environmental issues and inequalities. In D2, the State should be stronger than corporations and regulate them (Table 3).

4.1. Consensus statements

The consensus statements (Table 4) can be understood as a pool of opinions shared by all discourses. All four YV discourses we have identified agree on how transition should happen: through more consultation, by making the rich and not the poor pay for transition, and by using carbon tax money to finance that transition. The discourses agree in their indifference to whether the revenue should go to the poor and disagree with the view that the media talks too much about climate change.

4.2. Four discursive profiles

Discourse 1: Critique of capitalism

“We have to tackle the Number One cause: capitalism. Everything else is a diversion.” (I8)

Critique of capitalism overall comes out as a strongly anti-capitalist discourse: all issues are interconnected and have their roots in capitalism. The viewpoint expressed in this discourse is that people need to put an end to capitalism, otherwise climate mitigation can become another sector of profit:

“Climate issues are as good as any other way for the rich to get richer. Capitalism always means profit. If we end capitalism, we don’t have to bother with [green] taxes anymore.” (I8)

Table 5.

Critique of capitalism is the only discourse that strongly agreed with the statement about ending capitalism. Respondents also cared more, positively and negatively, about statements that had a highly political and systemic character. This is supported by their post-sort interviews. Respondents stated that individual or non-systemic changes were not the answer to environmental issues, because more fundamental changes were needed. *Critique of capitalism* also attributes the cause of the problem to corporations rather than individuals. *Critique of capitalism* argues that the average person has little power over their consumption because the problem comes from the production system:

“It is good to be mindful of our choices, but it is not all that useful, we have to change the production system.” (I6)

Respondents often criticized growth in the post-sort interviews (S20):

“Growth is not a necessity but a problem, and growing infinitely is destructive for both human societies and the rest of the ecosystems.” (I7)

Some respondents had doubts about the effectiveness of taxes and environmental measures (S37), and expressed concerns about the lack of fairness of ecological taxes:

“In a capitalist society, it is hard to pass real ecological measures because they are an obstacle to profit.” (I6)

“Punitive ecology penalizes the people that are already disadvantaged. It’s unfair.” (I6)

They were also wary of technological solutions, as well as products marketed as ‘ecological’:

Table 2

Discourse matrix based on tax support and environmental responsibility*.

	Corporations responsible	State responsible
Against taxes	D1: Critique of capitalism	D3: Purchasing power
Pro-taxes	D4: Corporate responsibility and inequality	D2: A fairer pro-environmental State

* Note: discourses are numbered following the PQMethod software order which is based on their respective variance explained.

Table 3

List of all the statement composing the Q-set with the corresponding scores by each factor.

