



Between climates of fear and blind optimism: the affective role of emotions for climate (in)action

Lena Maria Schlegel

Rachel Carson Center for Environment and Society, Ludwig Maximilian University of Munich,
Munich, Germany

Correspondence: Lena Maria Schlegel (lena.schlegel@campus.lmu.de)

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Abstract. Emotions affect how humans relate to others and define their place in the world. They thus shape responses to socio-ecological problems like climate change. In spite of the overwhelming knowledge and concern about climate change, a lack of appropriate moral and political consequences prevails in most contemporary societies. Instead of trying to explain climate inaction as a result of (un)awareness, this paper introduces a new perspective by conceptualising climate inaction as an active social process animated by emotions. Drawing on an interdisciplinary and radically relational perspective, I grasp climate inaction as a product of more-than-human intra-action and explore the affective role of emotions within this production. To illustrate how emotions energise climate inaction, I sketch how fear, grief, and hope animate current climate responses.

1 Introduction

Anthropogenic climate change is both well-known and acknowledged as a core challenge for human societies today. The basic facts underlying this problem are both scientifically well-understood and broadly recognised: a high concentration of greenhouse gas emissions in the atmosphere, caused mainly by the intensive combustion of fossil fuels, leads to significant heating of the climate. If uncontained, this will fundamentally alter the Earth system and its habitability. This process is simultaneously a result of and will profoundly affect existing systems of social organisation. Hence, climate change poses an urgent need to transform contemporary nature-society relations. For long, scientists and policy makers alike have been working on the assumption that knowledge will ultimately translate into action (Suldovsky, 2017) and enormous amounts of techno-scientific knowledge about climate change have been generated to date.

However, inaction on climate change persists, in spite of the overwhelming knowledge and concern about the problem. In fact, what is lacking in climate response is not information per se, but appropriate moral and political consequences (see Cohen, 2001). Avoiding as big an “elephant in the room” as the unfolding climate catastrophe, however, does not come off-handedly – it takes a collective effort (see

Zerubavel, 2006). Hence, I argue that we need to understand climate inaction as an active and collective process of avoiding appropriate moral, political, and timely responses to climate change. To better understand, how a system of social organisation can cause ongoing violence, and at the same time defer responsibility for its effects (Hochschild, 2018:27), I explore what energises this social process of avoiding and, in particular, the role of emotions which are a much overlooked aspect in this regard.

As climate change raises fundamental questions of identity, social order, and belonging, it is an inherently emotional matter (Richter, 2015). Consequently, emotions must play a part in responses to climate change. However, in most contemporary societies, emotions have no place in science, ethics and politics. As a result, (Western) scientific knowledge about climate change often remains abstract, dispassionate and mechanistic and fails to speak to real-life experiences (Verlie, 2021:3). At the same time, while many people do know and care about ecological problems, they are unable to translate their concerns into action in every social context and an effort to deal with unpleasant emotions may lead to strategies of avoiding and distancing (Norgaard, 2011). This is why I think it is important to look more closely at how emotions energise the social production of climate (in)action.

Untangling how the environment, emotional experience, and social production work together is a task that transcends established categories of thinking about the environment and calls for interdisciplinary interventions (see Schurr and Strüver, 2016). Therefore, I focus on the idea of radical relationality that speaks to a range of recent discussions about materiality, affect, and the more-than-human. Starting from the assumption that climate change is a relational problem (Sect. 2.1), I argue that the social production of climate inaction can be conceptualised from a relational perspective as “more-than-human intra-action”, which means that humans and non-humans co-constitute the world in an ongoing process of affective encounters (Sect. 2.2). This approach enables me to look at climate response as the work of relationships and to specify how emotions animate human–nature relations (Sect. 2.3). To illustrate how this line of thinking helps us untangle how emotions, environment, and society (re)make each other, I sketch how emotions of fear, grief, and hope animate current climate responses (Sect. 3).

2 Conceptualising the affective role of emotions for climate (in)action

Human–nature relations are not just physical, but also complex emotional configurations which shape experiences, subjectivities, social structures, and moral questions. This is why I think it is important to look more closely at how emotions energise the social production of climate (in)action. In the following sections I will, first, outline why I think climate change should be understood as a relational problem, second, sketch the conceptual lens of intra-action that reflects such a radical relationality, and third, carve out the role of emotions for this approach.

2.1 Climate change as a relational problem

Climate change calls into question established social structures, our sense of belonging and identity, and the place of humans in the world. As a result of human activity¹, it also calls into question the dominant notion of human subjectivity and distinct human agency derived from understandings of nature as passive and mechanical, the hierarchisation of life forms, and the purview of rights attached to that particular idea of the human (Frost, 2016:2f.). At the same time, the very idea of a world haunted by the consequences of human impact also evokes a collective human subject (Chakrabarty,

¹The reference to humanity as a whole here is not to disregard the variety in human interactions with nature and the unequal effects of environmental degradation on different social groups. While the article focusses explicitly on the collective effects of the dominant (Western) paradigm of human superiority over nature, I wish to emphasise that this is intimately connected with other forms of oppression, such as those based on gender, race, class, and ability, and that they need to be addressed intersectionally.

2009:222). Critical scholars from across disciplines have attested that this particular idea of the human may be precisely why “we have wrought such terrible crises on the world” (Frost, 2016:2). Hence, the question arises how we can both pinpoint human responsibility and transform nature–society relations appropriately.

A radically relational perspective aims to both decentre human agency and to stick with the consequences of human activity in terms of “situated human doings” (Puig de la Bellacasa, 2017:2). The idea of radical relationality² provides a fundamental shift away from anthropocentric thinking. It basically means that relationships are considered the prime unit of analysis, and it is radical in the sense that this way of thinking transcends different levels of enquiry: because we are entangled with others in myriad ways, any way we engage with the world, every attempt of understanding and making meaning, every encounter is shaped by the ways we relate to others (Johns-Putra, 2013:129). Based on this understanding, how we perceive and describe the world is always already mediated by our encounters with others and thus human subjectivity is much more fluid and, in fact, defined by the webs of relationships they are embedded in.

