

Sociological Tasks in View of the Transition to Post-carbon Societies. Also a Comment to Michael Redclift

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Introduction

Why have sociologists been so reluctant in analysing the carbon lock-in of modern societies, and why is their contribution so weak when it comes to delineating the contours of a post-carbon society? What – if it managed to change this uncomfortable situation – would be the contribution of a sociology that actively explores such a post-carbon society? And what would such a change-conducive sociology itself look like? These are some of the major questions that Michael Redclift deals with in his opening article. He does so for quite some time now (cf. Redclift 2009, 2010, 2011), and the fact that he has to repeat himself indicates that sociologists have not really responded

rapidly to what he has to say. But they should – his questions are more than appropriate. They are urgent. And they must hurt every upright environmental sociologist. But the problem is less that *environmental* sociology has been ‘sub-optimal’ in delivering their bit to the possible coming of a post-carbon society. The main problem is that *sociology* has an even poorer track record. The analysis of the carbon lock-in of modern society, as well as a future oriented look at possible pathways out of it – envisioning a post-carbon society – clearly transcend the domain of environmental sociology. Both refer to the very basic principles of modernity, their historical making, their current mechanisms of reproduction, and their critical social

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and environmental consequences. All of these are implicitly reflected in fields like science and technology studies, sociology of science, social inequality, social theory, political sociology, cultural or future studies. Giddens (2009) and Urry (2011) have tried to give a genuinely sociological view of climate change, but only Urry gives us some outlines of a post-carbon world. Unfortunately, Redclift – while not mentioning Giddens – does not share with us his thoughts on Urry’s attempt, he just mentions it.

What Is A ‘Post-carbon Society’?

While Redclift’s paper presents a lot of aspects and research lines that we need to follow in order to achieve a post-carbon society, he does not invest a lot of time in explaining what that term means. Of course it is the social discourse on climate change that has brought ‘carbon’ to the fore – referring to anthropogenic carbon dioxide emissions to the atmosphere that contribute to dangerous climate change. There are very many processes that generate emissions, and they are ubiquitous across the globe. ‘Everybody’ is responsible, more or less. This also means that there are numerous ways to reduce emissions and to cut-off our historic carbon dependency. This renders the term ‘post-carbon society’ to an ambivalent, may be even dialectical fate: very abstract and very concrete at the same time.

Very concrete: There is only one key parameter to measure whether a society is on its way to a post-carbon future or not, and this is greenhouse

gas (GHG) emissions, usually measure in tons of carbon (or carbon dioxide equivalents, CO_{2eq}). A real post-carbon society would have managed to reduce them to zero. Very abstract: there are thousands of ways to reach this goal, both in terms of technological and wider social choices, and in myriads of places on the planet. Virtually all forms of social organization are – or at least seem to be – compatible with this goal, including various forms of the economy, the political regime, or culture. This renders the term ‘post-carbon society’ not only abstract, but also rather uninteresting for sociologists. Other than, say, ‘industrial society’ or ‘risk society’, no particular inner-sociological shape seems to emerge.

While this sociologically diffuse nature of a ‘post-carbon society’ has some advantages – it opens up the space for social imagination – it also seems to rebuff many sociologists searching to analyse and ‘name’ contemporary societies in a meaningful, i.e. distinguishable way. We thus need the empirical richness and the theoretical creativity of sociology to conceptualize the ‘post-carbon society’. According to Ulrich Beck, climate change ‘is both hierarchical and democratic’ (Beck, 2010: 258), thus combining the social characteristics of poverty (hierarchical) and smog (democratic). A post-carbon society can also come in various social disguises, ranging from the liberal (or libertarian) willingness of citizens and organizations to invest in carbon-free futures to an authoritarian regime of strict carbon rationing and control. Renewable energy systems can play out in a rather centralized world with large (renewable) energy trusts,

or with a decentralized network of individual energy ‘prosumers’. What is needed is the screening of these techno-social scenarios, and especially the anticipative reconstruction of the social logic of power, income and profit generation, and the consequences of both for organizations and everyday life. We do need this not for academic reasons, but in order to get an idea of what a post-carbon society might ‘look like’.

Winners and Losers. And Strategic Choices

Whatever the shift to a post-carbon society might else be: it will also be a major social change, ranging from technological innovations to new organizational patterns, consumption and lifestyle changes, a shifting role of science, a cultural transformation, etc. Today, the protagonists of this change operate with labels like ‘green growth’, ‘green new deal’, ‘green economy’, ‘blue economy’, ‘solar economy’, etc., emitting the seducing smell of a brave new world in which our climate and job problems have been solved.

