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**The Socio-Natural Question: How Migration
Reproduces Inequalities in an Age of Climate
Change**

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The Socio-Natural Question: How Migration Reproduces Inequalities in an Age of Climate Change

Abstract

Cross-border migration is one of several ways by which people have adapted to both the slow-onset and fast-onset environmental changes of the Anthropocene, the epoch in which human practices have resulted in significant global consequences for the world's ecosystems. In order to trace inequalities and their politicization we need systematic studies of how migration emerges from complex interplays of social (political, economic, cultural) *and* environmental processes. So far, two generations of scholarship have characterized the climate change – migration debate. The first generation theorized migration as a mechanistic response to climate change. While the second generation conceptualized climate-related migration as adaptation in relationship and human security by placing agency at the core, the focus on the “resilient migrant” has occluded both the effects of climate change on different categories of people with respect to social inequalities and has not fully dealt with the analogy between the ‘exploitation of humans by humans’ and the ‘exploitation of nature by capitalism’. This analysis traces the evolution of concepts in the debates on climate-related migration and presents selected social mechanisms of (re)production of social inequalities in the climate change-migration nexus.

Keywords

climate change, environmental destruction, social inequalities, migration

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Climate Change and Migration in the Anthropocene

The debate on climate change and migration has been fueled and sustained by repeated dire scenarios with respect to the numbers of persons who will allegedly be displaced in the decades to come. The figures range from 200 to 700 million “climate refugees” by 2050 (e.g. Myers & Kent 1995, Christian Aid 2007). Climate change “is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods” (UNFCCC 1992: 3). Since the late 1980s, the Assessment Reports of the International Panel on Climate Change (IPCC) have been part of the scientific construct of the consensus, and this consensus has remained relatively stable over time about one key factor: the sensitivity of the climate to atmospheric CO₂ doubling, expressed as a projected increase of global mean temperature. Indeed, there is overwhelming evidence suggesting a positive correlation between the size of migration flows between 172 countries on the one hand, and measures of over-fishing, desertification, water scarcity, soil salinization, deforestation, air pollution, soil erosion and concomitant pollution (e.g. Faist & Schade 2013). Here, the negative effects of climate change are seen as a special instance of environmental degradation. The latter also encompasses processes which are not causally and directly related to global warming, such as the impacts of development projects (e.g. dam-building and development projects).

The simplistic thought underlying the daunting scenarios about dramatically increasing numbers of climate refugees is that GHG emissions in particular and environmental degradation more generally implies that people are forced to directly respond to the consequences of climate change, such as rising sea levels, by – for example – migrating to areas in higher altitudes. The idea seems to be that nature on the one hand and society/culture on the other hand can be neatly separated. However, this is a false dichotomy. It is more useful to construct it as a nexus. The nature-society/culture division and the assumed mechanistic, uni-linear response are untenable for at least two reasons. First, humans have altered the very climate we live in; hence the chemist Paul Crutzen in the 1990s popularized the term “Anthropocene” which implies that humans have become a geological force. Second, the hazards associated with climate change are experienced differently by various groups of people. In short, there are differential vulnerabilities. This becomes clear if we look at the social inequalities involved in the mobility of environmental degradation and people affected. It can be seen as a sort of cross-over relationship. For example, although the GHG emissions cannot be stopped by national border patrols, the consequences for social inequalities are highly uneven. The poorer sections of the world’s population, that is, those who have least contributed to global

warming, are hit the worst (HDR 2007). However, as we know from decades of research into international migration, it is not the poorest strata of societal units which are most likely to engage in cross-border migration (Ahmed 1997). This means that the relationship between migration induced by climate change and the associated social inequalities needs to be complemented by a perspective on mutually constitutive socio-natural drivers. This perspective also implies that climate change here not only refers to the scientifically determined anticipation of threats but has to integrate both social and natural aspects. The main empirical question therefore is: How do social inequalities in the context of climate change impact on migration and how does migration (re)produce such inequalities? Which mechanisms are operative?

The Anthropocene is characterized not just by a social question – as the conflict between capital and labor in the 19th century – but by a socio-natural question. In other words, we are confronted not only with the dynamics and consequences of the exploitation of humans by humans. Instead, this basic mechanism is complemented and intersects with the exploitation of nature by humans – and the consequences this kind of exploitation has for social relations in a broad sense, and – in order to capture these changes – the implications for research migration and inequalities in the context of climate change. The effects of climate change have produced very different processes: there is both migration as a result of slow-onset degradation and fast-onset change. An example of slow-onset change can be observed in many of the Pacific Island States over the past decade (e.g. Shen & Gemenne 2011). Yet we have also observed massive fast-onset disasters. Examples include the flooding of many river delta cities, e.g. in Bangla Desh (Etzold et al. 2016).