No	Statements	Factor1	Factor 2	Factor 3	Factor 4
1.	The state should invest more in green energy development.	2	3	-1	1
2.	The state should change its approach to ecological transition by favoring consultation with social partners, NGOs, citizens, etc.	2	1	1	0
3.	The rich should pay for the ecological transition.	3	1	2	2
4.	We consume too much meat in France.	-1	2	-1	-4
5.	The government should take drastic action to tackle climate change.	0	4	1	0
6.	The average citizen has no power over how goods are produced.	3	0	1	2
7.	Climate change is not caused by humans.	-3	-5	-6	-2
8.	We should privilege technological solutions to tackle environmental problems.	-3	0	0	-1
9.	The middle class shouldn't have to pay for the ecological transition.	0	-2	1	-3
10.	Reducing individual consumption is not the right solution to tackle climate change.	0	-2	-1	0
11.	The rich are using climate change rhetoric to create a new source of income for themselves.	3	0	0	2
12.	We should go back to living more like previous generations to reduce consumption.	-5	-1	3	1
13.	Consumption by the poor has little impact on the environment.	0	-2	-2	-3
14.	The ecological discourses of Emmanuel Macron divert collective attention from the truly important topics.	4	0	2	1
15.	Companies shouldn't have to pay ecological taxes because it increases prices for consumers.	-2	-1	-2	-6
16.	It is important to inform oneself about climate change.	-1	2	2	-1
17.	I oppose the carbon tax.	0	-1	5	0
18.	Public transport is not developed enough.	1	4	4	2
19.	The government is not currently addressing the main causes of global warming.	4	3	-1	3
20.	An increase in consumption is a social priority because it's good for the economy.	-6	-4	0	-5
21.	To make production greener, the state should give more subsidies to companies instead of taxing them.	-4	1	-4	-4
22.	Big companies are the only ones responsible for climate change.	1	-3	-3	3
23.	The government should put a carbon tax on planes.	1	3	3	5
24.	Ecological measures are useless because climate change is irreversible.	-2	-6	-3	-1
25.	Consumers have the responsibility to choose greener products.	-2	-1	-4	-2
26.	Multinationals and big companies are the ones pushing people to consume more.	5	0	-5	1
27.	Companies have the responsibility to offer eco-friendly options to consumers.	-1	-1	-2	-2
28.	Ecological taxation can encourage green innovation.	-4	-1	-5	-2
29.	The media talk too much about climate change.	-1	-3	-1	-1
30.	Global warming is an urgent problem for our society.	0	6	3	3
31.	We have to modify the foundations of our socioeconomic system to tackle climate change.	5	4	-2	0
32.	Paying ecological taxes would negatively affect French companies by making them less competitive.	-3	-3	0	-1
33.	The inhabitants of rural areas pay a disproportionate share of the carbon tax.	-1	-2	4	0
34.	To have a sustainable society, we must put an end to capitalism.	6	2	0	-5
35.	The car is a necessity for people in rural areas.	2	2	4	4
36.	Everyone must participate in the effort to save the planet.	-2	5	1	-2
37.	Ecological taxes can encourage people to consume greener.	-5	-3	-3	-4
38.	Poor people should also be able to afford to take holidays.	1	1	-1	3
39.	The revenues generated by the increase in the carbon tax must go to the poorest.	1	0	0	-1
40.	Scientists exaggerate the effects of climate change.	-1	-5	-4	-3
41.	The lower classes shouldn't have to pay for the ecological transition.	2	1	2	0
42.	Purchasing power is more important than energy transition.	-4	-4	6	4
43.	The government is using the money from the carbon tax to finance tax breaks for the rich.	2	0	1	4
44.	The French government should integrate climate policies with social policies that promote wealth redistribution.	0	3	-3	-3
45.	Each company should be held responsible for any harm it causes to the environment.	4	1	-2	5
46.	Individual freedoms are more important than the protection of the environment.	-3	-4	-1	1
47.	Inequalities are growing more and more in France.	3	5	3	6
48.	Living in an ecologically-responsible way is too complicated.	-2	-2	0	2
49.	The government should use all the carbon tax money to finance the ecological transition.	1	2	4	1

“Technology is not sufficient; it [climate change] is a political problem first and foremost.” (I6)

“We are offered eco-friendly products, but there is nothing ecological about them.” (I3)

Yet, *Critique of capitalism* does not view previous generations as more ecologically friendly (S12). The solution lies in reinventing a new system rather than going back to a previous way of life:

“The previous generations weren't necessarily more ecological. We must adapt our way of life according to today's reality.” (I6)

Discourse 2: A fairer pro-environmental state

“*End of the world, end of the month, same struggle.*” (I28)

Overall, *A fairer pro-environmental state* is the discourse most preoccupied with environmental issues and the importance of tackling climate change. This discourse expresses the viewpoint that current environmental policy in France is inadequate, and that green taxes will make low-income groups poorer without the revenue being invested in climate action. However, unlike *Critique of capitalism*, *A fairer pro-environmental state* is not as skeptical of the potential for taxes to do good for the environment if correctly structured and

Table 4
Consensus statements.*

Statements	Factor 1	Factor 2	Factor 3	Factor 4
2. The state should change its approach to ecological transition by favoring consultation with social partners, NGOs, citizens, etc.	2	1	1	0
3. The rich should pay for the ecological transition.	3	1	2	2
16. It is important to inform oneself about climate change.	-1	2	2	-1
27. Companies have the responsibility to offer eco-friendly options to consumers.	-1	-1	-2	-2
29. The media talk too much about climate change.	-1	-3	-1	-1
39. The revenues generated by the increase in the carbon tax must go to the poorest.	1	0	0	-1
41. The lower classes shouldn't have to pay for the ecological transition.	2	1	2	0
49. The government should use all the carbon tax money to finance the ecological transition.	1	2	4	1

* This table contains statements that were consensual among the factors, indicating the average rank (from -6 to +6) given by respondents of each factor.

Table 5
Salient Statements for Factor 1*.

