

Nature Views and Sustainability in Rural Research

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Nature Views and Sustainability in Rural Research:

A Review

Lutz Laschewski

natura naturans
transdyseyplinarność
rozwój obszarów wiejskich
natura naturata ekonomia
Längliche Entwicklung
Transdisziplinarität

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The series **PoNa-Papers** presents the results of inter- and transdisciplinary research conducted by the junior research group PoNa and makes them accessible to interested members of science, politics, economics and the public. They are part of our contribution to the sociopolitical discussion concerning sustainability issues at the interface between nature and society.

The junior research group "**PoNa** – **Shaping nature. Rural development and agricultural biotechnology between criticism and vision**" runs from November 2009 to October 2013. It is part of the Social-ecological Research Funding Program (SÖF), which was launched by the Federal Ministry of Education and Research (BMBF), (01UU0903).







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Lutz Laschewski

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Preface

The research project "PoNa – Shaping Nature: Policy, Politics and Polity" analyses the mutual relationships between nature and politics, focusing on the question of how nature and the manifold relationships between nature and society are shaped by politics. PoNa aims to create awareness of the fact that nature is a co-product of socio-economic developments. In order to comprehend the connections between nature shaping and politics, the project examines the question of who is in a position to shape what nature. The objective is to identify democratic spaces for negotiation in which these issues are – or can be – discussed. This examination is conducted using as examples the two policy areas of rural development and biotechnology in agriculture in Germany and Poland.

The present paper was written by Lutz Laschewski in order to link the first results of the PoNa-project with the international in rural studies (especially in rural sociology). Most of all, the Polish debates are of particular relevance according to the PoNa project design.

The paper was hold as a keynote speech during the German-Polish-Workshop "Socio-ecological research: The cases of rural development and agro-biotechnology" held at Warsaw University of Life Science (SGGW) from 17th to 18th March 2011, which was organised in cooperation with our Polish colleagues Hanna Podedworna (Warsaw University of Life Science, SGGW, Poland) and Piotr Stankiewicz (Institute of Social Science, Nicolaus Copernicus University Toruń, Poland). The participants discussed the formulated hypotheses and also added further issues and different perspectives. Some of these additions have been admitted to the paper.

Lutz Laschewski's paper offers an impressive review on "Nature Views and Sustainability in Rural Research". The future research within the PoNa-project will refer to the findings presented and will carry on with some of the linkages suggested.

We would like to thank Heidrun Schmitt and Janina Paszkowska for proofreading and technical support.

Finally, we thank Lutz Laschewski not only for writing this paper but for the numerous inspiring discussions that we had both during the writing process and during the workshop.

Daniela Gottschlich & Tanja Mölders

Summary

The research project "PoNa – Shaping nature: policy, politics and polity. Rural development and agricultural biotechnology between criticism and vision" is targeting two policy arenas: rural development and biotechnology in agriculture. The project is organised as a comparative German-Polish research project. Both main research themes have internationally been analysed and discussed in the domain of rural studies (rural sociology) for many years. Thus, this paper explores on the one hand, in how far PoNa may link and contribute to already existing discussions in this research area, and on the other hand in which ways PoNa may benefit from already existing theoretical developments in this field of research from its own comparative research.

In section 1 this paper describes changes in theoretical conceptualisation of nature in rural sociology. In the post-war era nature has been a "taken-for-granted aspect of rural life rather than a formal subject of analysis" (Castree/ Braun 2006: 162). However, since the late seventies nature has more and more been dragged into the core of rural theoretical thinking. The changing views on nature in rural sociology have paralleled wider currents of sociological such as critical materialism, constructivism and relational thinking.

Rural sociology has always been searching for a coherent understanding of its basic concept rurality, which is explored in section 2. Similar to the views of nature the concept of rurality has undergone some major revisions in the recent history of rural research. In the course of this the dualistic conceptualisation of urban-rural relations has been more and more abandoned in favour of a relation thinking of rurality.

Section 3 summarises some elements of the increasing importance of sustainability as topic in rural research. The analysis is starting with Fred Buttel's distinction of greening, which describes the phenomena that modern environmentally related symbols become increasingly prominent in social discourse, and environmentalisation, which is the "concrete expression of the broad force of greening in institutional practices" (Buttel 1992: 2). Following this distinction sustainability discourses, changing views on science and technologies and sustainability strategies are briefly discussed.

Consumption-Production relations have evolved as a new topic in rural research. Section 4 explores recent theoretical developments in this field starting from the new political economy of agriculture of the eighties up to more recent debates about the application of actor-network theory (ANT) to analyse consumption-production relations.

The final section summarises the major trajectories in rural research. Some aspects are discussed about PoNa can exploit these elements in comparative analysis of Poland and Germany. Finally, it is briefly discussed, which contribution socio-ecological research may make for the development of national rural sociologies in Poland and Germany.

Zusammenfassung

Das Team des Forschungsprojekts "PoNa – Politiken der Naturgestaltung. Ländliche Entwicklung und Agro-Gentechnik zwischen Kritik und Vision" richtet sein Interesse auf zwei Politikfelder (Ländliche Entwicklung und Gentechnik in der Landwirtschaft), die international insbesondere in den Rural Studies respektive der Rural Sociology analysiert und diskutiert wurden. PoNa ist als komparatives, deutsch-polnisches Forschungsvorhaben organisiert. In diesem Paper wird daher untersucht, inwieweit PoNa von den Befunden und Debatten dieser Disziplin für die eigene komparative Forschungsarbeit profitieren kann, als auch ihre Befunde in die bereits vorhandenen theoretischen Diskurse einbringen kann.

In Kapitel 1 des vorliegenden Papers werden Veränderungen der theoretischen Sicht auf gesellschaftliche Natur, wie sie sich innerhalb der Rural Sociology innerhalb der letzten Jahrzehnte vollzogen haben, beschrieben. In der Nachkriegszeit war Natur eher ein "takenfor-granted aspect of rural life rather than a formal subject of analysis" (Castree/ Braun 2006: 162). Seit den siebziger Jahren ist Natur mehr und mehr in das Zentrum des theoretischen Denkens gerückt worden. Der Wandel des Denkens in der Rural Sociology vollzog sich parallel zu den sich ebenfalls wandelnden theoretischen Strömungen innerhalb der Sozialwissenschaften wie dem kritischen Materialismus, dem Konstruktivismus bis hin zu relationalen Ansätzen.

Die theoretischen Reflektionen zu dem, was das Land und was ländlich ist, sind innerhalb der Rural Sociology immer von zentraler Bedeutung. Land und Natur sind eng miteinander verbundene Konzepte. Entsprechend haben die Revisionen des Naturverständnisses innerhalb der Rural Sociology auch die Debatten um die Natur des Ländlichen neu befruchtet. Dies wird in Kapitel 2 beleuchtet.