Relationships to people, places, ideas, and ideals are thus foundational to forging our sense of belonging and identity (Slater, 2019:43). Identity and belonging are not fixed states, but “movement toward intimacy, connectivity and commitment” (Wright, 2016:13). The subject defines itself, its relationships with others, and its world through the encounter: bodies and subjectivities “come to be, that is, they come to matter, in the very terms of the encounter” (Johns-Putra, 2013:129). Hence, from a relational perspective, transformative potential lies in appropriate encounters with those we are entangled with. Because we are so deeply entangled with other life forms, responding to climate change entails not only changes in our socio-technical systems but also (re)considering what it means to live “in right relations with the ‘more-than-human’ world” (Peterson, 2006:393). Thinking in relations can thereby help to grasp both the endurance of certain social orders and transformative change:

Relations can solidify into particular forms and processes and endure over evolutionary and shorter timescales. They can also be disrupted, fall apart and be reconfigured. (Head, 2016:68)

²This is discussed from a variety of angles across disciplines. I would also like to note that indigenous theories have engaged with relational perspectives for much longer and that this is unfortunately often not reflected in Western academic debates and citation practices. My own research draws heavily on the Western feminist New Materialist tradition because I consider this angle of critique most appropriate given my own situatedness as a white, female researcher from the global North. For a deeper reflection on anti-colonial engagement with relational theories see Rosiek et al. (2020).

Because humans are fundamentally entangled with nature through bio-cultural processes and eco-social structures, such a perspective is particularly helpful for looking at human–nature relations and eco-social problems. If we look at climate change from a radically relational perspective, it is a matter of how to appropriately address conflicting needs and “response-abilities”, i.e. practices of care and response (Haraway, 2012:302), in more-than-human relations – relations that involve humans as much as non-human animals, microbes, matter, social structures, and the underlying ideas and values of those orders.

Consequently, transformative change starts with rethinking human subjectivity in terms of more-than-human relations, that is, always already embedded with non-human nature. This perspective highlights that we cannot actually escape responding to climate change, because we are so deeply entangled with nature that we are inevitably and inherently affected by environmental decline. To avoid or delay responding to them is just as much an act of social production as it would be to change consumption behaviour, engage in political activism, or to introduce political regulatory measures, to name but a few practices that would conventionally be considered climate action. Hence, a relational perspective can shed light not only on the conflicts in human–nature relations but also on the potentials for transformative change.

2.2 More-than-human intra-action

If relationships are the primary unit of enquiry, the question arises how we can analytically grasp those relationships humans share with other beings and describe the processes of world-making that occur within them. I consider Karen Barad’s notion of “intra-action” a helpful concept to reflect both the radical relationality outlined and a more-than-human understanding of social production.

According to Barad, phenomena are not stable entities but rather ongoing material–semiotic reconfigurations of the world – mutually implicated in dynamics of “intra-action” (Barad, 2007:140). Intra-action describes the materialisation of different “spacetime-matterings”, that is different (re)configurations of the world, or locally and momentarily stabilised phenomena (Barad, 2007:179). In contrast to the idea of *inter*-acting entities, *intra*-action emphasises how entities co-produce each other through their encounters. In consequence, material phenomena are not prior to but constitutive of social production and vice versa. Specific (re)configurations of iterative becoming emerge through what Barad calls “agential cuts” (Barad, 2007:148), moments where “exteriorities-within” emerge into the world (Hollin et al., 2017:18). Such cutting (re)creates boundaries and thus always already entails a degree of ethical responsibility for the worlds created and excluded (Barad, 2007:243).

This means that “the world we inhabit arises most fundamentally out of our ethical practice” (Cheney and Weston, 1999:116) rather than the other way around. In this

sense, radical relationality is not so much an ontology as an “ethico-onto-epistemology” (Barad, 2007), highlighting the deep interconnectedness of ethics, knowing, and being. Agency in such an account is not located in specific bodies, but rather part of the affective flows of intra-action which constitute “the ongoing reconfiguring of the world” (Barad, 2007:171) in networks of human and non-human agents (Fox, 2015:308). Hence, agency is not limited to humans and not even a fixed attribute but rather the flows of affect that animate social production, and involve human and non-human bodies and matter, ideas, and emotions. Affect, in this paper, refers simply to the “capacity to affect or be affected” (Fox, 2015:301), rather than to certain emotional or cognitive dispositions.

Recognising the fundamental entanglements of humans with the more-than-human world offers both challenges and possibilities for making meaning amid ecological peril: “Whether through fear, disgust, anxiety or wonder, realizing vulnerability is rarely an easy matter; it is just as prone to set more troubling emotions into motion as it is to create comfortable relations” (Houser, 2018:16). Hence, I argue that in order to manage the fundamental change demanded by the unfolding climate catastrophe, we need to come to terms with troubling emotions and disentangle how they are involved in the ways humans relate to nature through the ways they animate more-than-human processes of social production.

2.3 The affectivity of emotions

Emotions have traditionally been located in the interplay between social environment, mind, and body (Hochschild, 1983:220; see also Turner, 1999). They are constitutive to social organisation and for “how people make sense of their place in the world” (Norgaard, 2011:470) in manifold ways. They affect how we apprehend the world and respond to it (Ahmed, 2004a:10). They are “part of our responses to events, but they also – in the form of deep affective attachments – shape the goals of our actions” (Jasper, 1998:398). Emotions are constitutive for the production of identities, social meanings, and groups, they “animate meaning systems and structure power relations” (Norgaard and Reed, 2017:464f.). Emotional dispositions inform value judgments and decisions on climate change (see Slovic, 2000). They also affect how information is processed and memorised (Rosenberg, 1991), and shape our sociological imagination by linking personal concerns to broader societal structures (Norgaard, 2011:8).

