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## Climate change through the lens of intersectionality

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Investigations of the interconnectedness of climate change with human societies require profound analysis of relations among humans and between humans and nature, and the integration of insights from various academic fields. An intersectional approach, developed within critical feminist theory, is advantageous. An intersectional analysis of climate change illuminates how different individuals and groups relate differently to climate change, due to their situatedness in power structures based on context-specific and dynamic social categorisations. Intersectionality sketches out a pathway that stays clear of traps of essentialisation, enabling solidarity and agency across and beyond social categories. It can illustrate how power structures and categorisations may be reinforced, but also challenged and renegotiated, in realities of climate change. We engage with intersectionality as a tool for critical thinking, and provide a set of questions that may serve as sensitisers for intersectional analyses on climate change.

**Keywords:** environmental politics; gender; feminist theory; power relations; difference; human–nature relations

### Introduction: integrating social analysis into the climate change debate

As climate change has gradually become a more recognised and apparent threat, the issue has also gained prominence on the political agenda, where responsibilities and strategies to handle the challenges are debated. There is also an increasing interest in climate-related research, evident in the calls from research foundations.

Since the effects of climate change are mediated through social, cultural, and economic structures and processes, the need for social analyses in relation to the issue have become more recognised. As climate change research was originally shaped within natural science, social scientific and humanist research on the issue was scarce. During recent years, climate change has gained increasing

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attention within these academic fields and social aspects of climate change have increasingly been acknowledged (Mearns and Norton 2010, Dempsey et al. 2011). While social and political dimensions are now being addressed to a growing extent (see e.g. Giddens 2009, Newell and Paterson 2010, Held et al. 2011, Urry 2011), issues of equity and intersectionality are largely absent from this literature (cf. Terry 2009).

It is widely noted that the emissions of greenhouse gases triggering global warming to a large extent originate in unsustainable lifestyles among the world's more affluent minorities, mainly in the so-called developed regions (IEA 2011). At the same time, those most exposed and vulnerable to the adverse impacts of climate change are poor and marginalised people living particularly in low-income areas. These groups tend, moreover, to be underrepresented at all levels of decision making regarding climate issues (Hemmati and Röhr 2009, Okereke and Schroeder 2009). The existence of climate-related injustices between different countries and areas is recognised by scholars and political actors, and is a focus in international climate negotiations. Yet, geographical and economic factors are not exhaustive for explaining climate injustice. The situation is complex with great inequality regarding the causes and effects of climate change largely due to unequal power relations, which also apply to human relations with other species (Donovan and Adams 1995, Lykke 2009b, Mallory 2010, Gaard 2011).

Our aim here is to explore how intersectionality can be employed as an analytical framework for understanding complex dimensions of climate change. Our aspiration goes beyond simply acknowledging the relevance of intersectionality for studying climate issues. We suggest ways to understand how individual and group-based differences are implicated in contexts of climate change, in material and institutional as well as normative senses. We side with Winker and Degele (2011) who propose that intersectional analyses need to be multilevelled in order to grasp how relations of power are manifested at different levels, from social structures to symbolic representation and identity construction.

We first briefly outline intersectionality before discussing intersecting power relations in the context of climate change. Then we address a range of theoretical approaches that we suggest are helpful for intersectional analyses of climate change, and thereafter go on to explore how intersectionality is manifested in institutional practices, norms, and symbolic representation of climate issues.