Nachhaltigkeit ist ein Konzept, das mit dem Wandel des Verständnisses gesellschaftlicher Naturverhältnisse eine herausragende Bedeutung auch in der ländlichen Soziologie erlangt und zugleich auch die Kernfragestellung der Disziplin verändert hat. Diese wird in Kapitel 3 mit Hilfe der von Fred Buttel vorgeschlagenen Unterscheidung von "greening" und "environmentalisation" analysiert und bezüglich der Themen Nachhaltigkeitsdiskurs, (Agrar-)Wissenschaft und Technologie sowie Strategien nachhaltiger ländlicher Entwicklung kurz diskutiert. Greening beschreibt in diesem Zusammenhang den Bedeutungsgewinn, den umweltbezogene Symboliken und Forderungen in gesellschaftlichen Diskursen bieten, während environmentalisation die konkreten Verankerungen dieser Forderungen in gesellschaftlichen Institutionen bezeichnet (vgl. Buttel 1992: 2).

Ein weiteres Themengebiet, dass sich in diesem Zusammenhang im disziplinären Kontext der Rural Sociology in den 1990er Jahren entfaltet hat, ist die Frage nach den Beziehungen zwischen Konsum und Produktion von Lebensmitteln. In Kapitel 4 wird in einem kurzen Abriss die Entwicklung dieses Themengebietes ausgehend von einer politischen Ökonomie der Landwirtschaft, wie sie in den 1980er Jahren formuliert wurde, bis hin zu der Anwendung der Akteur-Netzwerk Theorie (ANT) in den vergangenen Jahren skizziert.

Das letzte Kapitel fasst die Hauptentwicklungen der ländlichen Soziologie in Bezug auf die genannten Themen zusammen. Es werden Ansatzpunkte aufgezeigt, wie diese Entwicklungen in der in PoNa angelegten, komparativen Analyse von Polen und Deutschland berücksichtigt werden können. Zuletzt wird dargelegt, welche Perspektiven sozial-ökologische Forschung allgemein für die ländliche Soziologie in Polen und Deutschland aufzeigen kann.

Streszczenie

Zespół badawczy "PoNa – polityki kształtowania natury. Rozwój obszarów wiejskich i inżynieria genetyczna w rolnictwie pomiędzy krytyką a wizją" kieruje swoje zainteresowanie badawcze na dwa obszary polityki. Są to: rozwój obszarów wiejskich i zastosowanie inżynierii genetycznej w rolnictwie. Obydwa zagadnienia od wielu lat analizowane są na arenie międzynarodowej, w szczególności z perspektywy studiów wiejskich (socjologii wsi). Projekt naukowy PoNa został zorganizowany jako porównawczy projekt niemiecko-polski. W niniejszej publikacji zbadane jest, na ile projekt PoNa może nawiązać do stanu dyskusji w dyscyplinie naukowej socjologii wsi, na ile skorzystać może z istniejących już ustaleń i dyskusji w tej dyscyplinie dla własnych badań porównawczych, oraz na ile wyniki tych badań mogą przyczynić się do aktualnych dyskusji naukowych.

W rozdziale pierwszym przedstawionej publikacji opisane są zmiany teoretycznej konceptualizacji natury, które nastąpiły w ciągu ostatnich dziesięcioleci w obrębie socjologii wsi. W czasach powojennych naturę rozumiano "raczej jako oczywisty aspekt życia wiejskiego niż formalny przedmiot analizy" (Castree/ Braun 2006: 162). Jednak od lat siedemdziesiątych ubiegłego wieku nastąpiło przesunięcie pojęcia natury w stronę centrum teoretycznych rozważań studiów wiejskich. Zmiana myślenia w socjologii wsi dokonywała się równolegnie ze zmianami teoretycznych nurtów w obrębie nauk socjologicznych, takich jak: krytyczny materializm, konstruktywizm, aż do teorii relacyjnych.

Socjologia wsi zawsze dążyła do spójnego rozumienia jej podstawowego pojęcia, mianowicie pojęcia wsi lub wiejskości (rozdział drugi). Koncepcje wsi oraz natury są ze sobą ściśle powiązane. Podobnie do pojęcia natury, również pojęcie wsi zmieniło się kilkakrotnie w ciągu bliższej historii socjologii wsi. W trakcie tych zmian dualistyczna konceptualizacja stosunków miejsko-wiejskich coraz bardziej została porzucona na korzyść opisanego myślenia o naturze obszarów wiejskich.

Rozdział trzeci podsumowuje aspekty wzrastacjącego znaczenia pojęcia zrównoważonego rozwoju w socjologii wsi. Analiza rozpoczyna od zaproponowanego przez Freda Buttel'a rozróżnienia pomiędzy "greening" a "environmentalisation". Podczas gdy pojęcie "greening" opisuje fenomen wzrastającego znaczenia symboli związanych ze środowiskiem w dyskursach społecznych, pojęcie "environmentalism" oznacza wdrażanie związanych z tym żądań w konkretne działania na szczeblu instytucji społecznych (Buttel 1992: 2). Kierując się tym rozróżnieniem, w rozdziale znajduje się krótki opis dyskursów dotyczących zrównoważonego rozwoju, zmieniających się spoglądań na naukę i technologie oraz strategie na rzecz zrównoważonego rozwoju.

Nowy zbiór zagadnień, który rozwinął się w dziedzinie naukowej socjologii wsi, dotyczy kwestii powiązań pomiędzy konsumpcją i produkcją artykułów żywnościowych. Rozdział czwarty analizuje rozwój tych zagadnień, począwszy od politycznej ekonomii rozwoju wsi i rolnictwa, która uformowała się w latach osiemdziesiątych ubiegłego wieku, i kończąc na bardziej aktualnych dyskusjach o zastosowaniu actor-network-theory (ANT; socjologia nieludzi) dla analizy powiązań pomiędzy konsumpcją a produkcją.

Ostatni rozdział podsumowuje główne kierunki rozwoju socjologii wsi. Wskazane są założenia, w jaki sposób projekt PoNa mógłby uwzględnić i wykorzystać wyniki tego rozwoju w swojej pracy porównawczej Niemczech i Polski. W końcu krótkim opisem wskazane jest, w jaki sposób badania społeczno-ekologiczne mogą przyczynić się do rozwoju dziedziny badań socjologii wsi w obydwu krajach.

1 Intro

This paper is written as a contribution to the PoNa project. The project is part of a wider attempt to establish social ecology both as an academic discipline and a theoretical approach. Here, social ecology is defined as the science of human-nature relations. Socio-ecological research seeks to study the forms of human-nature relations. It obtains to generate knowledge and to create concepts for the construction of these relations in order to maintain natural resources and human societies (Becker/ Jahn 2006). Socio-ecological research is interdisciplinary in character and normatively connected with the concept of sustainability. In this context PoNa ("PoNa – Shaping nature: policy, politics and polity. Rural development and agricultural biotechnology between criticism and vision") itself intends to analyse the ways, in which multiple relations between human societies and nature are shaped. In a first working document the PoNa research group has outlined a basic common understanding of sustainability as the core concept of the research (Friedrich et al. 2010). Nature is defined as a result of "social-economic developments" as well as a "productive resource". Sustainability is seen as an integrative concept that encompasses nine categories (nature, policy, politics and polity, economy, power and domination, gender relations, strategies of efficiency, sufficiency and consistency, time, knowledge and reflexivity).