Throughout late modernity, emotions have been characterised as individualised, commodified, and reflexively managed feelings (see Patulny et al., 2019). Both everyday language and psychological models tend to define emotions as subjective and interior feelings (Ahmed, 2004a:8). However, such accounts maintain anthropocentric ontologies “which tie conceptions of emotions to the human body and human subject” (Fox, 2015:304; see also Navaro-Yashin, 2009;

Tamboukou, 2003) and reflect disembodied notions of emotion (Sabini and Silver, 1998). In response, more socially and materially embedded accounts of emotion have emerged but are yet to be more systematically theorised with respect to human–nature relations. I attempt to contribute to this endeavour by conceptualising the role of emotions for social production in terms of intra-action which shapes human–nature relations from a radically relational perspective.

Emotions have strong affective capacities (Massumi, 1996:228) and are socially structured. This means they are part of an “affective flow that produces bodies and the social world” (Fox, 2015:301). At the same time the appropriate range, intensity, duration, and targets of feelings in different situations are defined by social norms (Hochschild, 1983). Troubling emotions are kept at a distance through cultural tools such as norms of space, time, emotion, and conversation (Norgaard, 2011:197). Intense “emotional labour” (Head, 2016:83) is involved in the social production of inaction. Hence, emotions animate nature–society relations and define the space for response to eco-social problems. Following Sara Ahmed (2004b), I therefore look at what emotions *do* rather than what they are in the context of climate (in)action. The configurations within which emotions “do” things can be understood as affective economies where emotions “align individuals with communities – or bodily spaces with social space – through the very intensity of their attachments” (Ahmed, 2004b:119).

Hence, emotions are located neither in the body or the mind, nor are they distinct entities, but rather “key elements in the complex re-configuring of the world” (Barclay, 2017:183). I therefore suggest to understand emotions as constituents of social production in terms of more-than-human intra-action. Their affectivity emerges from the very relations between – human and non-human – bodies and “from the encounters that those relations are entangled within” (Anderson, 2006:736). In this vein, emotions are actualisations of affect related to a distinct experience of relational being, a momentary fixture of a particular material–affective constellation of relations through “heterogeneous processes of circulation, expression, and qualification” (Anderson, 2006:734). A focus on emotions as affective constituents of more-than-human intra-action allows to focus on the wider processes of the social production of bodies, boundaries, and subjectivities “including economies of power and resistance involved with them” (Fox, 2015:311). In the following sections, I explore how different compressions of affect into emotion yield the potential to enable and constrain distinct subjectivities and identities (Lupton, 1998 in Anderson, 2006:737), and how this affects responses to climate change.

3 The affective role of fear, grief, and hope for climate (in)action

Current climate policy is, on the one hand, dominated by discourses of fear which have been fed by both activists and denialists over the past decades (see Dörries, 2010). On the other hand, there is still a vast optimism that scientific and technological innovation will bring about a *deus-ex-machina*-like solution to “fix the climate” (Hulme, 2014). Together they recognise the existential vulnerabilities involved with environmental loss and change, and reflect a desire for a future worth living in. And yet, neither of these narratives seem to be particularly effective for energising climate action. By looking at different materialisations of fear, grief, and hope in climate discourse, I illustrate how the tendency to avoid troubling emotions fosters inaction and how engaging with emotional struggles can be productive for change³.

3.1 Fear

In this section, I sketch how emotions of fear are affective in navigating us through vulnerabilities and insecurities concerning conflicts of identity and belonging. I thereby argue that fear often works along lines of power in more-than-human intra-action. This may be both productive and counterproductive for eco-social change, depending on how power is shifted or stabilised, which boundaries, bodies, subjects, and objects are made and unmade.

Climate has historically been associated with fear in Western environmental history (Dörries, 2010). In the early modern period, extreme weather was considered divine judgement, in colonial contexts it reflected fears of unknown places, and today an ever-looming sense of catastrophe surrounds climate change in appeals to action and inaction alike (Dörries, 2010). And this is to no surprise, as information about climate change can be existentially disturbing in that it challenges the foundations of social organisation and human life on Earth. It exposes existential vulnerabilities and raises concerns about our position in our community, society, and the world, ranging from one’s personal sense of security (Norgaard, 2011:21) and identity to our very feeling of ontological stability (Giddens, 1991). In consequence, there is a widespread emotional uneasiness about the place of humans in the world – especially among Western societies – in the face of environmental destruction that Deborah Bird Rose describes as “Anthropocene Noir” – “the looming sense of fatality; the creeping awareness that nothing can be put right” (Rose, 2013:215). The Anthropocene, in this sense, is an expression of fears of “both our own power and our powerlessness vis-à-vis our own power” (Mauch, 2019:13).

³I do not consider this an exclusive list of emotions which are affective in the social production of climate (in)action, but rather as examples to illustrate how particular flows and configurations of emotion affect certain (non-)responses to climate change.

Fears hence play an important role in subjectivisation processes by shaping bodies and subjectivities, and by “secur[ing] forms of the collective” (Ahmed, 2004a:71). As fear is an embodied experience, “it creates the very effect of the surfaces of bodies” (Ahmed, 2004a:76). These processes can be grasped well through the notion of intra-action, because it allows us to look at boundaries as results of agential cutting exceeding notions of agency tied to the (human) body. Fear thereby takes different shapes and is described in different terms, including but not limited to direct fear, insecurity, anxiety, worry, and concern. Drawing on Heidegger, we can differentiate between direct fears which are present, recognisable, and induced by an identifiable trigger, whereas anxiety is an unspecific concern about our relationship with nature and the affect economies which constitute certain kinds of nature–society relations (Slater, 2019:13). Hence, climate anxiety represents the “generalized sense that the ecological foundations of existence are in the process of collapse” (Albrecht, 2019:250).

