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Questioning the logic of collective climate action: framing the climate action situation and the model of “Common rescue”

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Abstract

The problem of climate change, and how to respond to it, is often confronted to a dilemma between social justice and efficacy of action. Systematically presented as a tradeoff between individual action and profit (Acquier & Aggeri, 2015), or social acceptability and efficacy (Klenert et al., 2018), or equity and efficiency (Bauer et al., 2020), the coupling between social justice and efficacy appears to be a theoretical and empirical knot for climate action.

In this conceptual paper, we draw on the notion of framing to show that current mechanisms for climate action are based on the same frame of climate action. The frame of a “social dilemma” or “collective action problem” or “commons dilemma” situation underlies most of our thinking of climate action and forces to see climate action as individuals who are 1) interdependent because they are constrained by a common resource, but 2) independent in the way they derive value from this resource. Yet, this single framing is restrictive. While climate change has been framed in many ways, we propose that there is a need for research to properly frame climate action itself to access new strategies. We show that “common peril” situation which acknowledge an interdependence between values can be an alternative action frame and allow exploring new ways of thinking climate action.

Key Words:

Governance, climate change, collective action, framing, climate policy, equity

Introduction: climate action and the dilemma between efficacy and justice

While climate change is now certain and its impacts on human lives undeniable, the level of mitigation of greenhouse gas (GHG) is not sufficient (Masson-Delmotte et al., 2021). There is a decorrelation between progress in local sustainability actions and a worsening (or for the most optimistic, a stagnation) of the climate change problem at the global level (Wright & Nyberg, 2015). This observation suggests a lack of effective policies to coordinate actors among themselves.

Despite the abundance of available policies such as carbon tax, carbon market, voluntary agreements, regulation, it appears that these global mechanisms face difficulties in implementation. Climate action appears to be locked in a dilemma between efficacy of mitigation and the fair share of efforts. Empirically, social justice appears to be a major obstacle to their acceptability. This was observed in France with the social crisis of the yellow vests in 2018 following the increase of a tax on fuel to limit global warming. Questions of equity and social justice regarding climate mitigation have been raised since the first international conference on Human Environment of Stockholm in 1972. In discussions on the topic of climate change, equity has two intricately meanings: to reduce inequalities through climate action and to share in an equitable way the burden of climate action (Mattoo & Subramanian, 2012). Empirical evidence suggests that current mechanisms for coordinating climate action, such as carbon pricing, regulations and voluntary agreements, have difficulty achieving the objectives for which they were designed because they lack equity (Klinsky et al., 2017a). Yet, attempts to restore some equity in climate mechanisms such as compensations have been pointed as negatively influencing their expected efficacy. Climate action is thus facing a clear equity/ efficacy dilemma (Bauer et al., 2020; Bergstrom, 2010). This lock-in of climate action around the difficulty of articulating efficacy of mitigation and equity is acknowledged in various academic fields, from the literature on international negotiations (Carraro, 2000b; Zhou & Wang, 2016) to research on local implementations (Bourguignon et al., 2007; Diet & Atkinson, 2021).

Despite the growing concern toward the equity dimensions of climate action (IPCC, 2022), a rapid inquiry on strategies compiled by the Intergovernmental Panel on Climate Change (IPCC) reports since 1995 show a remarkable stability in global mechanisms to organize collective action to face the climate change challenge. Economic instruments, regulations, voluntary agreements, information programs and their varieties are stable categories of

instruments to the attention of policymakers to help organize climate action. This confirms that other approaches that study local success of organizing are confronted to the difficulty of scaling-up governance schemes (Araral, 2014; Ostrom, 2011; Young & Bouyssou, 2000).

The potential of framing to overcome the equity/ efficacy dilemma

The study of equity involves the forms and role of the sense of justice in social relations, especially in groups. It deals with reactions to injustice, varied and conflicting perceptions of "fairness," correlations between group types and norms of justice, and the impact of various distributional systems on the dynamics of interpersonal relationships (Demeuse & Baye, 2005; Rawls, 2003). As it influences perceptions and strategic decision making (Cornelissen & Werner, 2014b; Park et al., 2013; Ubel et al., 2001), framing appears as an interesting lead to deal with equity problems

From a strategy perspective, it has been recognized that, in dealing with climate change, narrowing frames can limit the range of possible solutions, alienate action and delegitimize innovative solutions (Aklin & Mildenerger, 2020; Patt, 2017; Schüssler et al., 2014; Wright & Nyberg, 2017). To generate new possibilities and unlock climate action, scholars explore the role of framing in motivating individual behavior to improve the acceptance of current mechanisms (Dickinson et al., 2013; Stevenson et al., 2018). Others see frames as a way to motivate collective action and generating new governance mechanisms or policies to organize collective action (McHugh et al., 2021; Mintrom & Luetjens, 2017; Rossa-Roccor et al., 2021; Shaw & Nerlich, 2015). Yet, while frames appear as a new lead to explore alternatives, there have been warnings on the limitation of frames to renew organizing possibilities because of the ignorance of implicit hypotheses that remain despite the new framing (Campbell et al., 2019; Nyberg & Wright, 2020).

By questioning the role of frames in generating new strategies for climate action, we propose, in this conceptual paper, that framing climate action (Hatchuel, 2019) rather than climate change can be a way out of current lock-in in the exploration of new strategies for climate collective action.