In this paper two main objectives are explored. Firstly, in its field research PoNa is targeting two policy arenas: rural development and genetically modified organisms in agriculture. Both arenas have been analysed and discussed internationally in the domain of rural studies (sociology) for many years. Thus, we have to ask on the one hand, in how far PoNa may link and contribute to already existing discussions in this research area, and on the other hand in which ways PoNa may benefit from already existing theoretical developments in this field of research. This paper asks for the views of nature that have shaped rural research in recent decades, and illustrates some of the main findings of rural research that relate to the categories that PoNa understands as parts of an integrative understanding of sustainability.

Secondly, PoNa is also organised as a comparative Polish-German research. This has further implications. For instance, the field of polish rural sociology has been established rather independently from the globally dominating 'American' model and has survived during socialism. Also, rural sociology is weakly institutionalised in the German context. Thus, many of the issues addressed here, have been studied in other disciplinary contexts such as environmental sociology, political sciences or geography. Recently, German and Polish rural sociologists have explored perspectives for a new rural sociology (Laschewski/ Kaleta/ Gorlach 2008). In this context the paper will also pick up on this debate and explore ways in

which socio-ecological research, international rural studies and rural sociology in both countries may be mutually beneficial and enhancing.

The paper is structured as follows. The following section briefly describes the origins and recent history of (Western) rural sociology and explores how views of nature have changed from mere ignorance in its early stages towards becoming a central research topic at the beginning of this century. The changing conceptualisations of nature are paralleled by a broadening of a rural research from a narrow focus on agricultural primary production and the (agrarian) village both horizontally towards alternative conceptualisations of the rural and agriculture and producer-consumer linkages, as well as vertically towards the analysis of agro-food chains and global-local interactions. Selected debates are briefly sketched in the following sections. A timeline of some major publications mentioned in the literature review has been attached at the end of the paper. Firstly, section 2 analyses the empirical as well as conceptual shift from rural nature towards diversified ruralities, while, secondly, section 3 illustrates the conceptual move towards sustainability. Finally, in section 4 the rich body of literature on global agricultural and rural governance is explored. The final section discusses the position of Polish and German rural sociology in these fields of research and explores possibilities of a socio-ecological research agenda.

2 Nature Views in Rural Sociology

In order to understand views of nature, which have been underlying rural sociological research, one has to look at the very specific history of the discipline. Rural sociology finds its historical roots in the American land grant university system. Rural sociology has emerged "part in parallel, part in conjunction, with sociology" (Lowe 2010: 314). Thus, it is not a derivative of sociology, but has rather been a part of agricultural sciences. In the US, rural sociology became institutionalised in the Agricultural Colleges, and not in the Departments of Humanities and Arts (ibid; Laschewski 2005). Rural Sociology benefited from (and has influenced) the "New Deal" in 1934. The formation of the (American) Rural Sociological Society took place at the height of the New Deal programme in 1937. After the Second World War, the American model of rural sociology was seen "as key means to facilitate the reconstruction, reform or modernisation of farming regions in the countries of Europe and Asia emerging from war, an other countries of strategic importance to the US, particularly in Latin America" (Lowe 2010: 317). The main concern at the time was to boost agricultural productivity. Thus, diffusion of technological innovation research (Rogers 2003) and extension became a major field of rural sociological research. In the line of this research, rural sociologists have developed a strongly empirical research tradition. As a consequence, many research methods, in particular quantitative survey techniques, common to every social scientist today, have been pioneered by rural sociology (Lowe 2010). The institutionalisation of rural sociology in Western Europe after the Second World War was more strongly in regions with small scale farming (and thus a perceived "peasant problem") and strong American influence, such as the American zones in West Germany or Northern Italy. In other countries, such as the United Kingdom, Sweden or Denmark a formalised rural sociology gained no foothold. Here, rural issues have been subject to other disciplines such as geography and economics. Thus, European rural sociology, institutionalised in the European Society for Rural Sociology, has become an interdisciplinary undertaking less tied to a coherent agenda and influenced by rather diverse theoretical currents in various fields of social science (ibid).

This brief history of (Western) rural Sociology is important, if we want to understand views of nature underlying rural research. Firstly, the specific way of its institutionalisation explains the rather narrow focus of rural sociology on agriculture and villages in the post-war era. The main theme of rural sociology has been the modernisation and transformation of rural areas and, in particular, agriculture. The 'rural' is perceived as almost identical to agriculture. Despite 'nature' has played a significant role in the understanding of the rural, "it is still

surprising how marginalised nature was in the post-war (...) rural studies discourse. To the extent that it figured at all it was either a backdrop or a taken-for-granted aspect of rural life rather than a formal subject of analysis" (Castree/ Braun 2006: 162).

Rural Sociology is not an isolated field of social studies. It has been shaped and influenced by general developments in theory and academic thinking like any other sub-field of social sciences. Indeed, it has been argued that rural sociology has only contributed little to theoretical developments in social sciences. The positivist 'fact finding', strongly empirical and very much applied approach of orthodox rural sociology has been criticised by general sociologists as well as by those who tried to establish 'heterodox' views in the field. However, this statement has to be qualified. Beside its methodological innovations a number of medium range theoretical developments can be assigned to rural sociology such as theory of innovation diffusion (Rogers 2003) or family business households. Thus, it is probably more correct to blame the "micro-analytical focus of rural sociology" (Goodman 2001).

Since the 1970s a neo-marxist school of new 'critical' rural sociology challenged the, at the time, dominating modernisation of agriculture paradigm taking a more theoretical stance, raising the "agrarian question" and focussing on the transformation of agrarian social structures. As a consequence new themes evolved such as the "paths" of capitalist penetration, and the 'survival' of family-labour farms (Buttel/ Larson/ Gillespie 1990). These debates also provided the basis for further conceptual developments such as the analysis of filières, commodity systems and the notion of agro-industrial complexes (Buttel 2001; Goodman 2001). Goodman has highlighted that all these "modes of social organisational change in agricultural production are grounded in the concept of the labour process" (Goodman 2000: 185). First generation social science analysis of agricultural biotechnologies and techno-sciences that have been undertaken in this school of thought continued to be framed in the distinctly classical terms of capital penetration and commodification (Goodman/ Sorj/ Wilkinson 1987, cit. in Goodman 2001; Kloppenburg 1991; see section 3.2). This includes, in particular, the commodification of nature, that is that nature becomes "a capitalist force of production" as means of agricultural production (Kloppenburg 1991: 39), since the biophysical processes of agricultural production and food consumption have constituted natural constraints to the industrialisation of agricultural use-values. In agriculture, where industrial capitals confront a natural production process, agricultural biotechnologies constitute generalised advance in the capacity of industrial capitals to manipulate nature (Goodman/ Sorj/ Wilkinson 1987, cit. in Goodman 2001). In an extensive review Goodman concluded that the labour process framework adopted by this 'first generation' approaches

"clearly provides an incisive analytical vantage point to address social cui bono questions and rural social structures as nature is reconfigured as a productive force, which can be directly manipulated according to the dictates of the market. These analyses also demystify science and technology by focusing on the processes of their commodification and embeddedness in capitalist social relations. It is equally clear, however, that agency in these approaches is unidirectional and uniquely identified with human intentionality and praxis. Human agents act 'upon' an external, objectified, but now less 'recalcitrant' nature, rather than in social partnership with nature" (Goodman 2001: 189)

However, despite the limitations of such an "instrumentalist ontological position" that has been heavily criticised by sociology of scientific knowledge, it took more than a decade until these developments started to penetrate rural sociology.