But no major historic change has come about without frictions and costs, and no one has come about without dividing society in winners and losers. Human beings are endowed with intelligence and foresight, and so all *presumable* losers will try to avoid their predicted fate. And they will try out various strategies in doing so. Imagine the owners of large fossil fuel resources, states or companies. In a post-carbon society, they will be out of business. But there are many options to *prevent* this: challenge climate

science, bet on optimal adaptation, fight climate policies, invest directly in renewable energy, or wait with direct investments and save revenues from fossil fuel extraction today in order to buy the future winners of the green energy competition tomorrow.

Sociologists should apply their knowledge about historic and actual social changes in order to decipher the transition to a post-carbon society as a process of social change. Michael Redclift seems to subscribe to this when he argues in favour of investigating future alternatives, instead of investigating past whole societies in Antiquity, like Max Weber did. To me, there is no ‘either – or’ here: we have to apply our knowledge about past changes from a holistic, social systems point of view, in order to better understand what expects us in the future. Of course not future transition totally resembles a historic one. But it is a necessary condition for a sober and de-mystified perspective on a future society to escape the naïve assumption that everything will be ‘totally new’ and harmonious. This is why sociologists can fully subscribe to Redclift’s statement: ‘the political economy of the withdrawal from carbon dependence needs to be analyzed, rather than evangelized’.

Internal Risks of A Post-carbon Society

There is no such thing as a free lunch. A post-carbon society will be based on non-fossil (and probably also on non-nuclear) energy sources. While they are carbon neutral in the operation phase – and ideally also in

their total lifecycle – they do come with side-effects and environmental consequences. Wind farms may harm the integrity of the landscape, bio-fuels may compete with food production and increase food prices, or photovoltaic systems might create a waste problem. Proponents of these technologies have a tendency to neglect these risks, given the positive contribution of post-carbon technologies to protect the global climate. This neglect will in turn reinforce opposition, and create mistrust. It is possible to ‘solve’ the climate problem by creating many others, both environmental and social problems in many – often interconnected – places on this planet (Hulme, 2009).

Despite a tendency to ask for the opposite: a post-carbon society needs a transparent and solid assessment of these risks, and a participatory approach to the implementation of solutions. Sociologists have to assist in this process, based on the rich experience of sociology in risk assessments of (conventional) technologies. We will also need new forms of participation, as well as innovative models of cost and benefit sharing for all kinds of new technologies.

Capital Choices

One of the most interesting points made by Redclift is the link he sees between economic depression, macroeconomic policy, and the prospects for a post carbon society. According to Redclift, what we have seen as the rise of green or sustainable consumerism in recent years is causally linked to the financial and economic crises in recent years. A

growing propensity of consumers to overspend and to indebt themselves has both fuelled a risky overall growth pattern of most Western societies, and it has fuelled a boom for the niche markets of green consumer products and services. What has been perceived and evaluated as a growth in green consumerism (Redclift does not mention the LOHAS, i.e. Lifestyles of Health and Sustainability, but this could easily be used to underline his point) by environmental sociologists has, due to this link to an unhealthy macro-economical condition, the downside of not only not really reducing the carbon footprint of the total economy, but in addition to bring additional economic risks to it.

I would like to generalize that point a little. Due to a shift in the capitalist regime (which is only in part covered by the fashionable critical term ‘neo-liberalism’) in the last 20-30 years, we have seen: 1) a shift in the shares of income towards profits (and away from wages); 2) a reduction in net investments in the real capital stock; 3) a growth in investment in financial markets, and 4) more luxury consumption (Jaeger, Horn and Lux, 2009). While this is a problem in terms of social justice, it is even more so in terms of innovation: such a type of ‘casino capitalism’ (Strange, 1986) reduces the total sum of investment in real capital, and it slows down the transformation towards a green economy. The capital stock is less greener than it could be.