Statement No.	Salient statements for Factor 1	Factor scores ^a
34*	To have a sustainable society, we must put an end to capitalism.	6
26*	Multinationals and big companies are the ones pushing people to consume more.	5
31	We have to modify the foundations of our socioeconomic system to tackle climate change.	5
44*	The French government should integrate climate policies with social policies that promote wealth redistribution.	0
37	Ecological taxes can encourage people to consume greener.	-5
12*	We should go back to living more like previous generations to reduce consumption.	-5
20	An increase in consumption is a social priority because it's good for the economy.	-6

* The table contains highly ranked statements with the participant's level of agreement (-6 to 6) with the statements. A distinguishing statement (marked by one asterisk - *) is a statement that received a notably different score by one of the factors compared to the others. (Significance level at $p < 0.01$).

^a To obtain factor scores, statement scores are first converted into z scores for each participant. PQ Method then computes the weighted average of the z scores of each statement; Finally, the z scores transformed back into factor scores: the statement with the highest z score will receive the highest factor score (-6 to +6). The final result is a grid with all the statements sorted according to the viewpoint of the factor.

implemented. A *fairer pro-environmental state* is the only discourse advocating for drastic governmental measures to tackle climate change (S5) (Table 6).

A *fairer pro-environmental state* puts environmental issues above almost everything else (S30, S5); and maintains that equality is the only issue as important as tackling climate change (S47). Respondents spoke extensively about fairness in the post-sort interviews. They expressed concern about poverty increasing in France and people not being able to make it through the month. As such, this discourse is not against environmental taxation, but against taxes considered unfair, and the fact that the burden often lies on poor people:

“We have to tax energy fairly; planes, boats, luxury consumption [...] we have to tackle the real polluters.” (I31).

Still, and in contrast with *Critique of capitalism*, A *fairer pro-environmental state* is not fundamentally against taxing the poor. It believes that the ecological crisis is everyone's business (S36), and that poor people's consumption has an impact on the environment:

“The environmental problems and their consequences concern everyone, so everyone must participate in the solution.” (I12)

But keeping in line with its concern with fairness, the discourse holds that taxing the poor must come with redistribution, or some kind of compensation (S44). In post-sort interviews, some respondents advocated for heavy investments in public transport and reduction of taxes (VAT) on basic needs (I12, I28, I30), or measures, such as reducing waste in production processes, over-packaging,

Table 6
Salient statements for Factor 2.

Statement No.	Salient statements for Factor 2	Z score
30*	Global warming is an urgent problem for our society.	6
47	Inequalities are growing more and more in France.	5
36*	Everyone must participate in the effort to save the planet.	5
5*	The government should take drastic action to tackle climate change.	4
44*	The French Government should integrate climate policies with social policies that promote wealth redistribution.	3
4*	We consume too much meat in France.	2
21*	To make production greener, the state should give more subsidies to companies instead of taxing them.	1
12*	We should go back to living more like previous generations to reduce consumption.	-1
7	Climate change is not caused by humans.	-5
40	Scientists exaggerate the effects of climate change.	-5
24	Ecological measures are useless because climate change is irreversible.	-6

planned obsolescence, and imports from distant countries (I28, I30, I31). Because none of those measures were taken, respondents felt that the fuel tax was only an excuse for the state to take more money from underprivileged groups:

“The government doesn’t really care about ecology. It’s only a way to take more money from the underprivileged. Otherwise, they would have taken effective measures.” (I17)

Yet, *A fairer pro-environmental state* strongly rejects inaction with regard to climate challenges (S24):

“We have to believe that we can do something for the planet until the end.” (I15)

Overall, *A fairer pro-environmental state* has a dual approach toward the responsibility for climate action, both individual and state-centered. On the one hand, it argues that individual action is crucial, and on the other, that the state has a central role to play in the fight against climate change, specifically regulating corporations, implementing sustainability measures and leading the transformation:

“It is the first thing we need to do, lower individual consumption, for those who can.” (I4)

“It is politicians who are responsible and not corporations. The state should be stronger. We shouldn’t take responsibility away from the state.” (I30)

Notably though, the Government currently in place is neither highly regarded nor trusted in this discourse.

“I don’t trust Macron’s government or its policies. They don’t care about the people, they’re not here to defend our interests.” (I30)

Discourse 3: Purchasing Power

“I don’t have the luxury of thinking about the environment, I have to think about my wallet.” (I26)

Purchasing power is characterized by distrust in the government and strong opposition to taxation, as it does not believe in its benefits. It shares the complaints of other discourses about rising inequalities, but not their distrust of corporations. Despite being aware of climate change and its consequences, this discourse is mainly concerned with the loss of purchasing power and living standards (Table 7).

