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Rethinking risk communication about climate change: Reflexive approaches and metamodernist public participation

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Abstract

A central purpose of risk communication about climate change is to provide information to publics that induces more sustainable practices and behaviours that avert or limit the predicted negative outcomes of climate change. However, despite broad public knowledge of the risks of climate change, responses to climate change at the various levels of society have been sluggish. One way of explaining the "knowledge-action gap" (Knutti, 2019) may be that risk communication promotes a broadly conservative approach to the anticipated challenges of climate change, as its logics are predicated on preserving a 'good' version of the present into the future, although a more transformative approach is increasingly regarded as needed to ensure more environmentally sustainable practices. In keeping with the growing tendency towards reflexivity and public participation in the field of risk communication, I argue that risk communication initiatives may be better positioned to benefit society if a) the values that climate change risk messages may be resting on are critically examined, and b) a collaborative approach is adopted with publics, drawing, for example, on metamodernist frameworks that support individuals' agency and responsibility.

Keywords

Climate change; risk communication; sustainability; values; reflexivity; metamodernism

1 Introduction

Media coverage of climatic events during the summer of 2023 provided stark reminders of the increasingly urgent and overdue need to 'do something' about climate change. Both June and July were the hottest months ever on record according to the European Union's Earth observation component, Copernicus (2023). Forest fires burned in countries such as Canada causing evacuations and air pollution (Hauser & Moses, 2023). In Greece, media coverage showed chaotic scenes of tourists fleeing hotels on foot to avoid forest fires on the island of Rhodes (McKie, 2023). Torrential rain also fell, resulting, for example, in over a million people being displaced and dozens dead in northeastern China (McCarthy et al., 2023). Due to a prolonged 'heat dome', pavements in Arizona were so hot that they could cause second-degree skin burns (Sabur, 2023). While the effects of climate change on human life were emphasised in media framings, the natural world was also affected. Besides the ravages of wildfires,

floods and drought, climate change was resulting in declining biodiversity (United Nations, 2023a) and visibly destroying habitats such as coral reefs (United Nations, 2023b). Thus, during the summer of 2023, media coverage presented scenes that reflected what scientists had been predicting for decades, even centuries (Fage-Butler, 2024): that, due to the release of greenhouse gases into the atmosphere, the planet was heating up, making conditions challenging for the various forms of life on Earth.

Climate change is broadly understood to be one of the gravest scientifically established existential challenges of our times. The IPCC (2022) report, which presented the most up-to-date scientific knowledge about climate change, summed it up as follows: "The cumulative scientific evidence is unequivocal: climate change is a threat to human well-being and planetary health" (p. 33). Increasingly framed as an existential crisis by civil society climate movements, the media and some politicians, climate change is associated with existential risks as it is seen as threatening (usually, human) survival and the meeting of basic (primarily, human) needs (Huggel et al., 2022).

This article explores the challenges of risk communication about climate change in the face of (un)sustainability. Sustainability has been defined in different ways, from ensuring the continuity of human 'needs' (however they may be defined) – e.g., "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland, 1987, p. 16) – to more contextual and critical approaches. In this article, the position on sustainability adopted in the context of risk reflects the latter approach and is tied to forward-looking responsibility (Fage-Butler, 2024; Nihlén Fahlquist, 2018). It holds that if we are to create more sustainable futures, then due consideration needs to be paid to context, where we define ourselves in relation to our environmental contexts and act as responsible custodians of our environments for future generations (Virtanen et al., 2020). Specifically, this theoretical article posits that climate change risk communication (i.e., risk communication about climate change) may be better positioned to create more sustainable futures if its underlying logics, values and blind spots are critically examined. Moreover, I propose the value of adopting a collaborative approach with publics that draws on existential metamodernist thinking which acknowledges and supports individuals' agency and responsibility (Björkman, 2019, p. 3). The aim of this article is not to claim that climate change risk communication could be readily effectivised through metamodernist thinking, but instead to highlight potential and the scope for renewal.