### **Outlining the intersectional framework**

Intersectionality has evolved within feminist theory, and is grounded in a feminist understanding of power and knowledge production. As an analytical tool, it serves to shed light on how structures of power emerge and interact. Davis (2008, p. 68) defines intersectionality as 'the interaction between gender, race and other categories of difference in individual lives, social practices, institutional arrangements, and cultural ideologies and the outcomes of these

interactions in terms of power'. The underlying ideas are not new. Feminist studies and activism has a history of placing gender in relation to other structures of domination long before the concept of intersectionality was introduced. For instance, Lykke mentions the linkages between US feminists and the anti-slavery movement during the nineteenth century (Lykke 2005). Crenshaw (1991), who is usually accredited with first using the concept of intersectionality, did so with a sharp criticism of what she perceived as a white, middle-class woman's perspective dominating the mainstream feminist movement. Anti-racist and post-colonial commentary continues to vitalise feminist studies and, together with queer, masculinity, and disability studies, enriches the understanding of how norms are constructed and power relations interact. Intersectionality arguably functions as what Lykke refers to as a common nodal point or platform for feminist theorising (Lykke 2005; see also Davies 2008). While intersectionality emerged in post-colonial and anti-racist feminism, related ideas have developed within various strands of feminist theorising, including ecofeminism, animal studies, and post-structural feminism. The strands have developed in parallel but largely as divergent paths. Post-colonial and post-structural feminism have advanced a humanist focus on intersections of, for instance, race, class, and gender, while ecofeminist and animal studies have addressed human–nature power relations, questioning human dominance.

Intersections of power can be found in all relations on all levels from institutional practices to individual actions (de los Reyes and Mulinari 2005, Lykke 2009a). Social categorisations, often in combination (e.g. working-class man, indigenous woman), serve as grounds for inclusion and exclusion, and for defining what is considered normal or deviant, and what is attractive to aspire for. Yet, these categories are not necessarily explicitly referred to; rather, they reflect underlying and implicit power patterns often depicted as natural differences (Winker and Degele 2011).

Power relations are expressed in many ways: as injustices in material conditions and normative expressions, within societal structures and institutions of various kinds, and lived, expressed, and reproduced through social practices. In this article, we focus on the power relations that are of specific interest in relation to climate change. We propose that intersectionality can be used to generate critical and constructive insights. It provides a critique of existing power relations and institutional practices relevant for climate issues and, thus, adds significantly to the framing and understanding of climate change. Moreover, intersectionality can generate alternative knowledge crucial in the formulation of more effective and legitimate climate strategies. Intersectional analysis has a normative agenda, as feminist and critical theories generally do. It is related to the feminist epistemological position that regards knowledge as derived from social practice (Harding 2004). This way, intersectionality also highlights new linkages and positions that can facilitate alliances between voices that are usually marginalised in the dominant climate agenda. Although we provide some examples from empirical studies, the contribution of this article is mainly theoretical.

While intersectionality is recognised as valuable for understanding power, its empirical applicability has been debated (Davis 2008, Cho et al. 2013). How may complex power relations be studied in practice? Intersectionality is not by default associated with any specific methodology, but attempts have been made at outlining methods for applying intersectionality empirically (see e.g. McCall 2001, Winker and Degele 2011). Intersectional analysis generally relies on a range of social theories about identity formation and power relations. Which particular theories are drawn from depends on the researcher's perspective and the intersectional relations that are the focus of analysis. We argue that for intersectionality to be useful for studying politics of climate change, it needs to be informed also by theories generated in research fields that look at the relationship between society and nature. We will return to this.

Intersectional methodology can be as straightforward as Matsuda's 'asking the other question' approach.

When I see something that looks racist, I ask, 'Where is the patriarchy in this?'  
 When I see something that looks sexist, I ask, 'Where is the heterosexism in this?'  
 When I see something that looks homophobic, I ask, 'Where are the class interests in this?' (Matsuda 1991, p. 1189)

Or it can be as elaborate as Winker and Degele's (2011) eight-step model of intersectional multilevel analysis. While we think that Matsuda's 'asking the other question' tactic can be a useful starting point to sensitise oneself to the intersections of power in social practices, an approach that provides a more thorough analysis of the intersections of power in terms of how they are institutionalised would be necessary in an academic context. For that purpose, in concluding, we propose a number of questions that we believe may be useful in intersectional analyses of climate change issues.