In a first part, we review the potentials, and limits identified by the literature on framing climate change. We then explore more deeply one specific frame that has had considerable influence on shaping climate action: the "social dilemma" or "collective action problem" or

“commons dilemma”¹ situation. We show that the “commons dilemma” situation is, in fact, the only available conceptualization on the very nature of climate action: interdependent individuals, constrained by a common constraint, and who must modify their behavior and bear the costs of such a change. After modelling current climate action, we found that despite the huge influence of the tragedy of the common’s metaphor, it has not allowed to question this initial setting. We then propose an alternative way of conceptualizing climate action: common rescue, therefore framing climate action in a “common peril” situation. Through a “common peril” situation, we make the tragedy visible: the values of individuals are interdependent. If no one acts, everyone risks losing everything. Thinking climate action this way forces to acknowledge the interdependence of values at risk, a consideration quite absent from current proposals. We conclude by illustrating how framing climate action can allow to access selectively original mechanisms of interest and provide new perspectives for climate action.

The potential and limits of framings to generate new climate policies

[Changing frames to motivate collective climate action](#)

Framing refers to the process by which people develop a particular conceptualization of an issue or reorient their thinking about an issue (Chong & Druckman, 2007). Regarding climate change, the effect of narratives and frames of the issue have been identified as influential on governance mechanisms (Funtowicz, 2020). Frames allow for setting the boundaries of a situation and apprehending the action that needs to be conducted. The main use of problem framing for action are 1) bounding the range of resulting policy recommendations (Pielke Jr, 2007) 2) building strong storylines that guide both analysis and action in practical situations, and allowing for a normative environment for policy choices (Rein & Schön, 1996) in (Dewulf, 2013) and 3) creating common understanding of an issue to motivate collective action (Steinberg, 1998).

As frames for climate change are diversifying, it was further noted that understanding the process by which climate change is framed is crucial as this process may lead to new forms of organization (Ansari et al., 2013; Cornelissen & Werner, 2014b; Wright & Nyberg, 2017).

¹ “Collective action problem” or “social dilemma” or “common dilemma” are used very similarly in literature. “Common dilemma” is a specific case of social dilemma that is widely used in climate change studies (Jagers et al., 2020; Yoder et al., 2022), As we will focus on climate change, in the following of this paper, we will use the term “commons dilemma”.

Literature has recently been expanding on the influence of different frames on governance implications (Hulme, 2019), as well as regarding the acceptability of governance mechanisms (Bolsen et al., 2014). Climate change has been framed in multiple ways since the first acknowledgment of the issue. Campbell, McHugh, and Ennis (2019) explore the different framings of climate change that have occurred since the cases of first climate concerns. The first frame of climate change identified was as an externality, a frame that existed before the concern for climate change. Since then, different framing of the climate change problem have emerged in different disciplines (wicked problem, threat, global warming, contested debate, tragedy of the commons, risk, war, crisis, catastrophe, super wicked problem, and Anthropocene) and different organizational effects have been recognized for each of these frames. More specifically, the authors argue that the use of the “climate emergency” terminology is an explicit attempt to frame the climate change issue in a manner that affects collective action and policy. (Campbell et al., 2019). While frames of understanding have multiplied, they can compete with one another, making it difficult to properly apprehend climate action. For instance, the “emergency” frame is challenged by the recent framing of climate change as a “crisis” (McHugh et al., 2021).

Some attribute this absence of effective policies emerging from frames to the nature of climate change, as it is defined by its unboundedness, incalculability and unthinkability (Campbell et al., 2019). For those who argue that climate change is possible to frame, it appears that the different frames face a limit to create new theoretical foundations for climate action. Climate frames have been mobilized to enhance collective action, and more specifically, recent studies on the role of framing regarding the development of policies often relies on cognitive framing (Cornelissen & Werner, 2014b), studying the evolution of individuals perceptions, values, regarding specific frames (Dickinson et al., 2013; McHugh et al., 2021).

As an otherwise useful paradigm to enhance strategic creation and initiate collective action, framing appears to fail its promises when applied to the topic of global climate action (Hallahan, 1999). It seems that different framings are replacing and challenging each other without leading to an adequate conceptualization of the nature of climate action, which would allow innovative organizational forms or policies.

Framing and implicit hypotheses: new description, same old habits?

Researchers have been influential in providing models and mechanisms for public policy (Bolsen et al., 2014), yet we wonder what has been the influence of framing on theories, and to what extent frames have contributed to the emergence of new organizational forms and policies. In other words, in what ways do frames influence the way we generate governance mechanisms, policy instruments that shape collective action. Frames can indeed be thought of as hypotheses about the possible outcomes of one situation (Tannen, 1985) in (Cornelissen & Werner, 2014a). Therefore, a restricting frame can prevent researchers to access some analytical or strategic insights. The influence of frames on theoretical development has been highlighted and criticized in multiple disciplines. For example, in international law, the criticism of the dominant frame of climate change as an environmental law problem considers that it has limiting effect on the creative thinking process to propose innovative ways to deal with climate change. Challenging this global paradigm is critical to think more constructively about collective action in the climate context (Carlarne, 2014). This diagnosis is also present in other social sciences domains. In the organizational field, works centered on framing has been identified as an attempt to incorporate climate change into existing organizational philosophies. Therefore, the framing of the climate change situation appears as a trajectory of increasing category expansion (Cornelissen et al., 2011) to try to accommodate it to existent philosophies (Campbell et al., 2019). This verdict is also present in management studies. Nyberg and Wright (2020) have argued that the framing of climate change in management research is as a subset of sustainability, therefore containing several implicit hypotheses and focusing on a tension between profit and social/ environmental justice. In sociology, Elliott (2018) has pointed that the discipline is driven by the question of how theories of sociology can contribute to the study of climate change and noticed that this topic has mostly been studied by environmental sociologists. He argues that the sociological thinking on climate action is an exercise of “exegetical organizing within a silo” (Elliott, 2018). He proposes an approach based on a sociology of loss to provocatively oppose the dominant (and more conventional) concept that frames the social scientific study of climate change: sustainability. In the policy and governance field, the combination of the “tragedy of the commons” and the “environmental problem” frames has been identified as highly influential on allowing people to identify and built effective solution strategies (Patt, 2017). Schüssler et al. (2014) have identified the global commons frame of international governance as one restricting the potential solution to market mechanisms to mitigate climate change. Shaw & Nerlich (2015)

who have also identified this frame as highly influential and narrowing governance mechanisms research argue for a need to revise the organizational discourse and frames as a prerequisite to improve public perceptions of climate action.