While some sociologists (re)turn to a very basic criticism of capitalism – older scholars feel reminded to the good old (or bad) days of Marxism flourishing in sociology seminars

–, others find it more promising to investigate more thoroughly what *kind* of capitalism (including its political regulation) would be needed in order to 1) re-accelerate the investment rate of modern societies and 2) to direct it in the ‘right’ (green) direction. Sociologists have contributed a lot to a debate about different ‘varieties of capitalism’ (VOC), but unfortunately this literature has 1) neglected the Asian varieties of capitalism (including communist China) that have emerged recently and 2) it has not included the valuation and regulation of nature as a constitutive element of any capitalist regime. We need to fix this quickly, not only in order to ‘green’ the VOC debate, but more so in order to politicize the climate debate! Maybe this would also help us to overcome the fuzzy consequences of Smith and Escobar Redclift is quoting, namely that (post)modern capitalism has entered an ‘ecological stage’, in which ‘outright exploitation of nature’ and also ‘the sustainable management of the system of capitalized nature’ are both possible outcomes. A more differentiated concept of capitalism is needed.

Adapting to Climate Change?

It is a strange feature of Redclift’s alert that adaptation to climate change is not mentioned. One might argue: the focus of a sociology of the post-carbon age is on mitigation against the causes of global warming, not on adaptation to it. Maybe there is also a moral undertone here, associating adaptation with surrender at the mitigation front. But arguing like this would be misleading. First of all, given today’s emissions

and their foreseeable future trends, combined with the inertia of the Earth system, we will be confronted with an unavoidable future global warming of at least 0.6° C, probably more. Even a post-carbon society will thus have to face climate change, and needs to adapt to it. How vulnerable are offshore wind parks to more intense storms or sea level rise? Questions like these will have to be answered, and we need the sociological voice in the interdisciplinary research choir in order to figure them out.

But there is a less trivial or more systemic reason why post-carbon societies will have to actively work on adaptation. Evangelists of an ‘adaptation only’ policy not only argue that mitigation will not work, they also argue that adaptation is a much more cost-effective way to spend scarce private and public funds (Lomborg, 2007). But it is necessary to see how mitigation and adaptation are mutually interdependent. We need successful mitigation in order to keep unavoidable climate change beyond +2° or (much more risky) +3° C. Otherwise, climate impacts will become much too expensive and socially disruptive, destroying adaptation’s cost-efficiency. On the other hand, we need successful adaptation in order to decouple climate change from adverse impacts, as most people are willing to bear mitigation costs because they want to avoid these impacts (not necessarily a changing climate as such). Sociologists of the post-carbon age thus need to integrate future climate impacts and adaptation as a social process into their analyses. And, as emissions and impacts occur rather unevenly distributed, they will need a strong sense for issues of social

justice and procedural fairness while looking at the issue.

‘(Not) Meddling with Politicks’

The first Academy of Sciences, the British Royal Academy, has made it part of its constituency: scientists must analyse what is happening in the world, but not prescribing what should happen. This is the job of the politicians, and ‘not meddling with politicks’ is part of the scientific ethos. Today, 350 years later, most sociologists could become honourable members of the Royal Society, as they subscribe to this a-political definition of their role. Some sociologist even view it as part of the sociological enlightenment to explain to us why governing society (even governance) is impossible, given the complexity of modern societies and the ‘Eigenvalues’ of their subsystems (Luhmann, 1995). And wasn’t it Max Weber who postulated value-free science as the ultimate sociological virtue?

According to Weber, values are basically irrational stances or choices, and a rational discussion about values is impossible. It is like trying to convince a meat lover to become vegetarian. While we have to note that this really happens occasionally, it is my major point to argue that if a rational value discourse is excluded in principal, irrationalism has become a structural feature of the theory, not an occasional fact of social life. In line with Kant and Habermas, I would thus rather suggest assuming that different ethical concepts can be subject to a rational discourse on moral norms – and on their political realization.

This does not support any attempt to bring up political statements in scientific disguise. The possible transition to a low-carbon society will be a process full of conflicts and contradictions, and we need all the observational and critical skills of sociology we can get in order to give it a good shape. But exactly this is why the self-concept of sociology as a pure observational science does not suffice. Opting *against* carbon dependency and *for* a low-carbon future is a rational choice, but neither an inevitable one nor one that is free of values. It presupposes some pro-environmental values, and it is characterized by an intricate mixture of information dependent value choices, not blind decisions.

What kind of sociology does the post-carbon society need? It will be a critical sociology, a public sociology (Burawoy, 2005; Davis 2010) and it will also have to be critical with respect to the solutions proposed to bring it about. Sociology has to engage in interdisciplinary work, and it has to accompany the major and minor attempts to leave carbon dependency behind us. It will not only interpret the transition process, it will also be an active part of it, observing and participating at the same time. Fortunately, such an active and critical sociology can draw upon the work of Michael Redclift.

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