### **Intersectionality and climate: from identity categories to situated knowledges**

The responsibility, vulnerability, and decision-making power of individuals and groups in relation to climate change can be attributed to social structures based on characteristics such as gender, socio-economic status, ethnicity, nationality, health, sexual orientation, age, and place. Moreover, the impacts of climate change, as well as strategies for mitigation and adaptation, may reinforce or challenge such structures and categorisations.

As social dimensions are increasingly recognised in climate change research, more aspects of social relations are brought into the debate. For instance, there is a growing body of literature on gender and climate change (Denton 2002, Röhr et al. 2008, Hemmati and Röhr 2009, Dankelman 2010, Glazebrook 2011). Although studies and political initiatives that focus on one single variable (such as place, gender, or economic status) are valuable for illuminating power relations in the face of climate change, they often fail to consider how this base

for inequality is intertwined with and even reinforced by other structures of domination. There is also a tendency for simplification. For instance, the gender aspect is often reduced to narrow man–woman binaries, in which women are depicted as vulnerable, marginalised victims (as in Denton 2002, Demetriades and Espen 2010, Oparaocha and Dutta 2011), or given the role of caretakers with some special, almost divine, connection to nature (see Plant 1989, Shiva 1989, Gaard 1993). There is a risk here of reinforcing categorisations, and not taking into account how differences are socially constructed and context-specific, and how they may shift in realities of climate change. Apart from fixing difference and turning it into categories, it also excludes those who do not fit in these static categories and denies social struggle, contestation, and the complexity and fluidity of identities (Alaimo 2009, pp. 30–33). To address these issues, Lykke (2009b) suggests that intersectional analysis should be employed in relation to climate change. However, this has not yet been done to any significant extent.

From an intersectional understanding, how individuals relate to climate change depends on their positions in context-specific power structures based on social categorisations. Tuana provides an illustrative example of how climate change is interconnected with power relations, erasing the imaginary boundaries between ‘social’ and ‘natural’. In her study of hurricane Katrina, which hit New Orleans in 2005, she sheds light on how the hurricane was mediated through materialised and non-materialised power structures. Arguing that ‘[t]he knowledge that is too often missing and is often desperately needed is at the intersection between things and people, between feats of engineering and social structures, between experiences and bodies’, Tuana (2008, p. 189) places the devastation of New Orleans in relation to various intersecting forms of marginality. Marginalised people were less likely to be able to evacuate and to afford to live somewhere else, and had poorer prospects if displaced. Katrina was in some respects a wake-up call to the Western world, making visible how climate change impacts may interact with social structures.

If, as another example, we look at individual emissions of greenhouse gases, income is the main determining category for lifestyle and thereby levels of emissions. Simply put, higher income generally equals higher emissions, and we may hence conclude that high emissions are the result of class-based differences in capitalist economic relations. This may be valid on a global scale, but in a micro perspective, the picture gets blurred. Disaggregated data on individual energy consumption (Räty and Carlsson-Kanyama 2010) or CO<sub>2</sub> emissions show that indeed the relations of production and class matter, but so does, for instance, gender and age. Such data are interesting in many respects, not least by showing that an intersectional analysis is relevant for attaining an image of higher resolution of the factors relevant to addressing power relations and injustices in climate-related issues.

It is thus difficult, and quite pointless, to ascribe certain aspects of dominance or marginalisation to one single factor, as they are all part of a greater pattern.

Yet, the aim of intersectionality is not simply to include as many analytical categories as possible, or list an – obviously not all-encompassing – number of factors that may determine responsibility and vulnerability in relation to climate change, but to widen the perspective and reflect upon what factors may be relevant in a particular setting. As a matter of research strategy, the individual researcher may need to select and prioritise the most interesting or relevant intersections in the particular case, while keeping in mind the bigger picture.

An intersectional analysis goes beyond identifying power patterns to problematising the underlying social categorisations and see how these are reinforced or challenged in light of climate change. Which identities are promoted and serve as grounds for political action? And which identities become invisible in such projects?