It appears that, in the case of climate change, new framings face the risk of only generating small inflexion of existing theoretical background which limits the exploration of innovative governance and policy mechanisms. The insights in Shaw & Nerlich (2015), show a considerable need to question frames that specifically shape policies and governance thinking to hope for more global collective action.

Climate actions: a fixation on the frame of commons dilemma?

“Tragedy of the commons” and the “global commons” one powerful frame?

One frame for climate change has drawn our attention for both its high influence and for some consensual content, and the number of critics it has drawn in most recent literature.

It is almost commonly admitted that climate change is a “tragedy of the commons”. As mentioned in the 2014 Intergovernmental Panel on Climate Change report, “Mitigation is a public good; climate change is a case of ‘the tragedy of the commons’ (high confidence). Effective climate change mitigation will not be achieved if each agent (individual, institution, or country) acts independently in its own selfish interest, suggesting the need for collective action” (IPCC, 2014). In the 2022 IPCC report, the “global commons” description of climate change is presented as a key finding (Patt et al. 2022, 14-5-36). The global commons perspective can be traced back to Hardin’s tragedy of the commons metaphor who have been the source of multiple contributions, especially regarding common resources management and pollution control, and have democratized a prism of analysis from an efficiency-based resource perspective (Frischmann et al., 2019; Nagle, 2018). Despite the acknowledgement of such a consensus by international experts, recent critical studies in several disciplines have questioned this representation as a tragedy of the commons that requires collective action, both, in its rationale and its implication for collective action regarding climate action. In climate policy, (Patt, 2017) recognizes the powerful narrative of the metaphor but acknowledges wrong assumptions that can only prevent effective strategies by diffusing wrong conceptualizations of climate action. The global commons framing in international governance has been identified as focusing strategies on market mechanisms that cannot

sufficiently apprehend the climate action challenge (Schüssler et al., 2014). Other works were directly built in opposition to the metaphor, with the initial criticism that it cannot explain the success of local collective action regarding resource scarcity (Ostrom, 1990). This line of research has led to consistent literature regarding management of common resource, collective action and climate change as a commons perspective (Forsyth & Johnson, 2014; Ostrom, 2000, 2010a, 2011). Others such as MacLellan (2016) criticize the use of the wrong part of the metaphor, arguing that while the focus has been on the common resource part, another interpretation of the tragedy could lead to deeper questioning about the individual production of value. Another way of questioning this frame has been to justify the need to add other perspectives such as ethics and justice (Vanderheiden, 2008) or democracy (Carvalho & Peterson, 2012). This multiple frame perspective is also defended in the 2022 IPCC report which justifies the need to incorporate ethical, equity or transformative frames (such as transition and transformation) to properly describe climate action (IPCC, 2022, 14-7-26).

While the performative effect of the tragedy of the commons metaphor and the global commons perspective have been recognized for its influence on shaping climate action and questioned regarding the way it condemns collective action (Ortmann & Veit, 2021), we then explore the commonly used concepts that are associated with this influential metaphor.

The tragedy of the common's metaphor: tip of the iceberg of a "commons dilemma" frame

The prisoner's dilemma, the free-rider concerns, or global commons can all be related to the consequence of a more general representation of a "commons dilemma" of which the "tragedy of the commons" appears has an undesirable outcome (Frischmann et al., 2019; Gardiner, 2001; Mansbridge, 2010; Ostrom, 1990). All those terms have been widely used to describe climate change and climate strategies and the debate regarding whether to frame climate change as a "collective action problem" has been settled in the 2000-2010s after intense research discussions (Carlarne, 2014). Nevertheless, very recent literature has reopened the discussion on the usefulness and capacity of these frames to help climate action.

One of the associated frame, the "Prisoner dilemma", has been called a poor description of the strategic incentives for climate policy (Mercure and al., 2021). Mercure and al. (2021) propose a reverse representation of the problem. They show that, for instance, huge fossil fuels dependent actors should be better off decarbonizing. However, while proposing a focus on the reverse financial considerations of this representation, they do not provide

organizational solutions on how to collectively motivate this new rationale. The focus of climate change policy around “free rider” concerns has also been criticized. Aklin and Mildenerger (2020) have mobilized the distributive theory to explain the lack of success of current policy mechanisms, showing that other theories can provide explanation for climate inaction on the basis of action inequity (Aklin & Mildenerger, 2020). The very qualification of “common” is debatable: in a pragmatic analysis of current actions and the existence of mechanisms of control to implement collective action, the fact is that global climate consensus is not reached (Harris, 2007; Ortmann & Veit, 2021). In addition, the insufficient description of behaviors provided by this frame fails to explain successful local initiatives (Korman & Vacus, 2021).

Several arguments have been advanced to question the framing of climate change as a “commons dilemma” situation in its influence on climate action: 1) it focuses strategies on a decision-making perspective rather than seeking for alternative solutions, and 2) it forces an individualization of climate action.