The 1990s social constructivist thinking has gained considerable recognition in rural sociological debates, which has also shaped the conceptualisation of nature. In rural sociology, constructivism is partly rooted in a general post-modern academic mainstream in social sciences in general in and a 'cultural turn' in social geography in particular (the disciplinary boundaries in rural research are not so clear). It had also been "an important vehicle for the importation of putatively 'critical' theories into rural studies" (Castree/ Braun 2006: 163). Constructivists questioned the realist assumption of earlier rural sociology that rural areas are more natural than towns and cities. For instance, it has been argued the apparent givenness and obviousness was precisely what protected it from critical scrutiny. 'Wilderness' and the 'rural idyll' have been de-mystified as strong social images rather than realist descriptions of the countryside. Thus, as Castree and Braun suggest, for a generation of rural researchers, constructivism has been empowering in the sense that it has allowed them to

"contest acts justified in the name of nature. It enabled them to show that 'nature' was a medium for the expression of power relations. And it offered them the chance to imagine alternative social and ecological arrangements that honestly confronted the non-naturalness not just of ideas of nature but also the phenomena those ideas referred to" (ibid).

There are at least two ways, in which the term "social construction of nature" is used in rural research. Firstly, in a broader understanding, it is understood in the sense of 'production of nature'. In this view, a definite set of social processes, structures and relationships is physically transforming specific rural natures. Such, a 'material constructivism', as it is for example represented by the neo-marxist approach outlined above, has shown to be particularly fruitful in the realm of agri-food research. Secondly, in a narrower understanding social constructivism is about the ideas, representations or images of rural natures.

The success of this line of research has been of particular relevance also, because of changing social realities in modern rural and urban societies such as the changing social class structures in rural areas, in particular the increasing non-agrarian middle classes, which challenged the dominant agrarian focus in rural areas. Different and often conflicting images of rural nature have been found to underlie many social conflicts in rural areas (see section 3). In rural research it has helped to broaden the social perspective and to include heterodox views of 'other' rural and non-rural actors in the analysis (e. g. Cloke/ Little 1997). Secondly, in sociology of agriculture alternative views of nature and farming practices were recognised and brought to the fore. Also, gender research has highlighted the gendered images of agriculture and nature. While the images of agriculture are typically masculine and revolve around classic expectations of physical strength and fitness, land and nature are conceptualised as feminine (Little 2006). Thirdly, the growing distance between consumers and food processors as well as the increasing complexity of the food system has found to contribute to diverging perceptions of food between producers and consumers.

Despite its prominence in rural sociological debates in the 1990s social constructivism (in the narrow sense) has also been challenged on many grounds. Firstly, although "greened", much of current, applied rural sociological research is still starting from a positivist assumption that there is an objectifiable environmental problem (e. g. nitrogen surplus, loss of biodiversity) to be solved. Secondly, rural sociology has been dragged into an on-going controversy among environmental sociologists about 'realist' and 'social constructionist' understandings of nature. The realist position is usually treating society and nature as dualism of separate but interrelated entities, while social constructionists see society-and-nature as contested cultural reality, which exists in diverse forms in the activities of claims-making and social mobilisation around 'nature'. Some leading rural sociologists have joined the group of those, who argue that such dualist society-nature conceptualisations are no longer fruitful. "The 'greening' projects now underway in various theoretical literatures are testimony to this ontological 'blind spot' and the difficult task of eradicating deeply ingrained, dualist modes of analysis. These projects, in other words, make our ontological choices explicit" (Goodman 2001: 195). Taking the example of domestic animals, Tovey argued as "we come to recognise that there is no 'unsocialised nature', we are forced to reconsider the meaning we give not only to 'nature' but also to 'society'" (Tovey 2003: 196). Her analysis, largely drawing on the writings of Ted Benton (1993), suggests that domestic animals for many reasons have to be considered as non-human actors of society rather than as 'nature'. In this context some authors used Latour's Actor-Network Theory (ANT) to rural research. Following upon Latour's notions of hybridity it has now more readily been accepted that there is a need to develop ways of seeing nature and society as 'co-constructed' (Murdoch 1998; 2000).

3 The Diversified Countryside

Rural Sociology has always been searching for a coherent understanding of its basic concept 'rurality'. Similar to the views of nature the concept of 'rurality' has undergone some major revisions in the history of rural research. Early rural sociology has been grounded on a dualistic notion of urban-rural. The 'rural' has been connected either with social characteristics, modes of social organisation or social and economic functions contrasting the 'urban', such as community vs. society, agriculture vs. industry, tradition vs. modernity. The specific structures were seen to parallel also social realities in a kind of urban-rural continuum. Modernity and the emergence of modern capitalism have shown to impose a fundamental transformation of rural societies. It appeared as if rural societies were becoming more similar to urban societies. Accordingly, these social transformations were conceptualised as 'urbanisation'. Depending on the social scientists views urbanisation was either perceived as threat or positive development to which rural communities and actors had to adapt.

The Belgian sociologist Marc Mormont has provided a critical review of rural sociological research arguing that 'rurality' should be considered as a "category of thought" (Mormont 1990). According to him, the dualistic conceptualisation of rural-urban is related to the specific historical setting and the spatial processes related to industrialisation. In his view industrialisation processes creating the rural-urban divide is not the dominant social forces in (post-)modern societies anymore. Instead there are multiple social movements and social projects targeting rural spaces, all of which think 'rural' in different ways. Despite some critics, there is no doubt that this analysis has helped to broaden the perspective of rural sociology and to analyse social changes that were already visible in many rural areas in at least two ways.

Firstly, changes of the occupational structure of the rural labour force and increasing mobility have been connected with a changing social composition of the rural population. One phenomenon, which has been observed in many countries since the 1970s, has been a 'population turnaround' in rural areas (e.g. Marini/ Mooney 2006). This has also been conceptualised as 'counter-urbanisation'. In a groundbreaking and often-cited paper Halfacree (1994) has shown the importance of a desire to live in a more rural residential environment to understand this migration phenomenon. Subsequently, (often idyllic) rural images or in Halfacree's words the 'village-in-the-mind' have become a major subject of rural research (e.g. Short 2006; Woods 2010). Until today this motif for migration, also labelled as 'amenity migration', has become a global phenomenon. Even further, it is suggested that an 'amenity property boom' is under way that is facilitated by rising incomes

in certain social groups, loosing restrictions on land ownership (even for foreigners), improved transport and communication facilities and the increased circulation of representations of prized rural landscapes (McCarthy 2008).

Changing social structures in connection with these changing images and expectations of parts of the population have increased social diversity and, thus, the potentials for social conflicts within the rural population. This has been outlined, in particular, in a series of studies by a group of British rural researchers (Marsden et al. 1993; Marsden/ Murdoch 1994, Lowe et al. 1997; Murdoch et al. 2003). The redundant agricultural workers and smallholders "were progressively absorbed into an expanding urban economy, creating social gaps in rural life frequently filled by a quite different and acquisitive 'middle class' that set about altering local social and political agendas" (Marsden et al. 1993: 174). At the same time at another level powerful agricultural interests ensured the continued payment of farm subsidies. Also, these authors identified a third relevant group for land development – the housing land-developers, and argued for the UK that to

"say that there are heightened tensions between the three major interests in rural land farmers, developers and middle-class residents is indeed a truism. Each occupies a powerful position in the land development process: farms and landowners through their ownership of rural land; the middle classes through their prominence in local government and politics and their property rights (owned and claimed) and the large developers through their oligopolistic control over house building and other major development processes, as well as their government-sponsored corporatists links with the planning system" (ibid: 181f.).