We suggest that intersectional analyses should address the question of which social categories are represented in, but also which are absent from, the case(s) under study. However, social categorisations should not be regarded as fixed; they always need to be understood in their specific historical and spatial context and as embedded in power patterns. In a constructivist approach, social categories are viewed as subject to continuous reproduction and alteration and this is central to our understanding of intersectionality. We consider it crucial to always take into account how social categories are constructed and negotiated, and in what ways they could be different. Thus, besides identifying and understanding power structures and their effects, an intersectional analysis can help explain constructions of individual and group subjectivities, and how existing categorisations are mobilised in political projects. In an intersectional analysis of climate change, this can be formulated thus: are there any observable explicit or implicit assumptions about social categories and about the relations between social categories to be found in the empirical material?

Feminist theorists like Hartsock (1985), Harding (1991), and Haraway (1991) have argued that subjects are situated, i.e. products of the power relations and the context that shape their existence. A person's situatedness, or location in the intersections of power as lived in specific circumstances, is also crucial for how he or she perceives and understands power relations. While we can study the impact of the contextual position on a specific individual or group, we can also turn the analysis around and ask how particular positions both enable and delimit individual agency. Situatedness gives rise to knowledge originating in specific circumstances of material and ideational experiences, sometimes coming out of a struggle against dominant power practices. The power differences at work in a specific setting generate particular types of knowledge. We suggest that it is useful to ask what type of knowledge is privileged in dealing with climate change? How is the understanding of what is legitimate knowledge related to social categories and to power relations?

Importantly, to speak about knowledge as situated does not imply that specific social groups possess fixed knowledge, as this would take us right back to the debate about essentialism, as with the criticism of Shiva's (1989)

claim to a feminine principle, or the notion that women have common knowledge as women due to their giving birth (Rose 1983) and mothering (Ruddick 1989). To speak in terms of situated knowledge rather means a questioning of universal claims of knowledge production; not all women give birth, and if they do, it is often only a fraction of their life experience. The conditions of life vary so significantly between, for instance, a female subsistence farmer in a low-income country and a Western female academic that the knowledge emerging from those positions varies considerably, which means that one should be careful to talk about a particular female experience or perspective. Different knowledges are generated by differences in economic resources, division of labour, and place. Situated knowledges (Haraway 1991, Harding 1991) can be highly valuable for addressing climate change issues. As an example, Agarwal (2000) considers the specific and valuable knowledge generated by women who live in and use a forest area for their subsistence. These women, through their daily practices as seed-, fuel-, and fodder collectors and as forest preservers, have acquired detailed insight into the many environmental resources of the forest (see also Agarwal 2010). Their knowledge is derived from their position in society and the place in which they live. A major aim of intersectionality is to avoid the kind of simplification that would declare this position and the knowledge generated by these women as a universal aspect of being female.

As pointed out earlier, when relying on categorisations of people, there is a risk of falling into determinism and neglecting the complexity and constant renegotiation of power relations. Identity politics – political projects promoting the interests of a certain social category – may be motivated under certain circumstances to mobilise protest and resistance, but the fluidity and constructedness of categories should always be kept in mind. Situatedness is a process of continuous change, most apparently across class, income, or profession, across time in the age cycle, and across geographical places but also across gender, ethnicity, and sexuality. So, how can political projects for climate change mitigation and adaptation be designed that achieve emancipation without essentialising categories or promoting certain identities while others remain invisible? Feminist theorists have pointed to the need for creating alliances based not on fixed identities but on common interests and solidarity, and with recognition of different positions (Haraway 1991, Mohanty 2003, Lykke 2005). These ideas may be employed in intersectional analyses that move beyond merely identifying power patterns in a certain context, to questioning prevailing categorisations and looking for grounds for agency and engagement around common interests and objectives.