The “commons dilemma” frame tends to direct the governance focus on how to motivate individual to cooperate (Holahan & Lubell, 2016; Ostrom, 2010a) and therefore on a decision-making perspective that supposes that efficient models of action already exist. The focus around climate action models on a “decision-making” lock-in instead of organizational challenges, limits the scope of exploration (Brown et al., 2019) towards fairer organizational forms. This focus on how to regulate individual behaviors has led to an individualization of action, which has been pointed as a dangerous narrowing in political science (Maniates, 2001). More generally, the problem-solving process of shared issues with individual solutions emerging from this perspective, rather than collective ones, lead to an inefficient allocation of resources and failures to coordinate, therefore introducing peer punishment to solve it. “In the presence of individual solutions to shared problems, groups struggle to balance self-reliance and collective efficiency, leading to a modern tragedy of the commons” (Gross & De Dreu, 2019). To help reach consensus and go beyond individualized action, researchers have push research into finding ways to acknowledge actors’ interdependencies, like co-benefit research (Karlsson et al., 2020) or ecosystem management (Barnaud et al., 2018). Nevertheless, this fields of research can be considered as contributing to the development of the collective action frames as a “commons dilemma” situation (Holahan & Lubell, 2016).

The description of mitigation as a public good and climate change as a tragedy of the common’s sources climate action description in a broader perspective: the lenses of collective

action and the framing of climate action as an externality². These approaches from the lenses of commons and collective action theories has enriched strategic characteristics for climate action in multiple disciplines from economics, sociology, political science, anthropology (Paavola, 2019).

The newest critics toward collective action theories and the framing of climate change as a “commons dilemma” situation suggest taking a closer look at what the “commons dilemma” situation frame really represent regarding climate action.

Commons dilemma the one and only framing of climate action?

This logic and initial frame of climate action as a situation of “commons dilemma” has led scholars to explore strategic collective action from two different perspectives that can be related to the work of Hardin’s tragedy of the commons, Olson’s logic of collective action and Ostrom’s work on governing the commons. All three provides different strategic recommendations to motivate collective action to solve commons dilemma situations (Holahan & Lubell, 2016; Medina, 2013). Hardin and Olson research works focused on the characteristics of resource to manage or properties of groups of resource managers and their strategic proposals to cope with such dilemmas are by the control of an external authority, either state intervention or markets (the privatization of the resource at stake) (Hardin, 1968; Olson, 1986). Ostrom switches the focus toward governance structures and institutions that allows effective collective action (Frischmann et al., 2019; Ostrom, 2000) and therefore provide strategic orientations in designing effective rules for the co-management of a resource (Ostrom, 1990, 2010b). Her starting point is that individuals can themselves provide new rules to effectively manage a resource, and by an inductive approach, she built on the observation of successful cases design principles to enhance collective action. Her work has also been extended beyond the resource system by the study of the process of creating commons, called “commoning” (see for example, Albareda & Sison, 2020; Bollier, 2020; Chatterton et al., 2013; Jakob et al., 2018; Perkins, 2019).

The influence of such representations in shaping current environmental policy instruments has been acknowledged³ (Cashore & Bernstein, 2022) and solving the commons dilemma is

² Climate action is considered as a positive externality if climate is a good to provision, or a negative externality if climate change is an undesirable pollution of atmosphere from individual actions.

³ The French commission on economics and sustainable development wrote in a synthesis note (n°14) written in 2011 is entitled “fishery management policies are the mother of all sustainable development policies”. While there is no direct quotation of either Ostrom, Olson or Hardin’s work, their contribution in research regarding fishery management is well recognized (Araral, 2014). Another example can be found in the dedication of the

presented as the ultimate challenge to tackle climate change (Edenhofer et al., 2015; Ostrom, 2011; Stavins, 2011). We can also note the ability of the “commons dilemma”, “social dilemma” and “collective action problem” situation frames to be used at different levels of one same initial problem in a fractal way. For example, in Ostrom work, the preservation of a common pool resource is one first order “commons dilemma”. Once institutions and mechanisms to effectively manage the resource are identified, providing the public goods necessary for effective management (monitoring, sanctioning rules) becomes a second order “social dilemma” (Ostrom, 1990; Wiemann & Weibel, 2020).

Despite the richness of contributions in collective action theories, they mostly focus on how to motivate individual action (incentives), the institutions that can help collective action and the individual behavioral components of motivation for joint action (Holahan & Lubell, 2016; Oliver & Marwell, 2001; Ostrom, 1998, 2010a). To our knowledge, there is no other model than the “collective action problem”, “social dilemma” or “common dilemma” that provide what we propose to be a framing climate action (Hatchuel, 1999, 2019).

Hence the research questions: how to build on the “commons dilemma” as the mother of all effective framings of climate action to identify hidden hypotheses and provide another effective perspective?

From common resource to common peril: a proposal to reopen climate action perspectives

[The commons dilemma: a situation of a common endangered resource](#)

To represent what is the current framing of climate action, we built on three articles written by Ostrom. In “The origins of the institutions of collective action in common pool resources situations” (Ostrom et al., 1985, p. 198) she explicated critically the framing proposed by Olson and Hardin and announce on which hypotheses her work will later focus on. It appears as a good basis to have access to the underlying hypothesis of the frame. In “collective action theory” she sets the basis for developing a coherent collective action theory (Ostrom, 2007). In “Analysis of collective action” (Ostrom, 2010a), she reviews the different models of

2014 IPCC report to Ostrom: “Her work provided fundamental contribution to the understanding of collective action, trust, and cooperation in the management of common pool resources, including the atmosphere. [...] We have benefited greatly from the vision and intellectual leadership of Elinor Ostrom”.(Intergovernmental Panel on Climate Change & Edenhofer, 2014)

“collective action problems” including “commons dilemma”. The temporality of those three articles allows ascertaining a stability in hypotheses. The choice of articles does not presume to be comprehensive on all the questions raised by the literature, but it highlights a minimal set of hypotheses that contain key conceptualization of what kind of action is motivated by a “commons dilemma” frame.