Closely connected to matters of identity, climate anxiety reflects one’s relations to the self and constitutive relations with others. The perspective of necessary lifestyle changes causes anxieties to the self, whose identity is at stake (Head, 2016:27; Weintrobe, 2013:43). Such anxiety may become existential, when “the narcissistic part [of the self] is anxious it will not survive if reality is accepted. The realistic part is anxious that the narcissistic part has caused damage and may imperil its survival” (Weintrobe, 2013:33f.). So eco-anxiety reflects a fear not just of ecological loss but also loss of identity and valued sense of self. In the strive to maintain favourable self-conceptions (Norgaard, 2011:90), the need to “feel good” may be so strong that it becomes an emotional self-interest (Hochschild, 2018:306). This inherent contradiction may amount to a delayed response or deferral of responsibility in the attempt to avoid the emotional struggle necessary to reconcile them.

As identities are always derived from group affiliation (see Tajfel, 1974), it is essential to look at the relational dimension of identity conflicts in more-than-human relations. Agential cutting always occurs within certain cultural and moral values and social norms. Hence, emotional responses like climate anxiety are themselves imbricated in social structures and maintain a function in social production. For example, research on the reproduction of colonialism highlights how anxiety is at work in the (re)production of colonial identities and power structures, “a social practice, an activity through which the subject is constituted” (Slater, 2019:9). Climate anxieties, in the global North specifically, may be an expression of fears of losing privilege (Ray, 2020). This shows that emotions of fear often operate along lines of power in (re)producing proximities and distances (see Ahmed, 2004a, b). Hence, emotional distress about environmental loss may be equally entangled in the reproduction of power structures (Norgaard and Reed, 2017:472).

In consequence, climate anxiety strongly intra-acts with *guilt*, related both to individual contributions to and the larger structural inequalities imbricated in the problem (Norgaard, 2011:86). Consequently, among climate activists in the global North, fear is valued for its alerting capacity as an individual and internalised emotional response but seldom utilised for collective mobilisation in order to avoid ascriptions of guilt and responsibility (Kleres and Wettergren, 2017). In the attempt to avoid troubling thoughts about one’s own imbrication in problematic power structures, people may “reproduce existing power relations as they enact denial in every-day life” (Norgaard, 2011:218). In the strive to protect valued identities, guilt may evoke mechanisms of emotion management like “perspectival selectivity” – i.e. belittling one’s own impact and agency or explicitly deferring responsibility to other actors (Norgaard, 2011). In particular, there seems to be a case of “white fragility” involved with Western climate response that tends to reinforce the status quo rather than facing guilt and responsibility (see Ray, 2020). Instead, an enormous emotional labour is invested to keep moral consequences associated with certain subjectivities and the associated lifestyles at a distance. Acts of emotional distancing are thus agential cuts to protect certain self-valuations or certain ideas of the subject’s position in the world whereby responsibility for the suffering of others is deferred and possibilities to form new relationships are closed down.

Feelings of *powerlessness* or *helplessness* also strongly interact with fear. As climate change is an existential problem, vastly distributed across time and space, individuals may feel overwhelmed by the scale of the problem and powerless in the face of pervasive political and economic structures (Norgaard, 2011:84). Compliance to social and cultural norms may thereby also contribute to inaction. For example, norms like optimism and control dominant in Western culture suggest to avoid such feelings through selective attention to information (Norgaard, 2011). On the other hand, research in indigenous communities affected by climate change shows that *shame* about the “inability to perform social and cultural responsibilities” (Norgaard and Reed, 2017:481) in light of ecological loss may also enforce powerlessness. Such feelings affect one’s sense of agency and may foster ill self-worth, and may ultimately lead to mental illness and community stress (Norgaard and Reed, 2017:484). According to Norgaard (2011:43), powerlessness stems from being inattentively caught in what Hannah Arendt (1958:183) calls “the web of human relationships”. Analogically, I argue that powerlessness in the face of ecological loss stems from being *inattentively caught in the web of more-than-human relationships*. By untangling the intra-action that constitutes those relationships, we can uncover conflicts and determine ways of entering into new configurations of relations. For instance, climate activists in the global South experience powerlessness through acute fear in light of the experience of climate change “as an already manifest reality with devastat-

ing consequences”, however the demobilising effects of fear are often averted by ascribing guilt and responsibility to the global North, turning it into anger (Kleres and Wettergren, 2017:516). Fear can thus be transformed by contesting and reconfiguring power relations.

In sum, the radical uncertainty underlying ecological loss and change evokes various forms of fear which are structured along relations to the self, society, and the world. At the same time these emotional responses are themselves affective in the constitution of subjectivities and worlds through agential cuts which create proximities and distances, borders, subjects, and others. As human–nature relations are deeply imbricated in the affect economies underlying climate response, disruptions of established subjectivities and relations may offer reconfigurations of these relations. However, a radical openness to more-than-human encounters and their ethical consequences is required for such change. Through the lens of intra-action, we can better understand emotional processes related to fear in more-than-human relationships. Fears evoke social action based on a logic of securing certain – more proximate – objects against an outside and thereby tend to reproduce established forms of order rather than enabling transformative change. At the same time, fears may be transformed into other emotional affects – like guilt, helplessness, or anger – which reinforce particular forms of action (or inaction). Ultimately, fear (re)configures human–nature relations through the ways it reproduces or diverts power relations.

3.2 Grief

As has been shown in the previous section, there is no single or uniform effect of particular emotions surrounding ecological loss and change. Disruptions caused by climate change, be that of loved places or patterns of social life and relations (Head, 2016:23), may also cause emotions of grief to diverse effects. In this section, I sketch how emotional processes associated with grief are affective in climate response. I thereby put emphasis on how grief affects and is affected by the ways humans relate to nature. It is striking that emotional mechanisms to keep environmental loss and change at a distance often correspond with (Western) dualisms, such as the nature/culture, mind/body, or self/other distinction. In contrast, for many indigenous peoples, nature is perceived as a central influence on emotional experiences (Norgaard and Reed, 2017) and vitally entangled (Rose, 2004). This hints that more intimate and “response-able” relations with nature may affect more transformative emotional responses to climate change.