2 Climate change and the challenge of (un)sustainability

Climate change is regarded as notoriously hard to address – it is the wicked problem *par excellence* (Lazarus, 2009; Levin et al., 2009, 2012; Perry, 2015; Stang & Ujvari, 2015; Wohlgezogen et al., 2020). Wicked problems are complex, intractable and value-laden issues that represent highly challenging areas for policymakers (Kasperson & Moser, 2017). Indeed, so apparently intractable is the issue of climate change that it has been described as a "super wicked problem" (Auld et al., 2021; Lazarus, 2009; Levin et al., 2009, 2012), which Levin et al. (2012) define as a heightened and more urgent form of a wicked problem. Besides having the features of a wicked problem, a super wicked problem has four more features: "time is running out; those who cause the problem also seek to provide a solution; the central authority needed to address it is weak or non-existent; and irrational discounting occurs that pushes responses into the future" (Levin et al., 2012, p. 124). This can result in super wicked problems becoming what Levin et al. (2012) call a "policy making 'tragedy'" (p. 123).

In line with this increasing sense of tragedy is the fact that the existential risks associated with climate change have been intensifying due to neglect and denial. Although it is broadly known and acknowledged that climate change is the result of human patterns of production and consumption (IPCC, 2022; World Economic Forum, 2021), and that delaying action only makes the matter more unmanageable, the response from various societal actors has been sluggish while the climate crisis worsens. This incongruity is captured by "Giddens' paradox", which Giddens (2011) defined as follows:

> since the dangers posed by global warming aren't tangible, immediate or visible in the course of day-to-day life, many will sit on their hands and do nothing of a concrete nature about them. Yet waiting until such dangers become visible and acute – in the shape of catastrophes that are irrefutably the result of climate change – before being stirred to serious action will be too late. (p. 2)

Our knowledge of the risks of climate change comes with the moral imperative to act; as Schicktanz (2021) states: "where there is risk there is responsibility" (p. 62). However, if what we are doing aligns poorly with what we know we should be doing, this can spur another existential crisis, which I call 'reflexive irresponsibility', where we, as individuals, feel morally compromised by our own daily practices.

Publics have, on the whole, made insufficient behavioural changes, despite governmental and local authorities running campaigns with the aim of promoting climate action among publics (see, for example, Bickerstaff & Walker, 2002; Wejs, 2014). Various reasons have been given for this such as a "stubborn persistence of climate skepticism, as well as a failure for nonskeptics to translate their concern about climate change into meaningful action" (Hornsey & Fielding, 2020, p. 3) and insufficient climate literacy (IPCC, 2022, p. 1886).

The current UN Secretary General, António Guterres, has recently upbraided political leaders for their lack of concerted action by describing current greenhouse gas emissions as being so high that the goal of meeting the 1.5 degree climate pledge by 2030 was "on life support" (United Nations News, 2022a), with people "sleepwalking to climate catastrophe" (United Nations News, 2022b). Drawing on the literature, I identified in Fage-Butler (2024) the following reasons for why politicians may struggle to confront the complex challenges of climate change:

• The cycle of politics [is] short, generally 4-5 years, and national politicians [may fear] that (unpopular) climate change mitigating policies [result] in voter backlash […]
• Political commitment to growth, and development being seen as a hallmark of good government while at the same time appearing to be at odds with commitment to climate action […]
• Lobbyists and some interest groups, e.g. in the United States, decelerating political climate action […]
• Dismissal of climate science for political ideological reasons […]
• Lack of straightforward solutions to climate change for policymakers in line with its "wicked problem" quality […]
• The fact that GHGs [greenhouse gases] are a 'shared' problem requiring global and not just national solutions and the associated challenge of politically transcending "the tragedy of the commons" […], where responsibility for shared or common resources such as the environment can be difficult to discharge. (p. 116)

There has also been considerable focus on corporations not meeting their responsibilities in relation to the environment (Ziady, 2023), relying on greenwashing (de Freitas Netto et al., 2020; Kim & Lyon, 2015; Lueg & Lueg, 2020) and/or passing their environmental responsibilities on to consumers (Doyle, 2011). This neglect is particularly problematic as, according to a major study produced by CDP (2017), "[o]ver half of global industrial emissions since human-induced climate change was officially recognized can be traced to just 25 corporate and state producing entities" (p. 8).