Slow-onset change may have much more drastic effects in the future. This is why it is important to consider the degradation paradox.¹ This paradox states that the dangerous effects of climate change are not visible immediately in our daily life. Therefore, many people will do nothing about it until the consequences become drastic. By that time it might be too late, either to mitigate climate change or to adapt creatively. We could compare this situation to that faced by an individual smoker. Smokers usually are aware that their habit is dangerous, but most of the damage is done before they begin to experience the negative health effects, so they don't give up until it's too late. This degradation paradox has important implications for migration research. Nonetheless, as already mentioned, there are also already many instances of fast-onset climate changes, such as flooding in Bangladesh (Black, Kniveton & Schmidt-Verkerk 2013).

¹ It is also known as the “Giddens’s Paradox“ (Giddens 2009), as Anthony Giddens himself applied this old insight to climate change.

Whether looking at slow-onset or fast-onset climate forcing, migration studies are at their best when looking at the internal dynamics of movement (across borders) and apply concepts capturing endogenous (self-driven) dynamics, such as cumulative causation and relative deprivation (see e.g. Massey 1990). This certainly should continue. However, it has to consider much more than before how previously exogenous factors such as climate change become endogenized in mobility processes, that is, how people and organizations seek to deal with the transformation of their socio-natural environments.

Such a perspective requires departure from a long-cherished assumption about human exceptionalism, especially in the discipline of sociology. During much of the 20th century, sociologists have upheld the idea that humans entertain a dualistic relationship with the environment, being subject to physical and biological limits and yet being unique in the capacity for culture and symbolic communication. This is the background against which sociological assumptions about social facts need to be placed. Not surprisingly, it is one of the central tenets of this discipline that the cause of a social fact must always be found in other social, as opposed to psychological, facts. Pioneered by one of sociology's founding figures, this "objective reality of social facts" (Durkheim 1964) trumps all efforts to bring in natural factors. This perspective prevents discussion of facts other than purely social ones, and thus leads to rejections or at least underestimation of biological and physical facts, and objections to research into the confluence of biological, physical and social factors. One of the noteworthy consequences of this state of affairs is that, even nowadays, there is a widespread belief in fields such as sociology that biophysical environment could be ignored. This tenet is also connected to beliefs about the exceptional nature of human species. Yet, as climate change is teaching us, humans are definitely not exempt from ecological constraints although or perhaps because we manipulate natural principles. Clearly, it is important to reject such "exemptionalism" (Dunlap & Catton 1979) also in migration research and bring in what one could call socio-natural facts.

Two steps need to be taken to overcome the exemptionalism perspective. The first is to look at the mutual interaction of nature on the one hand and society/culture on the other hand. We find such approaches, at least implicitly, in the writings of Karl Marx (*Capital*, Vol. 3) who dealt with the mutual transformation of nature and society in the process of capitalism, and hinted at the ruthless exploitation of nature by men, resulting in a "metabolic rift" (Foster 2000). Yet in this conceptualization still speaks of nature and society and two distinct entities. This is why a second step is in order. If it is plausible to assume that nature and society are mutually constitutive, we should think of it at least as a nexus. For example, humans are part of their socio-natural environment by breathing in

air (and germs) which in turn enables life and change, and determines their positions in time and space.

The following and second part of the analysis is devoted to tracing the two previous generations of capturing the climate change – migration debate. The main argument is that we need a third generation which devotes more attention to how responses to climate change, including migration (as adaptation), are implicated in reproducing existing social stratification. The third part will then detail the nexus between migration and inequalities in the context of climate change.

Three Generations of the Climate Change – Migration Debate

The nature-society/culture nexus in the form of the relationship between climate change and migration has traversed two full generations of scholarship up until now – and a third generation standing on the shoulders of the second is needed. What we know for sure is that vulnerability and also exposition to the consequences of climate change is highest in regions and communities which are economically defined as extractive economies (raw materials), tightly connected with a weak institutionalization of civil society, especially high income and wealth inequalities, and a relatively low degree of freedom of press (Roberts & Parks 2007).