Grief can occur both in form of “direct pain on behalf of others” and in terms of social experiences such as disruptions to identity, disruptions to social interactions, and the experience of environmental degradation with cultural and physical violence (Norgaard and Reed, 2017:476). Grief can also be associated with relations to time and place, such

as grief for the future, or loss of loved places, an emotion Glenn Albrecht (2019:27) has termed *solastalgia*. Likewise, ongoing and gradual environmental loss may cause forms of trauma, such as *cultural trauma* (Brulle and Norgaard, 2019) or trauma with respect to *future loss*, highlighting the affective capacities of emotions in linking present and future through embodied attunement (Richardson, 2018:18). All of these descriptions highlight the inherently relational dimension of grief – its constitution through ongoing intra-action in relationships involving humans, non-human nature, time, and place. Particularly, forms of place-based grief highlight how meaningful relationships between humans and nature can foster commitment and responsibility towards eco-social change. Grieving, in this sense, can be a form of emotional labour to work through conflicts in human–nature relationships.

At the same time, grief can also be a powerful boundary-making practice and a tool of governance by constituting more or less valuable forms of life based on cultural notions of legitimate and illegitimate objects of emotion (Ahmed, 2004a:191). In her work on mourning in Inuit communities, Ashley Cunsolo Willox (2012) makes the case for acknowledging non-humans as mournable. This would have ethical and political effects not just for non-human individuals, but also increase the necessity to act on climate change. In the light of mass extinction, grief for whole species is at stake (Head, 2016:24f.). Considering non-human lives as grievable and recognising non-human forms of grief is significant both because this would constitute a powerful impulse for climate action and because of the ethical consequences for non-human lives. The emotional work of grief may also provide a remedy for the anxieties outlined in the previous section. “Grieving for the loss of the modern self” (Head, 2016:21) may be required to enter into new relationships with non-humans:

We keep climate change at arm’s length to protect parts of our identity. This takes cultural work, and change will take cultural work as we transition – by force or choice – to new identities and practices. Part of that cultural work is grieving for what we might lose in the process. (Head, 2016:31)

Looking at this emotional conflict from a perspective of intra-action, we can better understand the constitution of inaction, but also identify transformative moments within more-than-human relations. If dualist thought categories like nature/culture, body/mind, and self/other underlying modern thought are at the heart of ecological loss, facing the loss of such relations is inevitable in order to (re)configure meaningful relations with the more-than-human world. So to move from non-response to transformative change, we need to become more aware of our more-than-human entanglements, interrogate which kinds of relations and distinctions we are afraid to let go of, make room for grieving them, and explore how we can create openness towards new engagements

– in sum to apply a radical relationality in practice. If knowing and caring is not enough, we must create social contexts in which we can express appropriate responses to eco-social problems. Hence, transformation may require “mourning and grieving for the destruction of a relation and those subjects that are constituted through that relation” (Yusoff, 2012:579). In this sense, grief can serve as a source for change and enable us to put all our affective capacities, “our creativity, reason, feeling and strength” towards remaking futures (Randal, 2009:128). Such grief

is always and simultaneously personal, political, and ethical, and corporeally embodied. It is a process full of often uncontrollable emotional and corporeal responses, such as grief, pain, anguish, sadness, devastation, denial, and affects, emergent from the shock of losing something or someone that was loved, valued, and important. (Willox, 2012:142, see also Dubose, 1997)

This transformative potential of grief described by Willox and others resonates with the notion of addressing inaction as a relational conflict, as emotional labour provides the missing link from dispositions to actions in working towards more response-able relationships. The lens of intra-action highlights the more-than-human nature of grief associated with climate (in)action and allows to evoke possibilities for transforming the human–nature relations underlying grief. In this sense, grieving can be considered an affective practice which may enable us “to imagine new kinds of selves” (Head, 2016:34) – more-than-human selves. Through public practices such as acknowledgement, witnessing, and arts, the relational element of grieving may provide comfort by creating a sense of connectivity and collectivity (Head, 2016:33). Listening attentively is thereby vital to witnessing in order to break established forms of power (Rose, 2004:30). These response-able practices are therefore crucial for working through the webs of intra-action constituted by conflicting needs, emotions, and practices that constitute inaction on climate change.

3.3 Hope

As shown, transformative moments may emerge from working through emotional ambivalence. But how can we imagine different futures while bearing our fears and grief and not shift into blind optimism? In this section, I explore how different configurations of hope may affect transformative change. According to philosopher Ernst Bloch, hope is a creative force responding to fear and loss, and stimulating imagination:

The most tragic form of loss isn’t the loss of security; it’s the loss of the capacity to imagine that things could be different. (Bloch cited in Norocel et al., 2020:165)

Conventionally, hope is thought of as a “positive” feeling that enables us to imagine “better” configurations of space–time–mattering than the present. It could thus be a tool to imagine transformative change of nature–society relations. However, hope is highly ambivalent and there are several critiques to how it is at work particularly in Western cultural contexts. For one, hope is connected to concepts of time which are oriented towards future redemption (Ricoeur, 1995:204–205 in Rose, 2004:33). According to Rose, such time concepts “deflect us from our moral presence in the here and now, and thus engage us in violence. This violence consists in ignoring the diversity of life in the present moment in favour of an imagined life in a future moment” (Rose, 2004:33). Similarly, Head (2016) suggests that the concept of hope in Western societies is strongly coupled to the idea of *optimism* and a cultural disposition to cling all too much to “positive” emotions. She argues that “associating hope only with optimism acts to close down possibilities rather than open them up” (Head, 2016:75). Even climate scientists are affected by this bias, leading to a systematic – and unrealistic – avoidance of worst-case scenarios (Head, 2016:89, see also Anderson and Bows, 2012).

To avoid tapping into a trap of blind optimism, we should thus resist the urge to resort too quickly to positive feelings, and engage with the diverse range of emotions, including painful ones entangled with environmental loss, and seek hope grounded in practices rather than particular emotions. The perspective of intra-action in more-than-human relationships outlined in this paper can be helpful to analyse the tensions and conflicts involved with hope in context of climate (in)action. According to Ben Anderson, the circulation and distribution of hope affects socio-cultural life on various scales and connects everyday life with collective social structures (Anderson, 2006:733). Hence, hope is part of the intra-action in more-than-human relations that constitute social organisation from everyday life to planetary boundaries.