In short, although publics, politicians and corporations are all implicated to varying degrees and in various ways in the historic and ongoing problem of climate change, considerable intransigence prevails. A carbon-based capitalist economy has proved seductive, inducing the continuation of environmentally unsustainable values, attitudes, behaviours and practices. As an alternative to the complex matter of overhauling values, attitudes, behaviours and practices, hopes are often pinned on identifying technological fixes for climate change (Hornsey & Fielding, 2020; Meijers & Rutjens, 2014) that demand less of members of the public than behavioural change, and less of corporations than, for example, deep infrastructural changes. The anticipation of future technological solutions legitimises the postponement of remedial climate action in the present, adding further to the inertia.

3 The evolving field of risk communication

A number of accounts regarding the evolution in the field of public risk communication exist (e.g., Balog-Way et al., 2020; Bourrier, 2018; Fischhoff, 1995; Lofstedt, 2015). Risk communication is still quite a young field and has not always been seen as a field in its own right: it has previously been characterised as a praxis (Leiss, 1996), a sub-field of the more established field of risk management (Bourrier, 2018; Renn, 2007) and an offshoot of the field of technical writing (Bourrier, 2018; Sauer, 2003).

The field of risk communication's historic concern with effectiveness is evident in the many models, checklists and practical guidelines that have been developed for risk communicators (e.g., Fischhoff, 1995; Lundgren & McMakin, 2018; Renn, 2008). An emphasis on effectiveness is not surprising; risk communication that is destined for publics is goal-oriented; its main *raison d'être* or telos is to provide information that provokes attitudinal and behavioural changes that result in risks being minimised or averted (Boholm, 2015; Fischhoff & Kadvany, 2011; Renn, 1998). However, risk communication is recognised as difficult to do well; it has been described as a "task of Sisyphus" (Finkel, 2008, p. 121) for risk communicators. The difficulties in communicating effectively to publics about risks have been attributed to a variety of reasons such as unclear expression in risk messages, as well as contextual factors such as poorly managed media coverage of controversial topics, public bias or mistrust and the epistemic challenges of the post-truth society (for an overview, see Fage-Butler, 2024, pp. 32-33). Risk communication that is poorly executed has disadvantages besides ineffectiveness, as it can lead to "hostile" publics (Löfstedt & Frewer, 1998, p. 9), greater public mistrust (Fischhoff & Kadvany, 2011) as well as frustrated risk communicators (Fischhoff & Kadvany, 2011) who feel disinclined from further engagement with their publics.

Similar to other academic fields such as strategic and corporate communication (e.g., Bowen, 2018; Gulbrandsen & Just, 2020) and organisational research where critical and reflexive approaches are gaining traction (Alvesson & Kärreman, 2000; Alvesson & Sköldberg, 2009), there is growing recognition in the field of risk communication of how language (e.g., discourses and framings) influences a society's broader sociocultural semantics (cultural meanings and values) as well as individuals' scope for identity formation (Balog-Way et al., 2020; Bieder, 2018; Bourrier, 2018). Another development in the field of risk communication is the growing integration of theoretical insights on risk from other fields such as anthropology, sociology and ethics (e.g., Beck, 1992, 1999, 2009; Douglas, 1984; Douglas, 1992; Douglas & Wildavsky, 1982; Jonas, 1984; Nihlén Fahlquist, 2018; Ross & Athanassoulis, 2012). In recent work, I have emphasised the importance of such reflexive and interdisciplinary perspectives for enriching the field of risk communication (Fage-Butler, 2024), particularly in light of the challenges of communicating about "super wicked problems" (Auld et al., 2021; Lazarus, 2009) such as the pandemic and climate change. In this article, I develop the argument further, focusing on the underlying logics of risk communication and the potential value of integrating insights from the public that reflect the emerging worldview of metamodernism.