However, the composition of these interests is not always the same over time and in different localities. Thus, the changing and increasingly diverse social composition of the rural population contributes to increasing differentiation of the countryside (Murdoch et al. 2003).

Secondly, as Mormont suggested, diverse images of the rural are not only relevant for the rural population itself, but also for the urban population. The emergence of environmentalism as a powerful ethic and political force and the related emergence of new 'consumptive' uses for rural spaces, societal demands in relation to land and landscape, the treatment of animals and nature, and the risks posed by modern science and technology to our food and health, as general social phenomena, on the one hand, have been connected with an increasing number of projects of urban actors to act upon rural areas, but, on the other hand, have created new economic opportunities for rural regions in tourism or alternative forms of agriculture and food production. This creates a turn towards a post-productivist or 'consumption countryside'. It

"represents a social process which is increasingly jettisoning the social and state paternalistic structures which have typified rural areas throughout most of the twentieth century. The 'deferential dialectic' (Newby) is giving way to different consumption social contracts, whereby social relationships and power relations are conditioned and typified by highly variable and contingent commodified relationships, which are often exclusive and positional in character" (Marsden 1999: 507).

Rather than the commodification of nature, it is the commodification of socio-cultural characteristics that are seen to re-resource the rural economy (Perkins 2006). However,

'productivist' uses, such as the still dominant industrialised and vertically integrated agrifood system, remain a strong social force, contesting the new interests.

These social shifts are taking place in the context of social meta-projects that is the neoliberal project of deregulation (and going along with it the reduction of rural services) and globalisation. Rural spaces become hybrid, which are constituted and defined by multiple dimensions (Murdoch 1998; 2000) including human and non-human actors. Thus, as Woods summarises, the

"hybrid reconstitution of rural spaces under globalisation involves not only the mixing of local and non-local agents, processes and influences, but also the mixing of diverse natural and social elements, and human and non-human entities. (...). The constitution and reconstitution of rural places is therefore not in the control of human actors, local or global, but is a multi-authored and negotiated process that seeks to engage, define and position a vast array of natural, material and social entities" (Woods 2007: 497).

Thus, the impact of globalisation in reshaping rural places is not uni-directional, but is manifest through processes of negotiation, manipulation and hybridisation, contingent on the mobilisation of associational power, and conducted through but not contained by local micropolitics. This view opens perspectives for active citizenship and forms of endogenous development. Local actors may exploit their cultural and social resources (local knowledge, social capital) as well as there are natural resources to counteract homogenising global forces (Ray 1999a; b).

4 The Greening of Rural Research and the Quest for Sustainability

Since the 1970s greening and environmentalisation have become one of the most important social forces of our time. Greening and environmentalisation are not identical. While greening describes the phenomena that modern environmentally-related symbols become increasingly prominent in social discourse, environmentalisation means "the processes by which green concerns and environmental considerations are brought to bear in political and economic decisions, in educational and scientific research institutions, in geopolitics, and so on" (Buttel 1992: 2). Thus, greening is an ideological and symbolic phenomenon and refers to culture and the justifications (Boltanski/ Thevenot 2007), which are underlying public discourses, while environmentalisation is the "concrete expression of the broad force of greening in institutional practices" (Buttel 1992: 2).

In an extensive analysis Buttel (1992) has, firstly, argued that greening is a response to environmental destruction, but it must also be seen in the context of larger currents of social change. Secondly, given this boundedness of the greening to social structures, environmentalisation of our institutions has both promise and limitations. Buttel sees a transition from social-democratic society ("Fordism") towards a neo-conservative society ("post-Fordism"). While the social-democratic model of the welfare state has undergone a decline a neo-conservative model has evolved that is characterised by a pluralistic class structure and growing rural as well as urban underclasses, industrial multi-polarity and political ideology that provides a pervasive justification for national market-augmenting policies such as deregulation plus state support for high technology and exports. In this context new social movements (NSM), of which environmental movements form a central part, have emerged as alternative modes of expression and political mobilisation to trade unions and working class parties of social-democratic societies, who increasingly struggle to mobilize their own (shrinking) constituency. Thus, the NSMs progressively fill the vacuum of social democratic decline.

Buttel argues that greening in the context of this social transition has several effects. Firstly, greening "has been leading to the substitution of environmental to social justice discourse" (ibid: 16). One example of this is the emergence of the concept of agricultural sustainability as a successor of "family farmism". Still, support for family farms is often an element of sustainable agriculture stategies. However, the justification for the protection of family farms is changing from maintaining rural livelihoods towards maintaining environmentally friendly farming practices.

According to Buttel, agricultural sustainability is at root a scientific notion and involves claims in which scientific data and scientific knowledge claims are employed to challenge other scientific positions. Subsequently, sustainable agriculture is narrowing the debate to mainly technocratic considerations. Thus, secondly, sustainable agriculture is an example for a further element of greening, which is its contribution to the 'scientisation' of social conflicts and policy formulation. The scientisation of social movements, reinforced by the authority of experimental science, grants authority, but also often serves to limit their claims. Third, Buttel argues that greening "involves a breadth of appeal, but this very breadth can lend itself to superficiality and trivialization" (ibid: 17). With regard to sustainable agriculture even "chemical companies (...) have little difficulty making claims that chemical agriculture is sustainable" (ibid: 22). Buttel concluded that greening will continue to be a constructive force for change. However, "green forces will be crucial in determining whether the new forms of social regulation of the economy that emerge will either reinforce the growing inequality (...) or lead to new channels for the mobilisation of subordinate class demands" (ibid: 24). The green agenda puts agriculture and rural areas back into the limelight. It might add but also detract from the quest of rural population for adequate livelihoods, security and dignity.

Much of Buttel's early analysis is reflected in rural sociologists' perception of rural change and their focus in the frame of the sustainability discourse. In general, rural research has stressed the interests of rural actors – as those, who have to make a living on using natural resources (Tovey 1998) – and the distinctiveness of rural movements. Rural researchers have continuously been critical towards some schools of ecological modernisation, which concentrated upon solving environmental problems and, subsequently, tend to propose solutions, which are socially unsustainable (e. g. Tovey 1997; Rannikko 1999; Marsden/ Banks/ Bristow 2000). Instead, rural sociologists have paid particular interests to approaches, which actively involve primary producers and consumption as in the organic movement. The organic movement seemed to offer a "vision of sustainability in the food production and consumption practices of a future society" (Tovey 1997: 28). Since this organic vision means to make use of rural resources it may be in contradiction with models of preservationist environmentalism that has only one goal "preserving natural habitats from encroachment by any human activities, including agriculture, that would 'disrupt' the 'natural' biotic community" (Buttel 1992). Accordingly, the diagnosis of a conventionalisation of organic farming that is the transformation (and limitation) to a purely technical rather than a social alternative through certification (Guthman 2004) has been observed with some disappointment. In the remainder of this section I want briefly sketch some issues, which have been discussed with regard to agricultural sustainability in the context of rural sociology.