As such, hope bears powerful affective capacities which can play out in ambivalent ways. It yields both potential to imagine new futures and a danger to reproduce a linear form of history as we tend to fill indeterminate futures with imaginaries of the past. Such hope for stability is also fed by other emotions such as fear and hopelessness or helplessness. As indicated in Sect. 3.1, these feelings may evoke a loss of agency or one’s sense of identity and meaning in life (Panu, 2020:10), and thus tend to foster the “type of magical-thinking hope that promises an antidote to the noxious brew of fear and helplessness” (Celermajer, 2021:58). As shown in previous sections, threats to one’s sense of identity, meaning, and place in the world may trigger emotional processes which create boundaries and defer moral responsibility rather than mobilising openness for change. Hence, thinking about hope in terms of intra-action in relationships opens up a transformative potential, because it allows us to view agency not as something located in the human body or particular subjects but rather shared across networks of re-

lations from which also new configurations of relations may emerge. In this sense, we can understand “hope as a type of relation emergent from particular encounters” (Anderson, 2006:741).

Becoming hopeful is therefore different from becoming optimistic. It involves a more attuned ability to affect and be affected by a processual world because it is called forth from the disruptions that coax space–times of change into being within that world. (Anderson, 2006:747)

Hence, becoming hopeful is not about transcending a present moment for an imagined future, but rather “an act of establishing new relations that disclose a point of contingency within a present space–time” (Anderson, 2006:744). From a radically relational perspective, generating hope is an embodied practice, enabling new forms of space–time–mattering in more-than-human relationships through cutting–together–apart. Within the temporalities of modernity, however, which tend to imagine the future as an extension of past experiences, hope can only evoke linear change. Instead of directing hope at an uncertain moment of the future, it should therefore be perceived as a dimension of action (Celermajer, 2021:133f.). A more contingent and non-linear understanding of hope may evoke change towards “as-well-as-possible” (Puig de la Bellacasa, 2017) futures in more-than-human worlds, starting in the everyday, grounded in practice, and transformed by emotional labour in intra-active relationships.

Thinking about hope as an embodied practice to enable transformative action thus is an experimental endeavour and requires some kind of speculative opening (see Puig de la Bellacasa, 2017). An openness towards others that involves the possibility to change one’s own ground, and to reconfigure one’s sense of identity and belonging (Rose, 2004:22). This perhaps allows for an understanding of hope grounded in connection and material arrangements rather than abandoning the idea of hope altogether like Rose does. The hope that remains is “fragile and messy” (Head, 2016:80) and offers no universal promises of salvation. But it is also more tangible and relatable as it stays close to the conflicts in our relations, and opens ways of relating and responding differently in a multitude of ways including “stories, visions and actions that work quietly towards a more hopeful future” (Mauch, 2019:20), described by Christoph Mauch as “slow hope” (Mauch, 2019:20). To conclude, looking at climate inaction as a conflict in more-than-human relations, we can stick with the messy material–affective struggles involved with forming responses, and mobilise a new kind of sociological imagination for alternative futures that is both materially embedded and affectively attuned.

4 Conclusion

In this article, I have explored the role of emotions for people’s (non-)responses to climate change through the ways they energise social production. I have proposed a radically relational perspective to understand climate change as a conflict in human–nature relationships, and applied the notion of intra-action to conceptualise inaction on climate change as an active social process that constitutes nature–society relations – rather than as a result of (un)awareness. I have thereby introduced a new perspective on collective change by showing that it is not necessarily lack of knowledge or concern that is delaying or deferring response-ability for transformative climate action, but rather a lack of engagement with the more fundamental challenges this knowledge poses to identities, lifestyles, and ideals, and consequently an active avoidance of the emotional struggles involved with addressing them.

Looking at emotional responses of fear, grief, and hope through a relational perspective, I have demonstrated how emotions can be affective in creating proximities and distances, defining spaces of attention and responsibility, and reinforcing power structures. In particular, I have sketched that while there is no singular or uniform effect of any particular emotion, the tendency to avoid troubling emotions fosters inaction and engaging with emotional struggles can be productive for change. In this sense, climates of fear that tend to protect existing orders in a strive to uphold certain identities and privileges should thus be accompanied by a heightened attentiveness to power relations and their interrelated effects. Hope can equally work as a tool to defer responsibility to act into the future and turn into blind optimism. However, it may also be applied as a transformative practice to reconfigure our relationships with nature, by moving us “into a different relation to the norms that we wish to contest, or the wounds we wish to heal (Ahmed, 2004a:201). Sara Ahmed regards this “as a form of labour or work, which opens up different kinds of attachments to others” (Ahmed, 2004a:201). The work of grief therefore is an important practice that allows us to process the – both deliberate and unavoidable – changes the climate crisis confronts us with and should thus receive more attention as an important collective practice.

The radically relational perspective proposed allows to uncover these (dis)connections in humans’ relationships with nature, and to identify potentials for change by reconnecting and reconfiguring those relations. The article thereby makes an important contribution to the broader research on nature–society relations and transformation by bringing into conversation the work of more-than-human geographies and anthropology with the sociology of emotions. My approach thereby adds to a broader need to better understand the role of emotions for social production across disciplinary boundaries. By shifting the analytical focus away from actors or structures towards relations, this perspective allows to better understand the dynamics and processes that constitute (non-)response to ecological problems in a more-than-human world. This ana-

lytical shift also addresses the double challenge presented by the Anthropocene: to reconsider human subjectivity, while pinpointing human responsibilities.