Recognising that categories are not fixed but dynamic, changeable, and interlinked (Lykke 2010), an intersectional framework must go beyond naming categories to an analysis of how they are related to broader power relations, to politics and institutional practices and to norms and symbolic representations. This would be another step in the analytics of intersectionality. Such analysis relies on theories developed in various disciplines. For research on climate



issues, the intersectional approach must be informed by a range of social theories as well as theories generated in research fields that look at the relationship between society and nature.

### **Analysis across disciplines**

Intersectional analysis calls for a ‘radically cross-disciplinary stance’ (Lykke 2010, p. 22), in order to understand the power webs where social and natural aspects are entangled. Yet, we note problematic tensions between some disciplines and approaches that may contribute to an intersectional analysis of climate change. Social equality and environmental considerations can diverge considerably regarding what types of behavioural, political, and technical changes are assumed to be required for attaining a better society. For instance, as an emancipatory theory, feminism has a normative aim: liberation and freedom from oppression. However, the way that freedom and emancipation are conceptualised is generally not devoted to reconciling human/social and natural dimensions. Furthermore, gender equality is often defined and measured as *women’s equality with men*, to be achieved largely through higher economic status and equal wages. For measuring equality and equity, statistics on income and the degree of involvement in the labour force are frequently used, and men’s wages and labour provides the norm. In class-based analyses, there is a similar tendency to depict higher incomes and consumption as a goal of the emancipatory project of the poor and marginalised. The social theories behind such emancipatory missions, such as Marxist and neo-materialist inspired analysis on class and gender, generally take economic growth and consumption for granted. This is also the case for liberal theories on participation and freedom. Such tendencies are further accentuated by the dominating contemporary political-economic trend where material resources equal freedom and emancipation. Thus, although often in an indirect and implicit way, increased growth and consumption are viewed as means to achieve equality, largely ignoring the ecological implications of increased resource use.<sup>1</sup>

On the other hand, research that seeks solutions to environmental problems often lacks a deeper understanding of social relations and power structures, hence underestimating the need for profound analysis of complex social and political dimensions (Stephens et al. 2010, Jerneck et al. 2011). This tension between different academic fields is reflected in the often-contradictory goals articulated by social movements that strive for equal rights and opportunities (often in material terms) and the downshifting lifestyle strategies that have been suggested by environmental movements. To emphasise the interconnectedness of the different goals (e.g. equality, improved conditions for marginalised groups, and environmental sustainability), and thereby reconcile the academic and political projects promoting them, should be a central mission for intersectional research on climate change.

Ideas about human–nature relations are central to ecofeminist research (Merchant 1980, Plumwood 1993), a scholarship virtually ignored by the larger

feminist community that has regarded it as essentialist. The ‘fear of contamination-by association’ (Gaard 2011, p. 27) has been so strong that only a few feminist scholars have continued to explore the human–nature connection. Gaard argues that since it is a ‘human-centered feminism that has come to dominate feminist thinking in the new millennium’ (Gaard 2011, p. 32), ecofeminist theorists who have made valuable contributions to the understanding of intersections of power – including nature – have not been adequately recognised (cf. Salleh 2009). In *The Death of Nature*, Merchant (1980) makes linkages between sexism, racism, speciesism, colonialism, mechanism, and capitalism in her account of the appropriation of indigenous people, animals, and land. In this tradition, Mellor has addressed these linkages with a specific focus on class and economic structures (Mellor 1997a, 1997b). Other authors who stress the connection between different power structures are Salleh (1997), Sandilands (1999), Cudworth (2005), and Mallory (2010). As Twine points out, within the field of ecofeminism, important but underrated intersectional work has thus been carried out, which includes non-human subjects in the analysis of power (Twine 2010). Particularly relevant here for the study of climate change and other environmental issues is how multiple power structures interact in order to objectify and instrumentalise nature.