Actors are bounded by a common constraint imposed by a resource: “*If the human demands [...] begin to approach the maximum sustainable yield, the degree of interdependence among users increases. If demands continue to rise and users continue to act independently, users find themselves in the commons’ dilemma*” (Ostrom et al., 1985). “The term “social dilemma” refers to a setting in which individuals choose actions in an interdependent situation.” (Ostrom, 2007, 2010a). The model also provide a representation of the relation of these individuals with the resource : For Olson and Hardin “*individuals act independently of one another to maximize their utility*”. (Ostrom et al., 1985). For Ostrom individual can coordinate themselves to arrange their utilities to preserve a resource, but that does not change the framing of individuals generating values, it allows them to communicate and set rules to regulate the resource use. Similar representation occurs in Olson’s logic of collective action, where individuals with independent values can provide or not a resource: the public good (Olson, 1986).

The most basic framing of climate action can therefore be described as individuals generating individual values and using/ providing a resource, see figure 1.

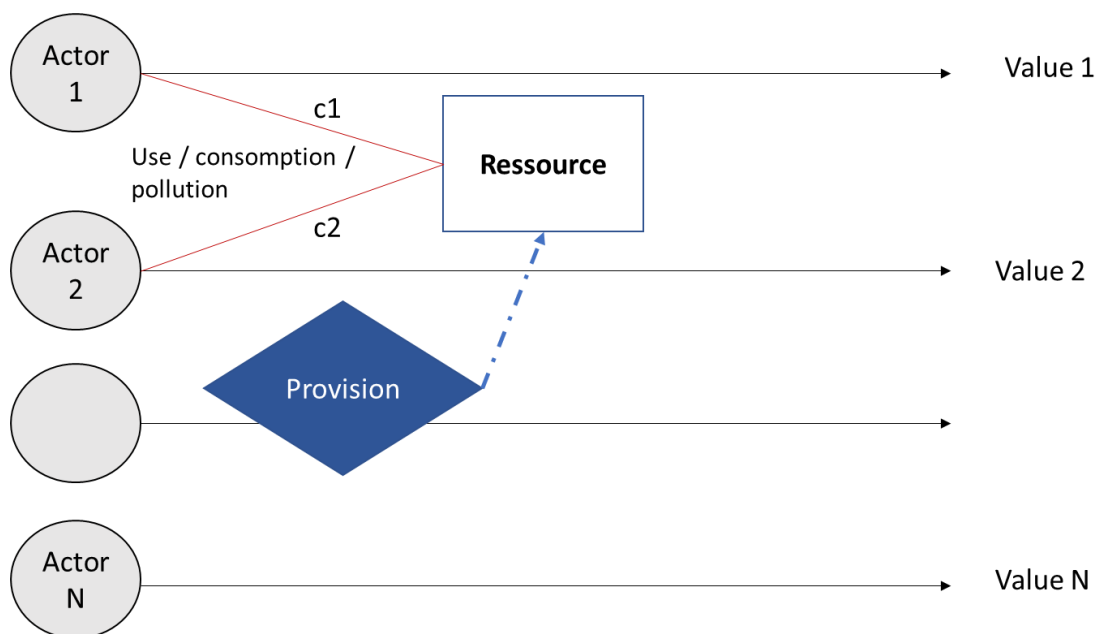


Figure 1: framing of the climate action situation from the “common’s dilemma”: A model of provisioning action. (Value can be considered as an equivalent of the concept of utility as individual preferences considering both social and economic values)

Drawing from this model, we can highlight that seeing climate change as “commons dilemma” shapes climate action. Individuals contribute to the scarcity of a resource (or its pollution) which generates a common constraint: an interdependence between them that necessitates individual changes to make the system work. The “commons dilemma” situation frame focuses climate action on the interdependence between individual uses of a common resource or between individual linked by a common constraint.

[The model of “commons dilemma” and the limitations of current climate actions framing](#)

Public interventions

Drawing from the previous proposition, we can analyze that organizing action will easily lead to individual behavior modification (either voluntary from actors or by an external authority). We can impose rules (norms, regulations) either directly on actors (quotas) or on the way they use the resource (efficiency standards, technological development). We can also imagine influencing individual behaviors by changing the way they use the resource (modifying the cost to use the resource by pricing use, for example), or the representation they have of the resource (information programs). Another approach will be to modify the properties of the resource itself (geoengineering, carbon storage). From all those possible instruments, we can notice that they all focus on the “actors-resource” system and neglect the value component of the representation. Equity based approaches which *a priori* concerns values surprisingly focuses on the allocation of resource rights, uses when looking to distribute quotas or objectives, the discussion regarding equity are mainly focused on burden sharing prior to action (Zhou & Wang, 2016). Economic instruments are by nature built on economic values to motivate action and can be conflictual with an efficient mitigation of emission (Pottier, 2020) and faces equity issues in burden sharing (Carraro, 2000a), but still maintain an actor-resource perspective by seeking to motivate individual behaviors and locating the final decision to a response to an economic incentive. Some more recent approaches tend to try combining the “actor-resource system” with value creation. Joint value creation and co-benefits research can be interpreted as an attempt to acknowledge the importance of the value

component of the model by integrating it in the “actor-resource” system, therefore characterizing governance mechanisms in their ability to enhance this value perspective (Bridoux & Stoelhorst, 2022). Other approaches place themselves in “commons dilemma” situation frame are incorporating climate justice considerations in economic modelling to make visible a “winner-loser” effect of climate action or inaction to explore new mechanisms such as climate bonds (Puaschunder, 2020).

It appears that this most recent development which shows the importance of interdependencies in values suggests that the “commons dilemma” situation frame modelled earlier is not sufficient to make this interdependence visible.

Commons and the challenge of scaling up local initiatives

Once aware of the scarcity of the resource, users can reach a consensus on rules: allocating each other’s rights of uses, dividing the costs of maintaining the resource (by provisioning mechanisms such as peer-punishment, monitoring) (Ostrom, 2000). Those are the case of this representation as leading to successful collective action. The potential for such studies to be scaled up have been challenged.