The first generation of scholarship on the climate change - migration nexus in the 1980s until the early 2000s focused on the idea of the environmental refugee who is vulnerable to slow-onset and fast-onset climate forcing. The most prominent definition is that of the environmental refugee, referring to “those people who have been forced to leave their traditional habitat, temporarily or permanently, because of a marked environmental disruption (natural and/or triggered by people) that jeopardized their existence and/or seriously affect the quality of their life.” (El-Hinnawi 1985) Such a definition did fit well into an alarmist and quite maximalist perspective in which deleterious consequences of climate change, especially as an effect of climate change, threatens livelihoods, state security and leads to armed conflicts – which, in turn, produces more migration. Thus the most popular scenarios predicted that environmental changes and disasters force millions of people to flee their homes (e.g. Myers & Kent 1995). As this line of argument went, environmental pressure leads to land competition, encroachment on ecologically fragile areas and impoverishment. These events in turn cause political and ethnic conflicts which precipitate violence and war, often the immediate cause of flight. As a result, millions of refugees have to leave their country and are supposed to claim asylum in developed countries, or enter as undocumented migrants. And those persons who escape to nearby countries may be perceived to challenge social cohesion and national identity by the established population. Most of these considerations are more or less “common sense” –

as sea water levels rise, or forests disappear, it seems obvious that people will have to move. Yet, there is abundant evidence that this simple causal chain from degradation to conflict and migration may be too simple. One obvious criticism was voiced right away: deteriorating climatic conditions are rarely the sole cause of out-migration and emigration. Usually, migration is a practice favored by multiple causes – in this case at the intersection of natural conditions and often the perception that economic and/or political conditions are more conducive to life chances abroad. In other words, there are always multiple causes of forced migration. Even in a limiting case such as Bangladesh, which often serves as the quintessential example of environmental displacement, we find complex causes for impoverishment and flight, including land ownership patterns, ethnic divisions, and – very important – economic development projects. Migration researchers were also quick to point out that exogenous factors, unless of an overwhelming nature such as floods or volcano eruptions, rarely lead to the massive and direct mechanical response of exit. Even on many Pacific island states, where the threat of inundation looms large in the perception of the inhabitants, causes other than climate change, for example, economic opportunities abroad, are an equally strong predictor for migration (Fornalé, Guélat & Piguet 2016).

Nonetheless, the first generation of discussion fulfilled a very important function for research in pointing to a glaring gap in migration theorizing. Migration theories, which have been mostly developed on the background of relatively voluntary migration not explicitly considering the aspect of threat and high risk, portray migration decisions mainly as proactive strategy aimed at improving life chances. This view is common to otherwise very different theories, including not only neoclassical individual choice models but also collective choice approaches such as the New Economics of Labor Migration and sociological-anthropological livelihood approaches (e.g. Hammar et al. 1997).² Moreover, most climate-induced migration has been part of ongoing mobility processes, a sort of collective path dependency in established migration systems viz. “migration corridors”. In a nutshell, it was mostly environmental research which dramatized the nexus in suggesting very high number of potential migrants, whereas migration researchers pointed to the ubiquity of mobility and the observation that slow-onset climate-induced migration did fit into established migration patterns. After all, established international migration streams did not encompass much more than 3% of the world’s population. However, the very fact that migration theories are successful in accounting for slow-onset change and migration

² Migration theories tend to differ much more when it comes to the expected consequences of cross-border migration to individual and collective welfare (see chapter 3). For example, world systems approaches are much more pessimistic than neo-classical theories with respect to the positive impact of migration on economic development. The latter speak of migration contributing to the “development of underdevelopment” in emigration regions while the latter – under conditions of relatively open borders – would predict a boost for collective economic welfare for all parties concerned.

but not for the responses to fast-onset change point to a considerable gap in migration theories.