4 The conservative logics of risk communication

As mentioned earlier, the characteristic *modus operandi* of risk communication to publics is to highlight anticipated dangers in order that publics adopt behaviours that avert or minimise possible dangers in the future. According to Anderson (2010), this

precautionary logic in risk communication emerged in the 1970s in Europe in the context of legal responses to potentially catastrophic environmental threats. Anderson (2010) notes that precaution involves both identification of a preventive action and an assessment of "the balance between what the threat could become and the costs of (in)action in the present" (p. 789). Risk messages involve "actuarial" concerns (Wilkinson, 2010, p. 57) with calculating the likelihood of negative outcomes for an object that is considered to have value (such as health or a climate that is conducive to maintaining biodiversity), using language and imagery to bring about changes in values, attitudes and, ultimately – and most critically, behaviours and practices (Homer & Kahle, 1988; Leiserowitz et al., 2006).

However, minimising risk through prudent preventive action means that risk communication tends to be characterised by a conservative logic. It seeks to minimise the likelihood of a danger and aims to ensure that the future will be a continuation of a 'good' version of the present. This means that risk communication practices build on positive assumptions about the value of maintaining rather than disrupting the status quo. This in turn provokes a question that is pertinent in the context of sustainability: what is it we want to maintain through risk communication?

5 The need for transformative approaches to sustainability

The sustainable development goals or SDGs (United Nations, 2022) were established to provide a blueprint for more sustainable futures. However, there are limits to how transformative they are – for example, SDG8, called "Decent work and economic growth", assumes the value of maintaining the growth paradigm. At the same time, there is increasing awareness that the challenges of unsustainability posed by climate change require transformative approaches (Jenkins, 2010). Indeed, according to the United Nations (2021) report, attitudes to the natural environment must be transformed if we are to achieve a sustainable future. António Guterres made it clear in the report's foreword that climate change is a result of human folly and carelessness, which backfires on humanity:

> Humanity is waging war on nature. This is senseless and suicidal. The consequences of our recklessness are already apparent in human suffering, towering economic losses and the accelerating erosion of life on Earth. (p. 4)

The United Nations (2021) report highlights the importance of transforming our views to ensure more sustainable practices in the following:

> Only transformative change will enable humanity to fulfil international environmental agreements and achieve the Sustainable Development Goals […]. Transformation can also enable the realization of the collective vision of a sustainable future for humanity, one that involves a rapid and thorough decarbonization, food security for all, an end to poverty, harmony with life on land and beneath the water, and substantial improvements in justice and fairness. (p. 101)

In other words, to create a more sustainable climate future where climate-friendly values and actions are well-aligned, there needs to be radical change. It is argued that radically transformed values and norms can lead to more sustainable futures where relationality and the proximate environmental context are emphasised:

> Paradigms and visions of a good life: Move towards paradigms that emphasize relationships with people and nature over material consumption, including many existing visions of good lives as those lived in accordance with principles and virtues of responsibility to people and nature. (p. 102)

Similar sentiments are also evident in the work of the environmental ethicist, Jonas (1984), who emphasised the need for people to take responsibility to address Earth's deteriorating environment because something as existential as "no less than man's fate" (p. x) is at stake. Tsing (2015) has suggested re-envisioning our relationship with the natural environment by promoting alternative stories to the usual stories that positively valorise growth and development. Latour has argued for a radical shift in how we define our relationship to the natural world (SciencesPo, 2022), for example, exploring in Latour (2017) the figure of Gaia as hypothesised by Lovelock and Margulis (1974) as an alternative to obsolete understandings of Nature. Christensen (2020) has appealed to the logics of care, arguing that we need to care about the planet in order to care for it. Drawing on the above, I suggest that there needs to be more fundamental questioning of what it is we want to preserve as well as how we define sustainability, bearing in mind that some values that underpin our current ways of living may in fact be preserving unsustainable practices.