Alaimo and Hekman lament the ‘flight from nature’ within the post-structurally oriented feminism that has dominated gender and feminist studies for the past decades (Alaimo and Hekman 2008). They suggest that insights from post-structural feminism could serve to deconstruct dominant ideas about ‘nature’ and ‘culture’ and create new definitions and understandings of these categories. These thoughts are not entirely novel; theorists like Haraway have long worked to integrate ideas of bodies, biology, and nature with critical theory as subjects of feminist analysis. As Haraway puts it, ‘[w]e need the power of modern critical theories of how meanings and bodies get made, not in order to deny meaning and bodies, but in order to live in meanings and bodies that have a chance for a future’ (Haraway 1991, p. 187). We argue, in line with Lykke (2009b, 2010) that intersectionality may be a valuable framework for identifying and analysing power patterns not only among humans but also between humans and what Plumwood calls ‘earth others’. Through the notion of ‘earth others’, nature is perceived not as an object for human manipulation but as a subject that deserves recognition and respect. Plumwood identifies with the glaciated valley which can be understood as an earth other if it is ‘considered as part of a directional, development process of the earth’ (Plumwood 1993, p. 138). Various feminist theorists include animals in critical analysis of power and stress interaction within and across species (Donovan and Adams 1995, Birke et al. 2004, Haraway 2008). We consider this an important contribution to intersectional analysis.

The class perspective has long been embedded in feminist theory, and many feminist scholars have used Marxist and materialist perspectives. Feminist scholars have found Marx’s focus on productive forces problematic, as it

neglects reproductive work when in reality (social) reproduction and production are linked and interdependent, both forming a part of global economic patterns (Peterson 2003). Theorists that look at (often unpaid) reproductive labour such as love, caring, subsistence, and cleaning (Hartsock 1985, Jónasdóttir 1991, Hennessy 1993) view reproduction as essential to upholding both gender power relations and the economic system of production and consumption (cf. Mellor 1997a). The intersectional approach could be well served by an emphasis on social reproduction that, according to Bakker and Silvey (2008), refers to the biological reproduction of the human species, including its ecological framework, the reproduction of the labour power, and the creation as well as maintenance of communities through caring activities. In the field of climate change research, studies are emerging on gender and climate change mainly from a materialist development perspective (Masika 2002; Hemmati and Röhr 2009). This research is relevant and much needed, but it is to date primarily policy oriented, and, as MacGregor (2010) points out, there is need for a broader theoretical agenda within feminist research on climate change. Analyses of material conditions need to communicate with ideas on political emancipation, as well as post-structuralist insights on construction and interaction of social categories, theories on human–nature relations, and research on environmental sustainability.

Intersectionality relies on theories across disciplines. Despite this, theories relating to nature and the environment have to date had less influence on intersectional research than those focusing on social aspects. We argue that in order to study climate change, it is necessary to include insights from various strands of theorising on relations among humans and human relations to nature. We propose that questions such as ‘How is nature represented?’ and ‘How are relations between humans and the environment portrayed?’ be addressed in any intersectional analysis of climate change.

### **Intersectionality, institutions, and norms**

Structures of power permeate all social relations from the individual to the global. Winker and Degele are critical of the tendency that intersectional analysis has mainly been concerned with either identity construction on the micro level or the structural positions of social groups, and call for intersectional analysis on various levels, e.g. with a view to norms and ideology (Winker and Degele 2011). This is a highly relevant approach for developing the analytics of intersectionality to address climate change issues. Intersectional analyses of institutions may reveal how power structures are reflected materially but also normatively as norms are reproduced in practices of political, economic, and social institutions. For climate issues, political and societal institutions that regulate and create demands for transport, energy, and consumption are particularly relevant. Such institutions both build on and take part in the construction and reinforcement of injustices and intersectional categorisations.