The discussion within the first generation of scholarship was premised on the policy idea of mitigating climate change. As it became more and more obvious in the new millennium that global warming was to proceed even if drastic measures of mitigation were to be taken, the discourse on the nexus also gradually began to change. In this second generation it was adaptation and the protection of human security that came to occupy the agenda in research and policy. As to adaptation, it has meant that people could and should adjust to changing climatic and environmental situations in order to moderate the harmful effects of climate change; in the words of the International Panel on Climate Change (IPCC), an expert group documenting and accounting for climate change, it is “the process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate harm or exploit beneficial opportunities” (IPCC 2014: 5). Proposals for adaptation have come in two versions, either in-situ adaptation, such as flood control and crop adjustment, or internal and international migration, including resettlement. They all have in common that it is not just mechanical response and adjustment to climate change but active intervention by humans that is at the core of adaptation (cf. Simonet 2010). To legitimate this changing perspective, migration theories began to play a greater role not only in climate change research but also in policy making; albeit still at a low level compared to the impact of environmental research and activism which has kept on scandalizing the consequences of climate change. Nonetheless, the reports of the IPCC show that migration has become more significant when discussing the responses available. In particular, approaches such as NELM and the livelihood approach began to play a prominent role in this emerging and consolidating adaptation narrative. These approaches asserted that (potential) migrants respond to risk by exerting agency; thus playing on a cherished notion in migration research that spatial mobility is often proactive, not just reactive. For example, NELM portrays migration decision as a response to the inability to get formal insurance, or as a way to diversify income via migration as an informal loan arrangement (Poirine 1997). There is also the livelihood approach, which observes inequalities in resource availability and spread, and migration, again, as a way to diversify income sources via remittances (Ellis 2000).

Another change also characterized this second generation of scholarship. Security was not seen solely as state security but as human security, a counterweight to the former. Human security has come to be defined as “a condition that exists when the vital core of human lives is protected, and when people have the freedom and capacity to live with dignity.” (IPCC 2014: 759) Human security usually went along with another fashionable term, resilience. It was the resilient migrant who emerged as the ideal-typical figure fitting the person who adapts. In the terminology used by the Foresight Report (2011), the resilient migrant who is mobile and preferably entrepreneurial in forging her or his fate under

adverse conditions, is engaged in “transformative adaptation”; the opposite begin mere “incremental adaptation”. In terms of bio-politics, one may interpret the figure of the resilient migrant (not the concept of adaptation!) as the neoliberal incarnation of the contemporary migrant (Bettini 2014).

Overall, the use of resilience as a strategy to accommodate to climate change is tightly connected to the main ideas of the migration-development nexus. Relying on their own resources, migrants produce benefits which are allegedly both beneficial to those left behind, especially family members, and even collectively. This is very similar to the idea of “migrants as development agents” in the recent migration-development debate, instigated by the World Bank in the early 2000s. The main mechanisms to achieve the “triple win” for migrants and their significant others (including communities of origin), emigration countries and immigration states are financial and social remittances (Faist 2016). This means that, ultimately, the migrants themselves are responsible for managing adaptation to climate change, letting governments and international organizations off the hook.

As this discussion indicates, we are in need of a third generation of scholarship, building directly upon the second one. Overall, while the idea of adaptation as proactive agency should be kept, the concept of resilience is deeply ideological and to be discarded. A step ahead or even a new generation needs to take into account more than before the observation that adaptation to adverse climatic changes (re)produces social structural features and those of social stratification, namely social inequalities. One strong and consolidated finding is that those lacking power, status, resources and are thus relatively disadvantaged with respect to these criteria, are most vulnerable to the deleterious effects of climate change (McLeman, Schade & Faist 2016). Considering the broader context in which climate-related migration is occurring, it is quite relevant that the main producers of climate changes with negative effects on the life chances of people are geographically and socially separate from those who are most affected. And those most affected, they respond with various answers. Perceptions of these responses are lopsided, however. Most public attention in OECD countries and in research focuses on those groups which are able to engage in international migration. Yet cross-border migration requires more resources than internal migration or some sort of in-situ adjustment. Very little attention is given to those people who are displaced within states and those who are despondent and destitute, and are unable to move even though they very much may want to engage in spatial mobility away from dangerous zones. Clearly, notions such as vulnerability raise the question about the differential capacities to respond to climate changes. When evaluating social inequalities, it is above all equality norms, such as fulfilling basic human rights, which are used as a yardstick to gauge categorical inequalities (heterogeneities). In sum, this emerging third generation raises the question how socio-natural facts are implicated in either reproducing existing social inequalities and stratification, and perhaps even

contributing to changing social institutions and cultural perceptions of the socio-natural question.