D3 is highly concerned with the protection of purchasing power (S42) and is the only discourse strongly opposed to the carbon tax (S17). Both issues are interrelated, according to D3, because of the rise in fuel prices:

“Of course, I oppose the fuel tax. It goes with the importance of purchasing power, naturally.” (I26)

In the post-sort interviews, respondents complained about significant losses in living standards and rising inequalities in France, expressing financial precariousness and difficulty meeting basic needs:

“I wish we could feed ourselves like before. I wish we had enough to afford at least food and basic products.” (I5)

Purchasing power is, overall, a little more concerned with the state of the economy and does not perceive consumption negatively (S20), contrary to other discourses. Despite the concern with poverty and inequality, it is the only discourse that does not blame corporations for over-consumption (S46), nor does it demand more environmental accountability from corporations (S26). When asked about those statements in the interviews, respondents explained that the state is the one responsible for those issues:

“It is not the corporations’ fault, it’s all the state’s fault.” (I26)

Purchasing power does not trust the current government to pass useful environmental measures and is opposed to eco-taxes in general (S28):

“I don’t think taxes are really useful for the environment. It is a way for the government to put more money in its own pocket, so they [the politicians] can live well while the people of France get poorer and poorer.” (I5)

According to *Purchasing power*, a fuel tax is particularly unfair if public transport is not developed enough to offer a decent alternative to cars (S18). *Purchasing power* complains about the lack of transport in rural areas compared to cities. Consequently, this discourse argues that people living in rural areas are punished disproportionately with the tax, while the rich can keep enjoying their lives (S33):

Table 7
Salient statements for Factor 3.

Statement No.	Salient statements for Factor 3	Z score
42	Purchasing power is more important than energy transition.	6
17*	I oppose the carbon tax.	5
18	Public transport is not developed enough.	4
33*	The inhabitants of rural areas pay a disproportionate share of the carbon tax.	4
20*	An increase in consumption is a social priority because it’s good for the economy.	0
45*	Every company should be held responsible for any harm caused to the environment.	−2
28	Ecological taxation can encourage green innovation.	−5
26*	Multinationals and big companies are the ones pushing people to consume more.	−5
7	Climate change is not caused by humans.	−6

“The government doesn’t provide my village with public transport. Meanwhile, Macron and the rich pollute more than me with their planes and all.” (I16)

Awareness about climate change is there, but climate mitigation takes lower priority compared to improving living standards now:

“We are responsible for climate change. The ecological transition should have been done years ago, but the priority is purchasing power. We need to start there to have a better life and then: energy transition.” (I26)

Discourse 4: Corporate responsibility and inequality

“We are protesting because we want serious change. There are too many inequalities.” (I19)

Corporate responsibility and inequality wants more equality and justice in France. To achieve this, according to this discourse, it is necessary to regulate corporations and make them responsible for their actions. Unlike the first discourse, this discourse does not want to end capitalism – only to reform it. Notably, it does not have strong opinions regarding climate change (Table 8).

Corporate responsibility and inequality is centered around fairness and equality. Although the other discourses were also concerned with this issue, *Corporate responsibility and inequality* gives the highest score to this statement (S47). In fact, all three most highly-ranked statements are rooted in a desire for more equality. For this discourse, inequality, is the reason behind the desire to protest.

“The inequalities, that’s why I recognized myself in the movement at first. The middle class is disappearing and the rich are getting richer and richer.” (I13)

Corporate responsibility and inequality advocates for carbon taxes specifically on planes (S23) and boats; it believes it is unfair to tax the means of transport used mainly by the poor and not those used by the rich, especially if the latter are more polluting. For the same reasons, this discourse captures views favorable to taxing corporations and does not believe that it has to increase prices for consumers (S15):

“It is not true that corporations should not pay green taxes because consumers will [end up paying the bill]. In fact, it is false. They [corporations] could reduce their profit margins and the prices would not increase.” (I19)

Overall, the viewpoints expressed in this discourse are similar to those of the second discourse, meaning that they are very favorable to taxation as long as it is mainly aimed at the rich and corporations. However, *Corporate responsibility and inequality* does not particularly comment on individual responsibility; it simply states that the average person in France does not have the means to be ecological:

“One thing is certain; it is not regular people that should be targeted. Unfortunately, since the beginning of the ecological movement, nothing has changed. French people are not more ecological. They just can’t afford it. They choose the cheapest and not the most ecological.” (I13)

A strong view in this discourse is that people need first to have sufficient purchasing power before they start making ecologically-responsible choices, given that green products are more expensive:

“Purchasing power is related to ecology, considering that without it, we can’t afford to consume better; not consume more, but better!” (I19)

Corporate responsibility and inequality also sees that corporations should be held responsible for the pollution they cause (S45):

“It’s obvious that corporations are responsible for what they do to the environment. They have the possibility to produce in a better way and they don’t make this choice because they prefer the cheapest way; they prefer the benefit of shareholders and not the benefit of the environment. It is not the consumers who should be responsible, it is those who produce.” (I19)

Clearly, and like *Critique of capitalism*, *Corporate responsibility and inequality* sees corporations as the main culprits. However, the two discourses are opposed on the question of capitalism. For *Corporate responsibility and inequality*, capitalism is not all bad and can be reformed (S34). Of all four profiles, *Corporate responsibility and inequality* is the only one clearly opposed to ending capitalism:

“We shouldn’t end capitalism. Rich people are necessary. But the rich have to stop getting richer on the backs of the poor. Now, capitalism is part of that phenomenon, but we shouldn’t eliminate it completely.” (I32)

Corporate responsibility and inequality is the discourse least centered around ecology. It is not that the people ascribing to this discourse are necessarily anti-ecological, as much as they lack interest in the question, which they do not see as the most pressing issue. Both the sortings and the post-sort interviews indicate this. Climate change is only minimally addressed in the interviews and the statements directly related to it were ranked in neutral positions. It is worthwhile mentioning that *Corporate responsibility and inequality*, contrary to the other discourses, does not agree that people eat too much meat in France (S4). The opinions of *Corporate*

Table 8
Salient statements for Factor 4.

Statement No.	Salient statements for Factor 4	Z score
47	Inequalities are growing more and more in France.	6
23	The government should put a carbon tax on planes.	5
45	Each company should be held responsible for any harm it causes to the environment.	5
4*	We consume too much meat in France.	−4
20	An increase in consumption is a social priority because it’s good for the economy.	−5
34*	To have a sustainable society, we must put an end to capitalism.	−5
15*	Companies shouldn’t have to pay ecological taxes because it increases the prices for consumers.	−6

responsibility and inequality on ecology seem to be heterogeneous and our data do not allow us to establish the relationship of this discourse to ecology. What our interviews suggest is that *Corporate responsibility and inequality* has other social priorities, such as establishing more economic equality in France and policing big corporations.

5. Discussion: Yellow Vest discontent and resistance to carbon tax

In this study, we unearthed the internally-connected and nuanced viewpoints that feed opposition to carbon taxation in the case study of the YV movement. Complementing survey studies that link individual characteristics and opinions, our research offers insights into the general categories of viewpoints held by protesters, and the interconnection/coexistence of different opinions within these categories. At least five findings stand out in our research and inform understanding of the YV, and reflections over resistance to carbon tax more broadly.

Firstly, there is a clear and strong ideological component in at least three, if not all four, of the discourses identified here, and it is through these ideological lenses that attitudes towards carbon taxation is probably filtered. The first discourse has a clear anti-capitalist stance, the second expresses a green ideology, while the fourth has a social democratic, more reformist, flavor. The third discourse, which comes closer to the prevalent representation of the YV in the public sphere, with an emphasis on material/livelihood aspects, might seem the least ‘political’ or ideological. However, the rejection of state and politicians, and placing the blame for inequality on government, coupled with reluctance to criticize or assign responsibility to corporations, suggests a possible permeation in this discourse of right-wing populist ideas, present in France as well as elsewhere in Europe and North America.

The attitude of each discourse towards taxation maps these ideological filters. Thus, Discourse 1 combines rejection of the value of green taxes with disbelief about the potential for change within the contours of the capitalist system. Instead, Discourse 3 is against the carbon tax and distrusts the intentions of the French Government. Discourse 2 is against the way it was implemented, whereas Discourse 4 emphasizes taxing corporations. Green ideology (Discourse 2), naturally is in favor of a carbon tax, but the critique here is that the way this specific tax was implemented was unfair and did not really benefit the environment. The fourth discourse too suggests that taxes could in general be useful (e.g. a tax on air travel), but insists on the importance of taxing corporations rather than consumers.