From the perspective we propose, it appears that one dimension is eluded from the problem-centered rationale that might explain difficulties in scaling up. Ostrom work focuses on governance mechanisms that allow individuals to generate shared values but remain blind to the equity, richness distribution and fairness dimensions (value dimensions) inside the group (Weinstein, 2013). When looking into what approaches of equity are considered in the literature on commons, we can highlight that they focus on the allocation of rights or costs (Ostrom, 1990). Therefore, similarly to the previous section on public interventions, there is a focus on the “actor-resource” part of the system, and an oversight of the value generated from the use of the resource. The focus on institutional features and behavioral components that can enhance collaboration to agree on individual modification of resource use (Ostrom, 2010c, 2011, 2012) is considering values generated as an implicit component of individual motivations (Ostrom, 1998; Weinstein, 2013). . This awareness of social interdependencies has been identified in others research as part of the process of conveying values of equity and social justice (Rawls, 1997). We can then reread Ostrom work as resolving *locally* an equity/efficacy dilemma (Ryan & Sudarshan, 2022) by acknowledging the success of institutional structures commonly accepted by a group of individuals but her work remains blind on the nature of value interdependencies (Weinstein, 2013).

Yet, her works and following research works are confronted to a difficult scaling of the required governing principles as it demands to consider the interdependence of decisions of many more actors that do not necessarily share the same cultural or relational perspectives (Young and Bouyssou, 2000). Studies show that the failure to respond collectively to climate change is caused by the multiplicity of interests of actors involved in the network. This is aggravated by economic reasoning, weak actor bounds and differing perceptions of the rules of the game (Finke et al., 2016). Most recent developments on collective action in the case of climate action are therefore focused on how to account for interdependences in order to enhance cooperation by demonstrating to the various actors that mitigating is indeed a “win-win” situation (directly in climate action or in comparison with other goals that preceded climate action) (Karlsson et al., 2020; Mayrhofer & Gupta, 2016). We observe a similar movement of recent research than previously toward value creation sharing that cannot be caught by the “commons dilemma” situation frame.

From “commons dilemma” to “common peril” situation: exploring the potential of a new framing

Surprisingly, while the tragedy of the commons has had significance influence on shaping climate action, the initial model of the “commons dilemma” has not been challenged.

Let us explore a different framing of the climate change problem: if the resource is overused, and in an extreme case becomes of no use, no values can be derived from it, therefore leading to ruin for all actors involved. A lack of efficacy in providing for the resource therefore paradoxically leads to full equity in inaction: global ruin, that we call “common peril”. The common peril is not caused by one individual specifically, it is the sum of uses, or pollutions that generate a risk. Contrary to describing the usage of the resource and more precisely the potential decrease in each individual usage due to the resource depletion, in common peril, all values are lost when efficacy of collective action is not guaranteed. In the hypothesis where climate change is not contained and everyone suffers damages, we face a common peril: that everyone risk losing everything.

When looking at actions to avoid the peril of climate change, it is almost undoubtable that mitigation will have impact on individual values. For instance, regarding GHG, reducing an equal quantity of emissions for everybody will involve individual changes in behavior or value creation, that will have different impacts on individuals as they differ in their value

creating processes. Yet, the common peril forces to look at mitigation action differently: if one sacrifices its own use or value to preserve the resource and if this action enables to preserve the resource, it allows all others to avoid the common peril, therefore allowing everyone else to preserve their own values.

One contributing to limiting climate change is therefore contributing to what we suggest calling “common rescue” and that we propose as a frame for climate action.

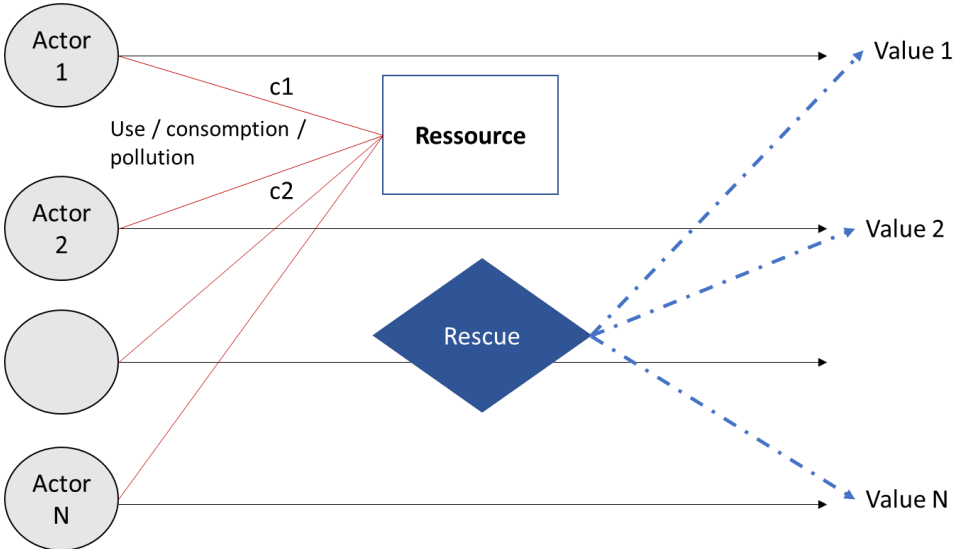


Figure 2: Framing climate action from the “common peril” situation: A model for rescue action

What this conceptualization allows is to move the focus from the interdependence of users toward the interdependence of values. Paradoxically, while the commons dilemma stems from a tragedy of the commons and technically the overuse of the resource and global losses, the reasoning leads to prescribe individual action to be coordinated without considering the global relation on values that is involved. This leads to an individualization of mitigation actions that prevent thinking mechanisms that acknowledge the “common rescue” character of individual actions undertaken for common good. How can we think of mechanisms that legitimize and make acceptable the diminution of uses or of the production of value, if the way to coordinate those action does not account for the solidary character of this action?