4.1 Sustainability Discourse

Discourse analyses have found a lot of evidence for breadth of appeal of the concept of sustainability and its inherit danger of superficiality and trivialization. In a seminal paper Frouws (1998) has analysed socio-political discourses, which constitute both the resources

and the products of the discursive actions of the myriad political, official, administrative, governmental, interest representational, scientific and other actors participating in the debate on the future of rural areas. These various discourses interact and influence socio-political discourses. He outlined three dominant rural discourses. An agri-ruralist discourse that primarily focuses on the social dimension of development, an utilitarian discourse that focuses entirely on the economic dimension, while the pivotal feature of the hedonist discourse is its cultural dimension. More recently Hermans et al. (2010) have drawn upon this analysis and shown that the utilitarian, the agri-ruralist and the hedonist discourse each incorporate their own sustainability perspective. The hedonist and utilitarian sustainability discourses are seen as being to a certain extent polar opposites, while "the agri-ruralist discourse is stuck in the middle, with the possibility of dissolving into the other two over time" (ibid: 58). Without going into details of this analysis, it is striking that various studies of this kind adapt a tripartite result. E. g., Lewidow (2005) uses a taxonomy by Woodhouse that divides between three views of sustainability, which are labelled the Neo-Liberal (or market-driven) view, the People-Centred (or Community) view, and the Environmental Management view. It is noteworthy that the latter taxonomy is, in the terminology of regulation theory, already pointing to dominant modes of regulation (market, community self-regulation, planning).

Marsden (2003) also applies a tripartite taxonomy that distinguishes a (dominant) agriindustrial paradigm that is informed by a neo-liberal 'virtual' logic of scale and specialisation, which ties agri-food into an industrial dynamic, and privileges national and international perspectives; the post-productivist paradigm, which is based on the perception of rural areas as consumption spaces to be exploited not by industrial capital but by the urban and ex-urban population; and a newly emerging sustainable rural development paradigm, which redefines nature by emphasizing food production and agro-ecology in the context of a more multi-functional context. In his view, these paradigms are corresponding with different modes of regulation. The agro-industrial model, which continues to be upheld by an "alliance of agricultural economists and biologists" (Marsden 2003), is strongly associated with the continued effort of producers and manufactures to reduce and/ or regularise the importance of nature in food production. The disconnection of food production from nature is mediated to appropriation, that is the attempt to replace previously natural processes by industrial activities, and substitution, that is to replace natural products in the food systems with industrially produced substitutes. The post-productivist paradigm corresponds with a bureaucratic 'hygenic' mode of regulation. This mode of regulation is in some respect parallel to the former. It has attempted to 'correct' the agro-industrial model in a technocratic manner by attempting to put into place highly interventionary and bureaucratic policies that effectively police the food and rural production systems in ways that seem to make them more hygenic and environmentally safe production and consumption spaces. The bureaucratic mode affects the farm both vertically, through the food supply chain, as well as horizontally, through the local re-evaluation of the countryside environment by ex-urban residential and amenity, many of which view agriculture as a 'dirty business'. According to Marsden the regulation mode for the sustainable rural development has yet to be developed.

This is made difficult by the tendencies of the agro-industrial model to occupy the food 'quality' agenda and introduce new 'clean' technologies which some would regard as a branch of weak ecological modernisation.

4.2 Science and Knowledge

The scientific notion of agricultural sustainability has enfolded various research initiatives and theoretical approaches in rural research, which critically address the role of knowledge, science and (bio-)technologies. Again, there has been a paradigm shift in rural sociology following theoretical developments in sociology of knowledge. Until the 1980s the orthodox perspective on science and society has been the diffusion model of research. According to this model scientists develop new technologies in their (publically funded) laboratories and fields, and educate extension agents who disseminate them to farmers. In addition, scientific knowledge is disseminated through schools and universities. Indeed, the American model of rural sociology, which has shaped international rural research, has been a part of this system. The diffusion model that is now applied in many technological fields and marketing research is deeply grounded in rural research (Rogers 2003: 43ff.). The diffusion model has been criticised on many grounds (e. g. Busch et al. 1991: 43f.), independently from wider theoretical developments in sociology of science, in particular, in face of the failure of technology transfer to developing countries, negative environmental impacts and the search for alternative models of agricultural production, and the privatisation of agricultural research and changing university-industry relationships in course of the rise of agro-biotechnologies. The search for alternative, sustainable models of agricultural production has from its very beginning been connected with a critique of scientific knowledge and a positive re-evaluation of local (lay, practical, indigenous) knowledge.

In a seminal paper Kloppenburg (1991) highlighted that the environmental critics have successfully revealed the link between the modes of agricultural production and environmental damages. This has created a consensus that agriculture should change somehow. "But the extent to which this alternative future will be change in kind rather than degree (...) will depend in significant measure upon whether agricultural science itself is reconstructed or simply reproduced" (Kloppenburg 1991: 523). He argued that it is insufficient only to de-construct conventional agricultural research. Instead agricultural research has to be reconstructed, that is that farmers have to be brought "back" into knowledge production for agriculture. The significance of different types of knowledge has been a continuous theme in rural research. Marsden recently described European rural spaces as "battlefields of knowledge, authority and regulation" (Marsden 2003), and has outlined a "sociology of rural knowledge" (Marsden 2006). The so-called Wageningen School of Agricultural Sociology similar to social anthropological studies (Salamon 1980; Gray 1998) always and very strongly emphasised the "knowledgeable actor" and the diversity of farming styles (van der Ploeg 1994; 2000; 2003). Most recently research in the context of the

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¹ Often cited publications are Latour/ Woolgar (1979), Knorr-Cetina (1981), Latour (1987) and Callon/ Law (1989).

European CORASON project (see the special issue in Sociologia Ruralis 48 (3) 2008; Bruckmeier/ Tovey 2009) has approached sustainable development from such a "cognitive perspective" also referring to a newer socio-ecological school of thought that is arguing that sustainability research should involve processes of co-production of knowledge, in which stakeholders interact with experts in the process of defining research questions and what would count as relevant evidence to answer these (Berkes/ Colding/ Folke 2003).

While the former debates highlight the power imbalances between scientists and lay actors, and have tried to raise the esteem of local actor's knowledge further a line of research has asked, who defines agricultural research questions? Most of such a political biology has focussed on breeding and less on other technologies and technological innovation, which are also relevant to agricultural production (like mechanics, ICT, etc.) (e.g. Busch et al. 1991; Goodman/ Redclift 1991). One reason for this is the fact that breeding has been a core activity of (public) agricultural research, thus research has been defined in the context of food policies. Also, the use of modern biotechnologies (hybridization, genetically-modification) has been accompanied by a process of institutional restructuring, in which farmers continuously have lost influence. The most important feature of this process has been the granting of intellectual property rights to hybrids and genetically modified organism (GMO) and liberalization of world markets. Consequences of these processes are (among others) the privatization of breeding, and concentration among breeding companies, a shift from power in the definition of research agendas from national states to those few global companies, and a redefinition of university-industry relations towards a kind of "academic capitalism", that is the science community's dependence on private industry funding, the development of proprietary technologies and so forth (Busch et al. 1991; Goodman/ Redclift 1991; Glenna et al. 2007; Lotter 2009).² Further, knowledge, science and new (bio-)technologies have also been studied with regard to their impact on farm structures (see section 2).