Categorical Inequalities

Social inequalities consist of the uneven distribution of costs and benefits with respect to goods among social units such as individuals, groups, organizations, regions and states. The goods or resources involved may be economic (e.g. income, ownership of land, labor power), political (e.g. household authority, workplace authority, legal authority), cultural (e.g. lifestyle), social (e.g. access to social networks, i.e. social capital), honorific (e.g. prestige, reputation), civil (e.g. rights, citizenship), and human (e.g. skills, formal education, i.e. cultural capital; on the notion of capital, see Bourdieu 1986). The unequal distribution of such resources implies different chances of access to and movement between social positions, demarcated, for example, by classes. They make a difference for opportunities and life chances—and refer to the disparities of opportunity, access and outcome to wield resources. Inequalities are not necessarily directly observable, especially if we consider deep patterns of inequalities, such as class structure (cf. Van Hear 2014). At the other end of the spectrum, others are readily observable and measurable, such as social mobility of individuals and groups.

Although categories, such as gender, are not devoid of inequality, it is helpful to distinguish analytically between the two concepts. As such, categories viz. heterogeneities signal difference. And heterogeneity is not the same as inequality. Categories, such as gender, ethnicity, age, legal status, religion and the degree to which persons or groups entertain ties across borders (transnationality) are relevant for inequalities because of the ascription of groups to categories: Categorical distinctions and cultural classifications of heterogeneities attributed to individuals and groups have tangible implications for the distribution of material and symbolic resources. By implication, categorizations along heterogeneities result in inequalities only if such transactions reproduce a rather stable and enduring boundary between categories. Hence, the term “categorical inequality” (Massey 2007) is appropriate to describe the processes of categorization along heterogeneities. Here, the causality of the inequality – migration nexus in the context of climate change is viewed from both directions, from inequalities to migration and vice versa.

As to inequalities resulting in migration, it is a well-established finding that class as a heterogeneity plays a prominent role, since the poorest segments of the population are especially vulnerable to environmental risks (for the following empirical claims, see the case studies in McLeman, Schade & Faist 2016). If at all, the poorer strata of groups usually have the option to move inside their countries, although crossing internationally recognized borders may be the only option in the long run, especially when island states

become submerged. In such a constellation, resettlement may be the only option to maintain a decent living; the inhabitants of the island Kiribati have all been resettled (Schade 2013). However, costly resettlement programmes may backfire. For example, Inuits in Alaska were (re)settled in areas which are now slowly disappearing in swamps (Bronen 2013). In general, the situation is especially precarious for trapped populations who are neither able to engage in in-situ adaptation nor migration as adaptation. Also, the intersection of class and gender, for example, constitutes an obvious link: Women are especially vulnerable, also among the landless and poor, as they are eight times more likely to be killed in natural disaster events compared with men (Adeniji 2011; IPCC 2014: chapter 11).

Those persons who are not destitute engage in migration mainly as a mechanism of opportunity hoarding (Tilly 2005) which means the availability of a modicum of financial resources and/or social ties which reduce the costs and risks of long-distance, international migration. Beyond well-known heterogeneities, such as class, gender, age, religion, location/citizenship or ethnicity, it is spatial heterogeneities which make a difference for coping with climate change induced risks. Populations in urban areas tend to have more capacities to cope with climate change, those in the global North more than in the global South, etc. Yet people often migrate in the wrong direction, toward areas endangered by flooding, not away from them. This is the case for migration to urban areas in low-lying river deltas, such as Dhaka or Shanghai (Lassailly-Jacob & Peyraut 2016).

As to the opposite direction in the nexus, from migration to inequalities, it is remittances which stand at the center of attention by researchers. It is by a now a basic insight of research that financial (and social) remittances from international migration often reproduce the class structures in the emigration locales. Moreover, there is a wealth of evidence, for example from the Pacific Island States and Mexico that international remittances have ambiguous effects in that they contribute to poverty reduction *and* exacerbate inequalities (see also Aksakal & Schmidt 2015). In general, remittances are a mixed blessing because of the ubiquitous risks of moral hazard on the scale of both states and households. State governments use financial remittances to correct currency deficits and may even seek to avoid structural changes in the provision of social protection, such as health and education. After all, much of the remittances are used for expenses in these two areas. And on the household level, dependent family members may rely on income from abroad instead of reconstituting the local sources of income (Horst et al. 2014).