A second observation is the overarching theme of (in)equality that permeates all four discourses. One might dare to say that the issue here is not climate change or carbon taxation – it is all about the growing inequality of French society, with this tax becoming the straw that broke the camel’s back. Indeed, our findings show that in principle only one discourse (Discourse 3: Purchasing Power) outrightly rejects the carbon tax per se (Statement 17); the rest are rather indifferent to it. Arguably, the discourses are differentiated in terms of where they attribute the reasons behind inequality: capitalism, the state, or unregulated corporations. But if one wants to understand the YV revolt, the focus should be on distributive discontent and consequences of the tax (real and perceived) in the context of a society seen as increasingly unequal and unfair.

Thirdly, despite ideological/political differences, there is much that the four discourses share, and which can form the basis for a more careful policy design in the future. To that end, the ability of Q to decipher consensual space is one of its main advantages. All discourses agree (or at least do not disagree) that: there should be more consultation in transition policy; the rich and not the poor should pay for transition; government should dedicate the money from a tax to the transition itself and not to other purposes. This space of agreement among dedicated protesters points to how an inclusive – and more likely to be accepted – carbon tax policy could be designed, framed and promoted: as a policy that targets the rich, that is developed through consultation and not ‘ex-cathedra’, and with clear and transparent earmarking of the funds to energy projects. (Interestingly, we do not find appeal here for the otherwise intuitive redistributive proposal of a ‘carbon dividend’ – that is, a tax whose revenue is returned to people, or the least well-off). One might argue that President Macron’s initiative after the YV revolt to set up a citizen’s assembly (consisting of 150 randomly-chosen citizens) to consult on proposals against climate change went in this direction. Questions remain, however, given that less than half of the proposals of the assembly were included in the climate bill presented to Parliament (France 24, 2021).

Fourthly, there is no strong evidence in our research for the existence of climate denialism or even skepticism in the movement. In none of the four discourses are there such elements. In all discourses the statement that climate change is not caused by humans (Statement 7) scores low, as does the obstructionist opinion that climate change is irreversible and measures are therefore useless (Statement 24), and with the exception of the anti-capitalist discourse, which is indifferent, all discourses score high on the statement that ‘global warming is an urgent problem for our society’ (Statement 30 – see Table 3). Interestingly, it is in the third discourse, about purchasing power, where one would expect to find more climate skepticism; the one where there is the most disagreement with the idea that climate change is not caused by humans (Table 7). The green discourse is evidently preoccupied with climate change. The concern is weaker in Discourses 1 and 4; not because of denialism or skepticism, but because capitalism and inequality are seen as taking precedence over climate change.

Fifthly, from the consensus statements (Table 4) we see that the discourses express satisfaction with current levels of public visibility and information about climate change. For example, all discourses share their disagreement with the view that the ‘media talk too much about climate change’ (Statement 29). And there is shared indifference among discourses about the importance of informing oneself about climate change (see: consensus on Statement 16). Prior research on the French population has found that, the more informed citizens are about climate change, the more likely they are to support related policies, such as carbon taxes (Douenne and Fabre, 2020a). What we find here is that (lack of) information does not feature strongly – one way or the other – as a concern in the prevalent discourses of the YV movement, but nor is there reaction or resistance to the provision of information through the media.

6. Conclusion

Why do people react to carbon taxes, and how can energy transition designs be improved by considering concerns that fuel protests such as those of the YV?

Here, we approached these two questions by using a systematic discourse analysis approach, Q methodology, that allowed us to get a glimpse of prevalent viewpoints of active participants in a movement, rather than the population at large. We found four different, and ideologically-charged viewpoints, or discourses, prioritizing respectively: a revolt against capitalism, fair state environmental action, purchasing power of low-income people, and the role of corporations in producing inequalities. France's tax changes were seen differently through the ideological lenses of each of these paradigmatic viewpoints: an irrelevant change within a problematic capitalist system; an unfair policy unless well regulated; one more burden on the unprivileged; a policy that did not address existing inequalities.

Interestingly, and despite the fact that these are discourses of people who went out in the streets and stopped a new tax, they seem to leave room for a well-designed and well-thought-out carbon tax. There is evidence in our research that a carbon tax that is the product of prior consultation, that is paid primarily by the rich, and whose revenues are clearly earmarked for the energy transition, could meet with less rejection, even by the most ardent opponents. One can draw only hope from the fact that there is no evidence of climate denialism or even skepticism and delayism in the discourses we encountered. Equality and inequality, rather than climate change and mitigation, seem to be the driving forces and concerns behind the YV protest. If we may dare a suggestion, carbon taxes and future energy transition policies should be thought of, and presented, as policies towards more equality, rather than having distributive consequences remain as an afterthought.

Declaration of competing interest

There is no conflict of interest.

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