4.3 Strategies for Sustainable Rural Regulation

The sustainable rural development paradigm basic request for a model of sustainability that includes primary producers as part of the solution rather than as a threat, which has to be controlled, may be considered mainstream among rural sociologists. The perhaps most comprehensive strategic approach has been developed in the so-called Wageningen School. It sees a disruption of "the organic relations between agriculture, society and nature" (van der Ploeg 2006). That is that the process of agricultural production becomes removed from the once self-evident parameters entailed in nature, society and the interests and prospects of the involved actors. Instead they are re-oriented towards new system requirements above all the logic of financial capital embodied in processing and trading companies as well as the need for extended state control. Agriculture has been captured in a double squeeze of agriculture: two intertwined processes of appropriation and redistribution. Firstly, redistribution between agro-industrial groups and those directly involved in primary production (externally) and, secondly, redistribution within the agricultural sector towards a small growth pole within the

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² For further discussion see also Ervin/ Glenna/ Jussaume (2010) and Konefal/ Busch (2010).

agricultural sector. The system is based on the overexploitation of nature and the introduction of cheap, often illegal labour (see also Goodman/ Redclift 1991). A reversal towards sustainable agriculture would require three patterns: repositioning, regrounding and self-regulation. Repositioning implies a redefinition of interrelations between agricultural production and consumption. Extended regrounding means a re-localisation of agricultural production and re-introducing ecological capital as bedrock for agricultural production. This includes the reference to local knowledge. Self-regulation includes various elements such as re-introducing social capital into agricultural production.

This approach is similar to the key elements of a sustainable development mode of regulation explored by Marsden (2003) such as associationalism, working by social convention rather than technical regulation, networking, retro-innovation, and ecological entrepreneurship.

5 Global Food Systems

One major theoretical development of a critical rural sociology in the 1980s has been the socalled new political economy of agriculture. In his review Buttel (2001) has summarised a number of different approaches, such as world-historical food regimes, commodity chain/ system analysis, regulationist studies etc., under this heading. In the early 1990s this has lead to a series of publications addressing rural and global agro-food system restructuring. The Agrarian Political Economy of the 1990s has

"consisted of four major foci of theory and research: (1) world historical and world-systemic analyses of agri-food systems (...), (2) global agri-commodity chains/system analysis (...), (3) agri-food political-sociological neo-regulationist studies (...), and (4) neo-Latourian actornetwork analyses of agri-food systems" (Buttel 2001: 171)

(although he acknowledges an strong overlap of the latter two approaches in particular in the work of Terry Marsden).

Buttel sees a Sociologia Ruralis paper by Friedmann and McMichael (1989) as a conceptual turning point away from a former critical new sociology of agriculture of the 1970s and 1980s, which on the one hand remained primarily in Marxist/ class categories, and which as largely focussed around the related issues of the pattern of agrarian structural change and the agrarian question. Friedmann and McMichael (1989) addressed agricultural regulation by referring to Aglietta's (1979) concept of historically contextualised food regimes. The Regulation approach has its origin in work undertaken by French economists. In short, it stressed the ways in which norms of production and consumption were socially and culturally produced. The early Parisian regulationists developed four distinctive concepts (Jessop 1997; Goodwin 2006): (1) An industrial paradigm, which refers to the dominant technical and social division of labour; (2) an accumulation regime, which refers to complementary, anddurably reproduced pattern of production and consumption; (3) a mode of regulation, that is an ensemble of rules, norms, conventions, patterns of conduct, organisational forms and institutions; and (4) when the former three complement each other over a period of time, a development model.

The most prominent model is Aglietta's characterisation of Fordism, which is seen as having to been come into crisis in the 1970s, and it has been suggested that societies are entering into a post-fordist era. This Fordist/ post-Fordist dualism has had some appeal also for rural studies and has been replicated, for instance, in the already mentioned concept of productivism/ post-productivism. Friedmann and McMichael (1989) argued that each period of capitalist accumulation creates a different international system of food production. While the post-War II food regime was based on Keynesian (national) state regulation, and

agricultural subsidies in the U.S. and Western Europe, the (at the time) upcoming post-fordist regime is based on state deregulation and growing international free trade.

Without going into detail into the analyses of the time (see e. g. Marsden/ Lowe/ Whatmore 1992; Goodman/ Redclift 1991; McMichael 1994; Symes/ Jansen 1994; Goodman/ Watts 1997), it is intriguing with regard to the main question in this paper to compare two of edited books in this research area published in 1994 ("The global restructuring of agro-food systems" edited by McMichael 1994) and in 2005 ("Agricultural Governance" edited by Higgins/ Lawrence 2005). The focus of the 1994 book is entirely dealing with political and economic changes affecting the global food order, nation states and forces that are behind those changes. Yet, the volume does not include a single paper that addresses environmental or nature issues. One paper discusses the implications of biotechnologies, but only with regard to economic flexible specialisation. Only 11 years later the focus has shifted fundamentally. The book abstract of the 2005 begins as follows: "Food security and sustainability are arguably the most important issues facing the agri-food sector at the beginning of a new millennium". The book includes papers about organic commodities, agri-biotechnologies, agri-environmental conflicts about governance, consumption, animal welfare and agri-food risks. It is noteworthy that some of the authors (Lawrence, McMichael, Marsden) have contributed to both volumes. Also, in another respect there is a striking difference between both books. The 2005 book is a clear expression that agri-food theory is today predominantly characterised by only the latter two of the afore mentioned traditions, these are the political economy approach through the use of a modified French (neo-)regulation theory, which has incorporated also elements of convention theory (Boltanski/ Thevenot 2007) and the application of Latour's Actor-Network analysis.

These changes in topics reflect conceptual developments as well as unforeseen dynamics in the new international food regime. Busch and Bain have noticed a tendency "to use oversimplified binary concepts of Fordism and post-Fordism. (...) From this perspective, we have simply moved from Fordist regime of state regulation to a post-Fordist regime exemplified by state de-regulation" (Busch/ Bain 2004: 339). However, they argue that in contrast a process of both private and public re-regulations can be observed. A major cause for these developments is a perceived "quality turn" of consumption.

Indeed, consumers and consumption practices have become core themes in the theoretical developments in rural sociology at the turn of the century. This marks a difference to the earlyregulationist conceptualisation of food regimes. In 1997, in a paper about the Organic Farming movement in Ireland, Hilary Tovey revealed that a

"curious, if implicit, division of labour seems to have established itself within sociology with regard to food. On one side are rural sociologists who study the organization of agriculture and its variable local forms, and on the other, sociologists of food who locate themselves firmly within the sociology of consumption" (Tovey 1997: 21).