Legal status is another heterogeneity which is tightly connected to inequalities in migration. It is crucial because it concerns the politico-legal constitution of the category climate refugees. One of the fundamental scientific obstacles – and it is here that the socio-natural question becomes important again – is the difficulty of legally codifying migrants in the context of climate change as refugees which would provide for their protection

(Kälin 2015). It is close to impossible to clearly assign singular natural hazards to the consequences of climate change. Yet although no clear legal case can be made with respect to the causality between climate changes and migration, there is abundant plausibility and thus social space for “norm entrepreneurs” (Sunstein 1996). This category of entrepreneur has been active trying to establish particular human rights for refugees in situations of climate-induced migration. One proposal seeks to make planned relocation the corner stone of their proposal for a climate refugee regime (Bierman & Boas 2008). The authors defined the term ‘climate refugee’ embracing only people who flee the direct effects of climate change (within or across borders), that is, sea-level rise, extreme weather events, droughts and water scarcity. The use of the term ‘refugee’ in this context became quite disputed, however, because of its legal meaning under the Geneva Refugee Convention. Indeed, the United Nations High Commissioner on Refugees (UNHCR) – the United Nations (UN) refugee organisation – did reject the use of the term “climate refugee” or “environmental refugee” and any attempts to broaden the mandate of the Convention. For example, it was argued that “giving refugee status to environmental refugees would only distort the definition and strain the desperately scarce resource of the international refugee regime.” (Suhrke 1994: 492) This opposition might have been one of the reasons why the term “environmental migration” and “climate migration” have since dominated in the debate and in research. Obviously, there are additional arguments in the debate over the desirability of legal codes for climate-induced migrants.

Nullius in verba: The Socio-Natural Question Expanded

As this analysis suggests, the first generation of scholarship on climate change and migration did, by using a mechanistic “nature” approach, seriously underestimate the adaptive capacities of humans in the face of seminal ecological changes. The second generation of scholarship focused on a particular kind of agency in light of “society”. The main protagonist has been the resilient migrant who engages in successful adaptation to climate change. This newer generation has propagated a mostly neoliberal version of mobility – a mobile and docile migrant who acts in an anticipatory and preventative manner. Moreover, it has given insufficient attention to the fact that the nexus between climate change and singular events cannot be proven, at least not by natural science methods. Taking a combined “nature/society” lens (cf. Mooney, Duraiappah & Larigauderie 2011), we see that migration leaves intact deeper structures of social inequalities and reinforces exclusionary mechanisms (cf. Faist 2016). What is nonetheless interesting is that this hurdle has not prevented norm entrepreneurs from scandalizing the dire fate of many migrants who engage in or are even forced into climate-induced mobility.

Research needs to be broadened to not only link climate change and migration to inequalities but to also bring in civil violence. In most cases, climate change and violence

are treated as two independent threats, each of which potentially contribute to the flow of migrants around the world. Recent work, however, suggest that climate change and civil violence are, in fact, causally interrelated. Indeed, we already know that outbursts of civil violence are closely tied to variations in the El Niño Southern Oscillation (ENSO) (Hsiang, Meng, & Crane 2011). The probability of a civil conflict erupting doubles during El Niño versus La Niña years, and the ENSO may have been behind 21 per cent of all civil conflicts between 1950 and 2005. This is quite a remarkable correlation and variance. Likewise, there is evidence suggesting a link between global warming and a greater risk of civil violence in much of sub-Saharan Africa (Burke et al. 2009). Given the potential of climate change to influence the frequency and severity of weather events such as El Niño, global warming not only has the potential to generate migration directly through displacement but also indirectly by triggering civil conflicts in affected areas throughout the world. Again, civil wars trigger even more migration and refugee flows.

With respect to changing perceptions of climate change, migration needs to be placed in the context of general politico-economic transformations, the most important of which is the mode of organizing economic life. Some analysts speak of a “metabolic rift” (Foster 1999). This term refers to ecological crisis tendencies under capitalism. Already Karl Marx theorized a rupture in the metabolic interaction between nature and society/culture which derives from the mode of capitalist production and the growing rupture between urban and rural regions. He spoke of an “irreparable rift in the interdependent process of social metabolism” (Marx 1981: 949). Marx held this rift to be irreconcilable with any kind of sustainability (cf. Rosa et al. 2015) and the exploitation of humans paralleling that of the soil. In a similar vein, another founding figure of sociology, Max Weber, declared that industrial society would work “bis der letzte Zentner fossilen Brennstoffs verglüht ist” (“until the last ton of fossil fuel has burnt to ashes”). However, in the meantime we have learned that, while capitalism has remained a pervasive force, it is “local at all points” (Latour 1993: 117). It is exactly on the local scale where conflicts over mitigation and adaptation to climate change have occurred over the past years, before and after the Paris Climate summit, far away from spectacular but ultimately inconsequential world gatherings. It has not been (global) climate governance but (local) climate conflicts which have been propelling some progress in addressing rampant carbonization. What needs to be determined in future research is the combination of responses to climate change which encompasses both exit and voice.