The concept of intra-action thereby allows to focus on the emotional struggles involved in meaning-making processes in more-than-human relations and to carve out appropriate responses to eco-social problems in a world so fundamentally entangled. Rather than fostering emotions that create distance from ecological problems and detachment from entanglements and responsibilities, we should focus on more-than-human encounters and nurture an openness for change. This means that intense emotional labour lies ahead of us in order to work through the troubles climate change poses to human subjectivities, lifestyles, and belonging, but it also entails the prospect of reconciling our place in the world in light of accelerating environmental loss and change. Meaningful relationships in a more-than-human world are thereby both what is at stake and to be gained.

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References

- Ahmed, S.: *The Cultural Politics of Emotion*, Edinburgh University Press, Edinburgh, ISBN 0748618465, ISBN 0748618473, 2004a.
- Ahmed, S.: *Affective Economies*, Social Text, 117–139, <https://muse.jhu.edu/article/55780> (last access: 1 July 2022), 2004b.
- Albrecht, G.: *Earth Emotions: New Words for a New World*, Cornell University Press, Ithaca, NY, USA, ISBN 978-1501715228, 2019.
- Anderson, B.: *Becoming and Being Hopeful: Towards a New Theory of Affect*, *Environ. Plan. D*, 24, 733–752, <https://doi.org/10.1068/d393t>, 2006.
- Anderson, K. and Bows, A. A new paradigm for climate change, *Nat. Clim. Change*, 2, 639–640, <https://doi.org/10.1038/nclimate1646>, 2012.
- Arendt, H.: *The Human Condition*, 2nd Edn., The University of Chicago Press, Chicago, London, ISBN 9780226025926, 1958.
- Barad, K.: *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*, Duke University Press, ISBN 978-0822339175, 2007.
- Barclay, K.: *New Materialism and the New History of Emotions*, *Emotions*, 1, 161–183, <https://doi.org/10.1163/2208522X-00101008>, 2017.
- Brulle, R. J. and Norgaard, K. M.: *Avoiding cultural trauma: Climate change and social inertia*, *Environ. Politics*, 28, 886–908, <https://doi.org/10.1080/09644016.2018.1562138>, 2019.
- Celermajer, D.: *Summertime. Reflections on a vanishing future*, Hamish Hamilton, ISBN 9781760899035, 2021.
- Chakrabarty, D.: *The climate of history: Four theses*, *Crit. Inquiry*, 35, 197–222, <https://doi.org/10.1086/596640>, 2009.
- Cheney, J. and Weston, A.: *Environmental ethics as environmental etiquette: Toward an ethics-based epistemology*, *Environ. Ethics*, 21, 115–134, <https://doi.org/10.5840/ENVIROETHICS199921226>, 1999.
- Cohen, S.: *States of Denial; Knowing about Atrocities and Suffering*, Polity, Cambridge, ISBN 978-0-745-62392-4, 2001.
- Dörries, M.: *Climate catastrophes and fear*, *Wiley Interdisciplin. Rev.: Clim. Change*, 1, 885–890, <https://doi.org/10.1002/wcc.79>, 2010.
- Dubose, J. T.: *The Phenomenology of Bereavement, Grief, and Mourning*, *J. Relig. Health*, 36, 367–374, <https://doi.org/10.1023/A:1027489327202>, 1997.
- Fox, N. J.: *Emotions, affects and the production of social life*, *Brit. J. Sociol.*, 66, 301–318, <https://doi.org/10.1111/1468-4446.12119>, 2015.
- Frost, S.: *Biocultural creatures: Toward a new theory of the human*, Duke University Press, ISBN 978-0-8223-6128-2, 2016.
- Giddens, A.: *Modernity and self-identity: Self and society in the late modern age*, Stanford University Press, ISBN 0804719446, 1991.
- Haraway, D.: *Awash in urine: DES and Premarin® in multi-species response-ability*, *Women's Studies Quarterly*, 301–316, <https://doi.org/10.1215/9780822373780-006>, 2012.
- Head, L.: *Hope and grief in the Anthropocene: Re-conceptualising human–nature relations*, Routledge, ISBN 9781138547148, 2016.
- Hochschild, A. R.: *The Managed Heart: Commercialization of Human Feeling*, University of California Press, Berkeley, ISBN 9780520054547, 1983.