An illustration of common rescue mechanisms: the example of general average maritime rule

Can changing climate action model by framing climate change as a “common peril” situation really have an influence in generating new insights for climate organization? To illustrate the potential of switching the model, we draw from the analogy of peril at sea. When looking for mechanisms that fit a common rescue paradigm, we noticed a specific rule from maritime law: the General Average contribution rule. This rule, that can be traced back to Rhodian era, still exists today when a ship faces a peril at sea and has led to international agreements since 1890. It has also already been used in management studies to explore new categories of action regarding bankruptcy (Segrestin et al., 2020; Scott, 1986)

When there is a danger at sea (a storm requiring the unloading of the ship to save the expedition, for example), maritime law authorizes the captain to sacrifice some goods to save the expedition. The rescue is made possible by his knowledge of the risk and his ability to evaluate the necessary ballast. But it is also based on the existence of a rule of solidarity on the sacrificed goods, which avoids the risk of individual ruin. Indeed, once the expedition is saved, a dispatcher evaluates the wealth lost by the intentional action of the captain and the wealth saved on arrival. The losses are then pooled in the form of a damage rate (ratio of losses to wealth embarked) applied to each participant. This is the method of calculating each person's contribution to the salvage: each person contributes up to the amount saved thanks to the sacrifices of the others' goods.

The rule distinguishes “general” from “particular” damages. The general average are the losses due to the jettisoning realized for the common salvation; this original principle considers that the interested parties in the expedition indeed jointly benefit from any sacrifice having allowed the salvation. On the other hand, the particular averages are the damages suffered by the goods independently of the action of rescue: the concerned agent then remains solely liable for their lack of care (for example the expiration of a commodity, or the loss of it due to a bad protection). Thus, only the losses incurred for the common rescue are pooled. The particular averages are however taken into account in the evaluation of the individual saved wealth in case of a general average situation: an agent who has lost everything because of his bad management or an external hazard will not have saved anything, the evaluation of his wealth at the end of the day will therefore be zero, and the contribution to the common damages as well.

What is interesting about this mechanism is that 1) it acknowledges the common risk on everyone's values, and 2) it allows thinking simultaneously the individual sacrifice required for common rescue and the compensation mechanism to make the sacrifice possible. Indeed, if the rule did not exist, each participant could have wanted to preserve the maximum of its cargo, which would have increased the risk that the ship sinks. This mechanism is substantially different from current instruments, as it acknowledges a relation between individual sacrifices necessary to successful collective action and the value of the sacrifice to others. The contribution rule is dependent on the chosen action, its role is not to motivate individual to sacrifice their goods but to guarantee the rescue of the ship.

Looking at climate action through the lens of this mechanism shows potential to discuss fundamentals of climate action such as the polluter pays principle regarding the equity/efficacy dilemma lock-in of climate action and the focus on responsibility to allocate climate action costs. The general average contribution rule has indeed been particularly remarked for its equity in peril situation, which allows the captain to act despite the individual sacrifices. The description of general average in a "commons dilemma" situation cannot explain its role in the success of rescue in another way than from individual rational incentives to agree for jettison once the rule exists (Epstein, 2010). The general average contribution rule therefore works as a social risk mitigating mechanism, that considers that what has been sacrificed requires compensation both in respect to individual losses and common preservation (Demonsant et al., 2021) independently of individual responsibilities in the weight of their merchandises. This mechanism forces to think simultaneously the equity and the efficacy dimension of action (Rodière & Du Pontavice, 1982), when today's approaches are starting from one or the other dimension (Zhou & Wang, 2016).

An illustration of using the "common rescue" model of action to provide policy rationales

A globalizing logic for local policies: the example of Low Emission Zones

Low Emission Zones (LEZ) are local policies at the city scale to prevent air pollution, they are present in a lot of cities in Europe (Paris, Stockholm, London, Berlin, Rome, etc.). In France, it is since the Climate Law of 2021 a mandatory policy for all cities of more than 150 000 inhabitants or that risks exceeding pollution limits fixed by the European Union. A local authority pronounces a restriction of use of a zone of the city for certain vehicles (The interdiction can take several forms, from cordon tariffs to interdiction of vehicles). This policy

applies a polluter-pays principle as defined by law: An authority defines a pollution source and the polluters bear the cost of the action, it is therefore an allocation principle of cost of action for pollution (Sabran-Pontevès, 2007). If we take the example of an interdiction of vehicles: owners of the forbid vehicles must bear the cost of maintaining their mobility by, for example, buying a less polluting vehicle. This policy can typically be described by the “commons dilemma” situation frame and a provisioning model of action where individuals have to consent a sacrifice of individual values to maintain air quality. LEZ are confronted to an equity/ efficacy dilemma that can be summed up as follows: 1) The efficacy of the policy to obtain the right emission mitigation depends directly on the effective interdiction of vehicles, 2) The interdiction of vehicles have different unequal impacts on users depending on their geographic position, mobility alternatives, capacity of paying for a new mobility type raising equity issues (De Vrij & Vanoutrive, 2022; Dietz & Atkinson, 2005), 3) Possibilities to make the policy more acceptable and reduce inequity relies on exonerations of most impacted populations which have a direct impact on the efficacy dimension (Host et al., 2020; Ku et al., 2020) or partial financing of changes of mobility that still leave remaining costs that cannot necessarily be supported (Axsen & Wolinetz, 2021).