References

- Adeniji, G. 2011. Adapting to climate change in Africa. *jotoafrica*. No. 6 (March): 1-8
- Ahmed, I. 1997. Exit, Voice and Citizenship, in T. Hammar, G. Brochmann, K. Tamas & T. Faist (eds.), *International Migration, Immobility and Development. Multidisciplinary Perspectives*. Oxford: Berg, 159-186
- Aksakal, M. & Schmidt, K. 2015. Migration and social protection as adaptation in response to climate-related stressors: The case of Zacatecas in Mexico, in F. Hillmann, M. Pahl, B. Rafflenbeul & H. Sterly (eds.), *Environmental Change, Adaptation and Migration: Bringing in the Region*. London: Palgrave Macmillan
- Bettini, Giovanni. 2014. Climate migration as an adaption strategy: de-securitizing climate-induced migration or making the unruly governable? *Critical Studies on Security* (2)2: 180–195
- Bierman, F. & Boas, I. 2008. Protecting Climate Refugees: The Case for a Global Protocol. *Environment: Science and Policy for Sustainable Development* (November-December 2008): 9-16. Last accessed on 22 January 2016:
<http://www.environmentmagazine.org/Archives/Back%20Issues/November-December%202008/Biermann-Boas-full.html>
- Black, R., Kniveton, D. & Schmidt-Verkerk, K. 2013. Migration and Climate Change: Toward an Integrated Assessment of Sensitivity, in T. Faist & J. Schade (eds.), *Disentangling Migration and Climate Change*. Dordrecht: Springer, 29-54
- Bourdieu, P. 1986. The Forms of Capital. In *Handbook of Theory of Research for the Sociology of Education*, ed. JF Richardson, pp. 46-58. Westport CT: Greenwood Press
- Bronen, R. 2013. Climate-Induced Displacement of Alaska Native Communities, Alaskan Immigration Justice Project. Brookings-LSE Project on Internal Displacement
- Burke, M.B., Miguel, Shanker, E.S., Dykema, J.A., & Lobell, D.B. 2009. Warming Increases the Risk of Civil War in Africa. *Proceedings of the National Academy of Sciences* 106(49):20670-20674
- Castles, S. 2007. Twenty-First-Century Migration as a Challenge to Sociology. *Journal of Ethnic and Migration Studies*, 33(3): 351–371
- Dunlap, R.E. & Catton, W.R. 1979. Environmental Sociology. *Annual Review of Sociology* Vol. 5: 243-273
- Durkheim, É. 1964 [1895]. *The Rules of Sociological Method*. New York: Free Press.

- El-Hinnawi, E. (1985). *Environmental refugees*. Nairobi: United Nations Environmental Programme (UNEP)
- Ellis, F. 2000. *Rural Livelihood Diversity in Developing Countries: Analysis, Policy, Methods*. Oxford: Oxford University Press
- Etzold B. Ahsan Uddin Ahmed, Selim Reza Hassan, Sharmind Neelormi and Tamer Afifi. 2016. Rainfall Variability, Hunger, and Social Inequality, and Their Relative Influences on Migration: Evidence from Bangladesh. In: McLeman, R., Schade, J. & Faist, T. (eds.) *Environmental Degradation and Social Inequalities*. Dordrecht: Springer, 27-42
- Faist T. 2016. Cross-Border Migration and Social Inequalities, *Annual Review of Sociology*, Vol. 42 (forthcoming)
- Faist, T. & Schade, J. 2013. The Climate-Migration Nexus. A Reorientation, in T. Faist & J. Schade (Eds.): *Disentangling Migration and Climate Change: Toward an Analysis of Methodologies, Political Discourses and Human Rights*, Springer: Dordrecht, 3-25
- Foresight. 2011. *Foresight: Migration and Global Environmental Challenge*. Final Project Report. London: The Government Office for Science.
- Fornalé, E., Guélat, J. & Piguet, E. 2016. Framing Labour Mobility Options in Small Island States Affected by Environmental Changes, in: McLeman, R., Schade, J. & Faist, T. (eds.) *Environmental Degradation and Social Inequalities*. Dordrecht: Springer, 167-188
- Foster, J.B. 1999. Marx's Theory of Metabolic Rift: Classical Foundations for Environmental Sociology, *American Journal of Sociology* 105(2): 366-405
- Foster, J.B. 2000. *Marx's Ecology: Materialism and Nature*. New York: Monthly Review Press
- Giddens, A. 2009. *The Politics of Climate Change*. Cambridge: Polity
- Hammar, T., Brochman, G., Tamas, K. & Faist, T. (eds.) 1997. *Migration, Immobility and Development*. Oxford: Berg
- Horst C, Erdal MB, Carling J, Afeef KF. 2014. Private money, public scrutiny? Contrasting perspectives on remittances. *Global Networks* 14(4):514–32
- Hsiang, S.M., Meng, K.C. & Crane, M.A. 2011. Civil Conflicts Are Associated with the Global Climate. *Nature* 476: 438-441
- Human Development Report. 2007. *Fighting Climate Change: Human Solidarity in a divided world*. New York: United Nations Development Program (UNDP)