- Hochschild, A. R.: *Strangers in their own land: Anger and mourning on the American right*, The New Press, ISBN 0520054547, 2018.
- Hollin, G., Forsyth, I., Giraud, E., and Potts, T.: (Dis)entangling Barad: Materialisms and ethics, *Social Stud. Sci.*, 47, 918–941, <https://doi.org/10.1177/0306312717728344>, 2017.
- Houser, H.: Affective Turn, in: *Posthuman Glossary*, edited by: Braidotti, R. and Hlavajova, M., Bloomsbury Academic, <https://doi.org/10.5040/9781350030275>, 2018.
- Hulme, M.: *Can science fix climate change? A case against climate engineering*, John Wiley & Sons, ISBN 978-0-745-68205-1, 2014.
- Jasper, J. M.: The emotions of protest: Affective and reactive emotions in and around social movements, in: *Sociological Forum*, 13, Kluwer Academic Publishers – Plenum Publishers, 397–424, <https://doi.org/10.1023/A:1022175308081>, 1998.
- Johns-Putra, A.: Environmental care ethics: notes toward a new materialist critique, *Symploke*, 125–135, <https://www.muse.jhu.edu/article/532815> (last access: 1 July 2022), 2013.
- Kleres, J., and Wettergren, Å.: Fear, hope, anger, and guilt in climate activism, *Social Move. Stud.*, 16, 507–519, <https://doi.org/10.1080/14742837.2017.1344546>, 2017.
- Lupton, D.: *The emotional self: A sociocultural exploration*, Sage, ISBN 9780761956020, 1998.
- Massumi, B.: Becoming-deleuzian, *Environ. Plan. D*, 14, 395–406, <https://doi.org/10.1068/d140395>, 1996.
- Mauch, C.: Slow Hope: Rethinking Ecologies of Crisis and Fear, *RCC Perspect.*, 1, 1–43, <https://doi.org/10.5282/rcc/8556>, 2019.
- Navaro-Yashin, Y.: Affective spaces, melancholic objects: ruination and the production of anthropological knowledge, *J. Roy. Anthropol. Inst.*, 15, 1–18, <https://doi.org/10.1111/j.1467-9655.2008.01527.x>, 2009.
- Norgaard, K. M.: *Living in denial: Climate change, emotions, and everyday life*, MIT Press, ISBN 9780262515856, 2011.
- Norgaard, K. M. and Reed, R.: Emotional impacts of environmental decline: What can Native cosmologies teach sociology about emotions and environmental justice?, *Theory Soc.*, 46, 463–495, <https://doi.org/10.1007/s11186-017-9302-6>, 2017.
- Norocel, O. C., Hellström, A., and Jørgensen, M. B.: *Nostalgia and hope: Intersections between politics of culture, welfare, and migration in Europe*, Springer Nature, ISBN 9783030416942, 2020.
- Panu, P.: Anxiety and the ecological crisis: An analysis of eco-anxiety and climate anxiety, *Sustainability*, 12, 7836, <https://doi.org/10.3390/su12197836>, 2020.
- Patulny, R., Bellocchi, A., Olson, R. E., Khorana, S., McKenzie, J., and Peterie, M.: *Emotions in late modernity*, Routledge, ISBN 9780367661731, 2019.
- Peterson, A. L.: Toward a materialist environmental ethic, *Environ. Ethics*, 28, 375–393, ISBN 0163-4275, 2006.
- Puig de la Bellacasa, M.: *Matters of Care. Speculative Ethics in More Than Human Worlds*, University of Minnesota Press, Minneapolis, ISBN 978-1-5179-0065-6, 2017.
- Randall, R.: Loss and climate change: The cost of parallel narratives, *Ecopsychology*, 1, 118–129, <https://doi.org/10.1089/eco.2009.0034>, 2009.
- Ray, S. J.: *A field guide to climate anxiety. How to keep your cool on a warming planet*, University of California Press, Oakland, ISBN 978-0520343306, 2020.
- Richardson, M.: Climate Trauma, or the Affects of the Catastrophe to Come, *Environ. Human.*, 10, 1–19, <https://doi.org/10.1215/22011919-4385444>, 2018.
- Richter, M.: Can you feel the difference? Emotions as an analytical lens, *Geogr. Helv.*, 70, 141–148, <https://doi.org/10.5194/gh-70-141-2015>, 2015.
- Ricoeur, P.: *Figuring the sacred: Religion, narrative, and imagination*, Fortress Press, ISBN 978-0800628949, 1995.
- Rose, D. B.: *Reports from a wild country: Ethics for decolonization*, UNSW Press, ISBN 9780868407982, 2004.
- Rose, D. B.: *Anthropocene noir*, *Arena J.*, 41–42, 206–219, <https://search.informit.org/doi/epdf/10.3316/ielapa.860610859642687>, 2013.
- Rosenberg, M.: Self-processes and emotional experiences, in: *The self-society dynamic: Cognition, emotion and action*, edited by: Howard, J. and Callero, P., Cambridge University Press, 123–142, ISBN 978-0521384339, 1991.
- Rosiek, J. L., Snyder, J., and Pratt, S. L.: The new materialisms and Indigenous theories of non-human agency: Making the case for respectful anti-colonial engagement, *Qual. Inquiry*, 26, 331–346, <https://doi.org/10.1177/1077800419830135>, 2020.
- Sabini, J. and Silver, M.: The not altogether social construction of emotions: A critique of Harré and Gillett, *J. Theory Social Behav.*, 28, 223–235, <https://doi.org/10.1111/1468-5914.00073>, 1998.
- Schurr, C. and Strüver, A.: “The Rest”: Geographien des Alltäglichen zwischen Affekt, Emotion und Repräsentation, *Geogr. Helv.*, 71, 87–97, <https://doi.org/10.5194/gh-71-87-2016>, 2016.
- Slater, L.: Anxieties of belonging in settler colonialism: Australia, race and place, in: Vol. 65, Routledge, ISBN 978-0367585594, 2019.
- Slovic, P. E.: *The perception of risk*, Routledge, ISBN 9781853835285, 2000.
- Suldozsky, B.: The information deficit model and climate change communication, *Oxford research encyclopedia of climate science*, <https://doi.org/10.1093/acrefore/9780190228620.013.301>, 2017.
- Tajfel, H.: Social identity and intergroup behaviour, *Social Sci. Info.*, 13, 65–93, <https://doi.org/10.1177/053901847401300204>, 1974.
- Tamboukou, M.: Interrogating the ‘emotional turn’: making connections with Foucault and Deleuze, *Eur. J. Psychother. Counsel.*, 6, 209–223, <https://doi.org/10.1080/0967026042000269656>, 2003.
- Turner, J. H.: Toward a general sociological theory of emotions, *J. Theory Social Behav.*, 29, 133–161, <https://doi.org/10.1111/1468-5914.00095>, 1999.
- Verlie, B.: *Learning to Live with Climate Change: From Anxiety to Transformation*, Routledge, <https://doi.org/10.4324/9780367441265>, 2021.
- Weintrobe, S. (Ed.): *Engaging with climate change: Psychoanalytic and interdisciplinary perspectives*, Routledge, ISBN 9780415667623, 2013.
- Willox, A. C.: Climate change as the work of mourning, *Ethics Environ.*, 17, 137–164, <https://doi.org/10.2979/ethicsenviro.17.2.137>, 2012.

Wright, K.: *Transdisciplinary Journeys in the Anthropocene: More-than-human encounters*, Taylor & Francis, ISBN 9781315692975, 2016.

Yusoff, K.: Aesthetics of loss: biodiversity, banal violence and biotic subjects, *Trans. Inst. Brit. Geogr.*, 37, 578–592, <https://doi.org/10.1111/j.1475-5661.2011.00486.x>, 2012.

Zerubavel, E.: *The elephant in the room: Silence and denial in everyday life*, Oxford University Press, ISBN 978-0195332605, 2006.