If we look at this policy as a “common peril” situation where values provided by the zone (use, habitation, work) are endangered by air pollution. The first question will be: What is causing air pollution? When taking a closer look at the pollution problem and particles responsible for health issues and the sources of such emissions we can observe that there are several other sources than vehicles⁴: heating of houses, industries, vehicles, constructions. These makes appear several choices for local authority to prevent air pollution: forbid vehicles (the LEZ choice) but also forbid heating houses or limiting industries. When looking at the endangered community – those who have value to save by preserving the zone – all users are concerned and have different values to preserve (quality of life, revenue, mobility, etc). Looking at LEZ as a “common rescue” model of action makes it appear that some interests are sacrificed for the benefits of others. Other policies exist to reduce emission from house heating, but each policy is treated as an independent sectorial policy: This is logic in the “commons dilemma” situation, where emissions sources must be identified first to be able to influence individual behaviors. “Common peril” situation forces to highlight a potential inequity in choosing for the case of LEZ vehicles instead of housing. Thinking as a common

⁴ For example, in a French study made by Airparif in 2019 in Paris on the PM₁₀ particles: housing represent 41% of particle emissions, road transportation 36%, constructions 14%, Industry and energy production 5%

peril changes the question over equity by extending the concerned community to all interested in rescue.

A logic for innovative global policies: Rereading the Yasuni Initiative in international policy

The Yasuni initiative was an innovative international project launched by Ecuadorian president Rafael Correa in 2007. The Yasuni national park is both a biodiversity reserve for Ecuador and a potential of fossil fuel extraction, and so an important monetary value creation for Ecuador. The aim of the initiative was to conserve biodiversity, protect local inhabitants and avoid the release of emissions., to that extent, Ecuador proposed a guarantee of keeping oil into the ground in exchange for 3.6 billion dollars from international community. This case has been widely discussed in literature⁵. It has been recognized for its original equity-based approach (Sovacool & Scarpaci, 2016) and used to critically review current approaches in environmental economy (Vogel, 2010), other international conservation policies or to provide insights for development policies (Martin & Scholz, 2014). This initiative has been mostly described as “paying to keep oil under the ground” (Martin, 2011) and considered to have “brought into focus and tried to solve a classic dilemma: conventional policy options would imply either that Ecuador forgoes large revenues, or that the world loses a natural and cultural patrimony irreversibly” (Pellegrini et al., 2014): This is a classic description of a “commons dilemma” situation which has been the lens to analyze this original policy. Pellegrini et al. (2014) in exploring the tensions raised by such an initiative have highlighted several points: 1) A tension between this policy with other development policies 2) The problem of trust toward the Ecuador government, 3) the difficult search for legitimacy as it differs deeply with usual Kyoto protocol principles and more generally with the general principle guiding climate governance. Drawing from the conclusions of this paper and the proposal we made previously that current climate governance mechanisms are built on a “commons dilemma” situation logic which is blind to the interdependence of values at risk if the resource is not preserved, we propose to read the situation differently: 1) It appears quite natural that this initiative has not found its legitimacy if climate action is thought as a provision action type because it is blind to value generated by the resource and focused on the interdependence between individual uses of the resource. Ecuador is, *a priori*, the only one benefitting from the use of the Yasuni park. 2) The “common peril” situation, by acknowledging the interdependence of values at risk facing climate change, provides a rationality for this proposal. Ecuador is

⁵ For example, « Yasuni initiative » research on google scholar leads to more than 3500 papers.

sacrificing potential economic interests which benefits all those whose interests are in peril with climate change.

The point of the three illustrations is not to provide a turnkey solution but to highlight the potential of framing the climate action situation and modelling climate action rather than climate change to access different inspirations, mechanisms, or rationales for climate action.

These three illustrations allow us to define more precisely what we call a common peril. A common peril is a situation in which 1) the sum of individual actions is the cause of the problem, 2) It is possible to act, 3) It puts in peril all values. Common rescue action is therefore an individual action which allows others to save or preserve values.

Discussion and perspectives

The importance of considering interdependencies specific to climate change has been pointed out several times in the literature (Aghel, 2021; Andersson et al., 2021; Barnaud et al., 2018; Brown et al., 2019). When looking at climate change frames that have been proposed such as wicked problems, threat, global warming, war, health issue, catastrophe, systemic breakdown we can see attempts to acknowledge the interdependencies of values raised by the climate change situation. This is also the case of the multiplication of frames for climate action based on ethical or value considerations. However, while new frames are proposed, the exploration of solutions is focused on the decision-making influences of these frames (Orlove et al., 2020).

What we tried to argue in this paper is the need to go beyond climate change problem framing and to think about the framing of the climate action situation itself. Going from a “commons dilemma situation” to a “common peril” situation allows a change in model of action by making visible an interdependence in values that is consistent with recent developments in climate action research.

While the need to consider equity in climate action has been acknowledged from multiple sources (Klinsky et al., 2017; Vanderheiden, 2008; IPCC, 2022), this proposition opens a space to discuss equity dimensions with a new lens on what climate action is about. As shown in the illustration, reframing the climate action situation and modelling climate action can

allow reconsidering differently the equity debate and go beyond rights allocation. As the role of frames in perception of equity has been acknowledged, this proposal can open a new range of discussion by asking different questions. This can allow getting out of responsibility or rights allocations concerns and to focus attention on what fair transition means (Bell, 2019; Cook et al., 2012; McCauley & Heffron, 2018) and explore new ways to achieve it.

In a more theoretical contribution, we propose an explanation of why frames are limited in their influence on generating new organization forms and innovative policies: Beyond frames, while we do not model what we call climate action, new proposals are likely to be absorbed by the one inherited from past research and perpetuated in a lock-in of climate action. It is likely that many contributions fit the new proposed conceptualization of climate action but realizing that there can be a different way of seeing the situation can allow to selectively classify new insights in whether they remain stuck or promote one specific climate action representation.

In addition, as the role of analogies and metaphor has been acknowledged for theory expansion and innovative organizational forms (Cornelissen et al., 2011; Oswick et al., 2002), we propose that modeling climate action can help to select more precisely inspiration to create new way of organizing that are more adequate to the challenge at stake.

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