- IPCC. 2014. Climate Change 2014: Synthesis Report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K. Pachauri and L.A. Meyer (eds.)]. Geneva: IPCC
- Kälin, W. (2015) Klimaflüchtlinge, Katastrophenvertriebene oder schutzlose Migranten? – Flucht in Zeiten des Klimawandels, *VHS-Bulletin* Nr. 4, November 2015: 10-18
- Lassailly-Jacob, V. & Peyraut, M. 2016. Social and Spatial Inequality Linked to Flood-Induced Displacements in Burkina Faso in 2009 and 2010, in: McLeman, R., Schade, J. & Faist, T. (eds.) *Environmental Degradation and Social Inequalities*. Dordrecht: Springer, 57-72
- Latour, B. 1993. *We Have Never Been Modern*. Cambridge, MA: Harvard University Press
- Marx, K. 1981. *Capital*, Vol. 3. London: Penguin
- Massey D.S. 1990. Social structure, household strategies, and the cumulative causation of migration. *Population Index* 56(1): 3-26
- Massey D.S. 2007. *Categorically Unequal: The American Stratification System*. New York: Russell Sage Foundation
- McLeman, R., Schade, J. & Faist, T. 2016. *Environmental Degradation and Social Inequalities*. Dordrecht: Springer
- Mooney, H., Duraiappah, A. & Larigauderie, A. 2011. Evolution of natural and social science interactions in global change research programs, *PNAS* 10(1): 3665-3672
- Myers, N., & Kent, J. 1995. *Environmental exodus, an emergent crisis in the global arena*. Washington, D.C: Climate Institute.
- Poirine B. 1997. A theory of remittances as an implicit family loan arrangement. *World Development* 25(4): 589-611
- Roberts, J.T. & B.C. Parks. 2007. *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy*. Cambridge, MA: MIT Press
- Rosa, Eugene A. et al. (2015). The Human (Anthropogenic) Driving Forces of Global Climate Change, in: Riley E. Dunlap & Robert J. Brulle (eds.) *Climate Change and society: Sociological Perspectives*. New York: Oxford University Press
- Schade, J. 2013. Climate Change and Planned Relocation: Risks and a Proposal for Safeguards, in T. Faist & J. Schade (eds.), *Disentangling Migration and Climate Change*. Dordrecht: Springer, 183-206

Shen, Shawn & François Gemenne, 2011: Contrasted Views on Environmental Change and Migration: the Case of Tuvaluan Migration to New Zealand, *International Migration* 49 (S1): e224-e242

Simonet, G. 2010. The concept of adaptation: interdisciplinary scope and involvement in climate change, *Sapiens* 3(1). Last accessed on 22 January 2016:
<https://sapiens.revues.org/997>

Suhrke, A. 1994. Environmental degradation and population flows. *Journal of International Affairs* 47(4): 473–496

Sunstein, C. R. 1996. Social Norms and Social Roles, *Columbia Law Review* 96(4): 903-968

UNDP. 2007: *Human Development Report 2007/2008. Fighting climate change. Human solidarity in a divided world*. New York: PalgraveUNFCCC. 1992. *United Nations Framework Convention on Climate Change*. Bonn: UNFCCC

Van Hear, N. 2014. Reconsidering migration and class. *International Migration Review* 48(S1): S100–S121