6 Public participation using metamodernist perspectives

The argumentation thus far is as follows: a) risk communication tends to support the preservation of 'good' versions of the status quo, which may be problematic as climate change is the result of existing ways of thinking and doing, and b) there is, at the same time, broad acknowledgement of the need for more transformative approaches to achieve sustainability. Notably, a similar need for transformation has been captured in philosophical works on the emergent worldview that is increasingly considered to

characterise our time: metamodernism (Björkman, 2022; Pipere & Mārtinsone, 2022; Storm, 2021; Vermeulen & van den Akker, 2010).

This article relies particularly on theories of metamodernism developed by Björkman (2019, 2022). Metamodernism is – literally – a 'meta'-theory that needs to be understood in relation to previous worldviews or "thought perspectives" (Björkman, 2019, p. 432) as it draws on them. Briefly, a religious thought perspective or worldview "made us aware of the world of subjectivity" (Björkman, 2019, p. 434). A modernist thought perspective, on the other hand, championed scientific knowledge and technological progress, and "helped us to see the objective, physical domain of reality" (Björkman, 2019, p. 435). A third thought perspective, postmodernism, which was associated with post-WW2 irony, deconstruction, relativism and skepticism towards grand narratives, "gave us an increased awareness of the intersubjective, socially constructed, collective imaginary" (Björkman, 2019, p. 435). According to metamodernism, none of these positions is sufficient by themselves in the face of current existential crises such as climate change. For example, a modernist approach will be inclined to assume that technological solutions will be found and that 'business as normal' can continue, while a postmodernist approach may reduce climate change to a matter of narratives where we lose sight of the facts (Björkman, 2019, 2022).

Metamodernism aims to integrate insights from previous worldviews into a rich multiperspectival worldview while admitting "that the synthesis it produces can never be final or absolute" (Björkman, 2019, p. 442). With metamodernism, although there is no (longer) such a thing as ultimate truth in line with the postmodern approach, there is still a "reality" (such as climate change) that we need to relate to, reflecting a realist sensibility more closely associated with modernism. Metamodernism is thus not just 'meta' in the sense of 'over' or 'beyond', but also in the sense of 'both/and'. According to Vermeulen and van den Akker (2010), metamodernism involves ambivalences and tensions and "can be conceived of as a kind of informed naivety, a pragmatic idealism" (p. 5) that is characteristic of recent responses to global events such as climate change. Metamodernism, they state, "oscillates between a modern enthusiasm and a postmodern irony, between hope and melancholy, between naïveté and knowingness, empathy and apathy, unity and plurality, totality and fragmentation, purity and ambiguity" (pp. 5-6). In other words, by combining the perspectives of previous worldviews, a metamodernist perspective captures some of the contradictory impulses of our current age. It criticises previous thought perspectives for being too limited and reductive by themselves, acknowledging, for example, that "the modern project and industrial society are not sustainable in the long run" (Björkman, 2019, p. 445), and that the postmodern critique of modern society "does not create sufficiently pervasive visions and political programmes for a sustainable, global society" (Björkman, 2019, p. 445).