One way of observing intersections of power on the institutional level can be by scrutinising representation in decision making. Röhr *et al.* (2008, p. 6) state that ‘the degree to which women participate in decision making on climate policies is small’. When it comes to international climate policy content, gender aspects are marginalised. The United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1992, completely lacks a gender perspective, and gender aspects have emerged on the global climate agenda only recently. During the COP13 in Bali, 2007, the Global Gender and Climate Alliance (GGCA) was formed, with the mission to provide support to the UNFCCC and advocate for gender awareness in climate change policy on all levels.<sup>2</sup> In more recent international documents, gender is considered, however, mainly through the mentioning of women as a particularly vulnerable group. In a study of women’s representation in climate policymaking in the Scandinavian countries, Magnúsdóttir and Kronsell (2013) found that women were well represented in policymaking bodies, but that no attention was paid to gender or intersectional effects in climate policy documents. Well-known gender and class differences in transportation behaviour and consumption patterns were not mentioned in the climate strategies, nor were possible distributional effects of the policies a concern. The tendency was instead to favour technical and economic incentives and measures.

Climate policies and strategies, in turn, likely have impacts on power patterns. For example, increased bioenergy production is part of strategies to limit CO<sub>2</sub> emissions. Climate policies that stimulate bioenergy production or call for investments in wind or solar power challenge existing power relations in the energy sector where decision-making power is currently distributed highly unequally in terms of gender and class (Carlsson-Kanyama *et al.* 2010). Bioenergy policy challenges power relations in energy institutions when privileging other actors – those involved in designing, building, and investing in alternative energy – and as a consequence, it may lead to new power constellations. The complexity rises as such climate policies have direct and indirect effects on land use. Investments in bioenergy affect biodiversity and livelihoods; land used for energy production competes with food production and forestry (DiLucia *et al.* 2012). This change in land use may reconfigure power relations between different social groups but clearly also affects the relationship between human societies and the environment and thus with ‘earth others’. While fossil fuels remain a major source of energy, many measures for development of alternative energy sources are in process. There is urgency to address their implications through an intersectional approach because, as the example suggests, it is highly likely that such policies will have both negative and positive effects on different groups. New power relations may be forming, but it can be expected that changes in energy production will take place in a top-down pattern where existing inequities and inequalities will be exacerbated and individuals and groups with little influence will be further marginalised.

Material, ideational, and normative aspects of power are embedded in institutions and come to the fore in everyday practices (Peters 2005, Olsen 2010). For institutions, it is key to look not only at policies and actions, but also at the normative assumptions that they reflect. Bradley (2009) provides an example of how power structures of class and ethnicity are reproduced normatively in public opinions on eco-friendly behaviour. Material forms of power overlap with normative elements and function in curious ways, so that in Sweden, for example, the tendency is to regard the white, middle-class man driving his new biogas-fuelled car to buy his eco-labelled bananas as the best example of 'the sustainable modern man'. Yet another example comes from Polk's research (2009). She argues that affluent masculinity is the norm for the transport sector, in terms of travel needs, priorities, and preferences for travel solutions. For the affluent North, it seems that a predominantly middle-class, white, male car owner has taken precedence as the norm bearer in the transport sector, and is also in a privileged power position regarding the transport sector and transport policy as a whole. While these norms are increasingly challenged, it may explain the reluctance to curb car use<sup>3</sup> and ownership. Such norms seem to affect climate policymaking as well. As an example, policymakers in Sweden are reluctant to suggest binding policies and strategies to restrict behaviour, e.g. to curb consumption and mobility. Can this be explained by the policymakers' situatedness, which makes them reluctant to challenge high-consumption lifestyle norms that permeate richer Northern societies?

Intersections of power structure political, economic, and social institutions on all levels. It is therefore necessary, in an intersectional analysis, not only to look for the adverse impacts of climate change on 'vulnerable' groups, but also to shed light on and problematise norms and underlying assumptions that are naturalised and regarded as common sense, but build on and reinforce social categorisations and structures of power, not least through institutional practices. We need to turn our gaze towards economic elites and the Western countries, as in the examples above. Using intersectionality in the study of climate issues makes it possible to reach a more complete and accurate understanding of the social and political conditions for climate governance.