Instead, according to Björkman (2019), metamodernism can be used as an overarching frame to "propose a new societal model" (p. 445) by "creating a meaningful myth of our time. The message is stated in mythic form, not to be taken as a truth" (Björkman, 2019, p. 442). He asserts that we need to develop such new metanarratives, as the narratives of "God, Science or the Market" (Björkman, 2019, p. 509) are not sufficient, given the current existential challenges. According to Björkman (2019, 2022), by working on developing personal, collective and universal narratives, we will be better able to understand ourselves in the context of our time, and thus be better equipped to assume responsibility for matters such as climate change. As we search for new metanarratives, sustainability is emphasised: "any new metanarrative must be one that is directed towards the global, sustainable society, and towards the human being's ability to attain self-realisation" (Björkman, 2019, p. 513). Post-humanism too has a role to play in the new metanarratives as "the human being no longer sees itself as the measure and meaning of everything, but that we are parts of a greater reality and evolutionary process" (p. 514). This greater relationality and longer temporal perspective could help to increase our sense of agency and responsibility for our world (p. 520). Björkman (2019) concludes with a reminder of the need for greater attention to human agency and responsibility: "the direction for the future of humanity will be decided by the *collective existential choices* that confront us. And the important insight which both obligates and liberates us is that the future lies in *our* hands" (p. 524, italics in original).

The think-tank Metamoderna (2023) similarly characterises the agenda of metamodernism in terms of existential questions such as the following:

- Can we create better processes for personal development?
- Can the inner dimensions of life gain a more central role in society?
- How can modern, postmodern and premodern people live together productively?
- What is the unique role of humanity in the ecosystems of nature?

With these 'prompt-questions', metamodernist initiatives call for a re-existentialising of society and politics. Human beings should be supported to develop their inner life to meet the complexities, incongruities and, not least, the searing crises of the world, often expressed in terms of risks – as in the case of climate change, of which we are reflexively aware (Beck, 1992). It is important to note that in this metamodernist perspective, the amalgam of crises is not seen as a polycrisis, but as a meta-crisis – a singular crisis that has one main origin – namely, humans' lack of inner resources to deal with the complexity of the world (Björkman, 2022).

Thus defined, metamodernism is a nascent sensibility or worldview that may have the potential to promote new thinking on existential challenges. It does not come with ready solutions to the knowledge-action gap on climate change; instead, it hints at potential and even hope. The field of risk communication has long acknowledged the value of public participation to enrich understandings of risk and enhance communication to the public (Balog-Way et al., 2020; Bieder, 2018; Bourrier, 2018; Leiss, 1996; Lofstedt et al., 2011). The possibility of learning from metamodernist public discussions regarding how we reconceptualise our role in the world would reflect this tradition, where solutions to the intractable challenges of unsustainability in the

Anthropocene are identified by members of the public who think about the future as lying "in *our* hands" (Björkman, 2019, p. 524, italics in original). However, metamodernism, while it holds promise, would certainly benefit from further empirical research and theoretical development.

7 Conclusion

This paper examined risk communication in the light of the super wicked problem of climate change. Its starting point was Giddens' paradox (Giddens, 2011): that although there is broad public knowledge and acknowledgement of climate change and what causes it, there have been and continue to be high levels of inertia, which mean the problem is getting increasingly difficult to address. The article highlighted the challenges involved in adopting transformational approaches to climate change risk communication, as risk communication is typically concerned with preserving a 'good' version of the status quo into the future. As such, I suggested that risk communication about climate change may need more transformational approaches if it is to support the goal of greater environmental sustainability. The article also provided an overview of the nascent worldview of metamodernism (particularly drawing on Björkman, 2019; Björkman, 2022), showing it to be in step with more transformational approaches as it envisions a multiperspectival viewpoint supporting the creation of new narratives, and encourages agency and responsibility for more sustainable practices. While metamodernism has been suggested as a way of responding to the existential challenge of climate change to produce more sustainable forms of living (Björkman, 2019, 2022), to my knowledge, connecting the challenges in the field of risk communication and the thought perspective of metamodernism has not been done before.

In focusing on public responses to risk messages about climate change, this article underscored the usefulness of reflexivity vis-à-vis risk communication (Fage-Butler, 2022, 2024). There appears to be the need for breakthrough thinking in how we envisage the future with respect to the environment and climate change and how we see sustainability and our role in promoting it. Participatory approaches that support agency and responsibility may help to shed light on what kinds of futures are desirable – particularly with regard to what should be sustained and what should be re-envisioned.

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