It is vital to expose the underlying norms of current economic activities. Hawthorne (2009, p. 98) writes: '[t]o the extent that women belong to dominant white, European-derived, heterosexual, wealthy and mobile groupings, they too are drawn into modes of production, consumption, and theorization that reflect the model of economic man'. Increased equity and equality will not come about simply through the inclusion of marginalised groups in policymaking. As we have seen, the norms that guide solutions to climate change must be scrutinised as well. Connell (1995) suggests that the reproduction of existing power relations hardly requires any specific politics; the norms are maintained and reproduced through everyday behaviour and practice. Power reproduces itself 'by doing things the way they have always been done'. For this reason, norms reflect power and privilege. Studying norms for behaviour and lifestyle can help us

understand intersections of power. It is pertinent to ask how norms are reproduced, reinforced, or challenged.

Holden and Linnerud (2010) studied the energy use and transport behaviour of environmentally minded Norwegians and found that their actions and behaviour did not reflect their environmentalist attitudes. They knew how to act in line with climate objectives, but a sense of powerlessness and a certain desire to indulge prevented them from acting in accordance with their environmental beliefs. This study is interesting because, first, it points out that behaviour is situated within power relations and subject to societal structures and institutions beyond individual behaviour and decisions. Second, the findings about the desire to indulge despite environmentalist attitudes illustrate the importance of addressing the normative element of consumption, energy use, and transport and how it relates to models of a desirable life. This echoes what Soper (2008) proposes as a more general phenomenon; an unsustainable lifestyle, modelled on that of a relatively small group of wealthy people, predominantly white men in Western countries, has become the global norm for what constitutes a 'good life'. The hope for a more climate-friendly future lies to some extent in a redefinition of what the 'good life' is all about. Paraphrasing Soper (2009, p. 99), we ask why wasteful and polluting forms of personal consumption and mobility should 'be exempt from the kinds of criticism that we now expect to be brought against racist or sexist or blatant undemocratic attitudes and modes of behavior'.

We suggest that looking at normative models for behaviour and lifestyle is an important element in intersectional analyses. Key questions to ask are: What are the norms that set the standards for the 'good life' in the context of climate issues? How and by whom are they articulated?

### **Doing intersectional research on climate change**

Research on the interconnectedness between human societies and climate change is diverse, encompassing a multitude of disciplines and methods. Such studies could cover a wide range of levels and topics, ranging from discourses in international climate agreements, local effects of adaptation measures, to the representations of climate change in contemporary poetry. Given this multitude, it is not feasible to provide a common intersectional methodology; the methods always need to be adapted to the specific context or case under study. Nevertheless, inspired by Matsuda (1991), we have developed a number of questions that could be applied throughout the research process. These address all three levels suggested by Winker and Degele: social structures, symbolic representation, and identity construction. The questions, introduced through previous discussions, are:

- Which social categories, if any, are represented in the empirical material? Which social categories are absent? Are there any observable explicit or implicit assumptions about social categories and about relations between

social categories? What identities are promoted and considered to serve as grounds for political action? Are any other aspects of identity neglected or deemed insignificant?

- How are relations between humans and between humans and the environment portrayed? How is nature represented? What type of environmental knowledge is recognised and privileged?
- Are any norms for behaviour discernible in the material? Are there norms about the relation to other humans, resources, and nature? What are the norms that set the standards for a 'good life'? How are these norms reproduced, reinforced, or challenged? How are they reflected in institutional practices?

These questions can be used as sensitisers to help maintain awareness of intersecting structures, and in order to identify the intersections that are relevant in a particular case. The researcher may choose to elaborate on one or a set of questions in a given research project. Still, it is crucial to return frequently to 'asking the other question', the most significant contribution of intersectionality for empirical research.

## Notes

1. A central ecofeminist critique addresses the neglect of ecological implications within liberal emancipatory projects – see below.
2. <http://www.wedo.org/wp-content/uploads/global-gender-and-climate-alliance.pdf> [Accessed 29 March 2013].
3. In the EU White Paper *Transport 2050*, it is expressed as 'Curbing mobility is not an option' (EU 2011: point 18).

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