The emergence of

"alternative agricultural movements, such as the movement for organic farming, demand that we somehow overcome this consumption/production divide in our thinking about food. From such movements rural sociologist can learn to look at food in a new way, as something whose

meaning and value is not exhausted by its nutritional content, its economic costs or the political agreement underpinning its production (...), but as a way of live" (ibid: 23).

Tovey's paper has probably been not the first paper to address this separation of sociological disciplines and its inadequacy for the analysis of modern rural movements, but she has probably been the first to address it so clearly. Thus, her paper marks a watershed in rural sociology, which after developing a more inclusive approach to the 'rural' and developing a more sophisticated understanding of nature also extended its focus from the sphere of agricultural production to the sphere of food consumption. However, while Tovey's analysis conceptually analysed organic agriculture as a social movement, the cited text has been an entry point to the analysis of (alternative) agro-food networks.

In line with the general theoretical developments in rural sociology there have been a couple of attempts to extend the commodity systems analysis framework by "adding consumption" as an additional level of analysis. Perhaps, the most prominent analysis of such a kind, at least in the sphere of rural sociology, are the Systems of Provision (SOEP) advocated by Ben Fine (1994; 1995) and the work of Jane Dixon (1999; 2002), who has extended the Commodity System Analysis (CSA) framework. In principal, these approaches argue that a shift is necessary from a horizontal analysis of activities to vertical analyses of particular commodities (or groups of commodities). In a major review of the production-consumption debate Goodman and DuPuis (2002) acknowledge that through such extensions consumption "has arrived as a theoretical category". However, since this kind of analysis is not about consumption and consumption practices "the consumer emerges only to disappear in a production centered framework" (ibid: 7). The authors cite a number of further rural sociological studies, in which consumers and consumption practices "appear as common tropes in a literature that 'uses' consumption to talk about production" (ibid: 8).

In this context, Stewart Lockie and co-authors in particular have strongly proposed ANT as an analytical approach (Lockie/ Kitto 2000; Lockie 2002). Indeed, they argued that earlier applications of ANT in rural research "deploy a novel language – borrowed from ANT – without the ontological shift underlying ANT" (Lockie/ Kitto 2000: 10). They found a tendency to equate the influence of corporations with "the capacity to exert direct control. This has led to an analytical emphasis on the material resources (...) and the relative neglect of symbolic resources utilized and the negotiation that must take place over the meaning of those resources" (ibid). Also, while SOEP and CSA tend to search for the locus of control in agro-food systems the appeal of Actor-Network Theory (ANT) in the analysis of agricultural food systems is "that it provides the conceptual tools for deconstructing 'powerful' actors, such as the state so they may be viewed as contingent networks of disparate actors and agencies" (Cheshire/ Lawrence 2005: 36).

Marsden has passionately responded to this debate. He argues that although

"ANT has liberated us from many of the restrictive dichotomies and assumptions of the past, allowing other types of agents (such as natural objects, technologies, artefacts, and particularly

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³ There are some notable exemptions. One of which is the book by Goodman/ Redclift "Refashioning nature" (1991).

knowledge) to be considered in the analysis of social action, it remains methodologically strong but substantively weak. That is, it may help and guide us as to what to study and how to study it, but it does this, quite purposely, without making any assumptions about how we interpret what we eventually find" (Marsden 2000: 24).

Pointing at the "farming style" work (van der Ploeg 1994; 2003) he argues that the embodiment of nature as a key actor is essential, however, it "does not necessarily need actor network theory to do this" (ibid: 23).

However, despite this conceptual diversity, the significance of consumers and consumption practices is today widely acknowledged in the agro-food system research. Indeed, as mentioned before, the "quality turn" has become a major determinant to understand the regulation of the emerging global food order. The regulation is characterised by a changing role of the nation state due to the emergence of transnational agreements, international law and transnational bodies (McMichael 2009; Busch/ Bain 2004), and the increasing importance of new 'privatised' forms of agricultural regulations through self-regulated industry standards, public-private partnerships and even directly through the control of (large) companies as a consequence of the neo-liberal policy agenda (ibid) as well as citizens' perception that the state has failed to deliver the outcomes they desire (Woods 2007).

It is an "irony of free trade" that the elimination of tariffs and quotas, which the World Trade Organisation (WTO) has foreseen and implemented over the years, had the "potential to open a Pandora's box of nontariff trade barriers" (Busch/ Bain 2004: 325). To restrict this, a series of agreements such as the Sanitary and Phytosanitary Agreement (SPS), the Technical Barriers to Trade (TBT), the Agreement of Trade-Related Intellectual Property (TRIPs) and so forth were established. Some of the agreements make direct reference to voluntary standards. Also, inconsistencies and contradictions as well as gaps in the regulations have been a pressing issue for NGOs, but also the private sector. The rise of the private regulatory system is going along with a shift of power from processors to food retailers. But it is not only that food retailers have grown rapidly, but food retailing globally has become more oligopolistic. This is going along with a shift from "price competition to nonprice competition, where variety, convenience, quality and year-round supply are as important or even more important than price" (ibid: 329). This search for variation has shown to be an entry point for NGOs to set new standards (e. g. animal welfare, fair trade, environmental friendly production) and reach agreements with food retailers and processors.

6 Rural Research and Social Ecology: Some Conclusions for PoNa

In this section, after reviewing some major trajectories in rural research, I want to pick up the two main questions posed in the introduction. Firstly, it is evident that during the last three decades rural research (and rural sociology in particular) has "greened" similar to other fields of social sciences, and even has contributed extensively to the analysis of nature-society relations. Indeed, in particular prominent American rural sociologists in many cases also are or have been well known environmental sociologists (e. g. Buttel, Freudenberg, Bell). In cause of these trends new topics have been integrated into the rural research agenda, but rural research has undergone a major revision of its conceptual frameworks. Some of the most prominent conceptual 'turns' have been explored in the previous sections:

- The inclusion of nature-society relations as a core theme of rural research.
- A revision of the concept of rurality, and the development of relational understanding of rural regions.
- An extension of the analytical perspective beyond food production towards food production-consumption relations.
- The development of a perspective of global food regimes and global-local interactions.

Insofar, rural studies have a lot to offer for socio-ecological research in general and PoNa research topics in particular, and vice versa. The specifics of rural research may be seen in a normative position, which is taken by many rural researchers, rather than in concepts applied in research. As outlined before, rural researchers tend to act as 'engaged scientists' (Lowe 2010), which are inclined to see the improvement of rural livelihoods. Thus, rural researchers are often critical to some schools of environmental modernisation, which sometimes tend to ignore social impacts on rural actors.

The comparative research approach of PoNa has to acknowledge the specifics of different rural contexts in Poland and (both parts of) Germany. It also opens the possibility to study aspects of those broader trajectories, which are rarely explored, in a comparative way. Germany and Poland differ considerably both culturally as well as with regard to the historical development path like the significance and speed of industrialisation, the nation state formation and, in particular, the post-war history. At the same time the history of both nations is closely intertwined. These different historical developments shape the ways in which rural areas in both countries are affected by the globalisation processes, the environmental issues they have to tackle, and nature views of the populations as well as the ways nature regulations are institutionalised. Some authors have argued that Poland can to a

large extend be seen as part of a "green ring" of European nations. While in the core industrial countries industrialisation produced a fairly rapid reorganisation of their class structures and institutions, in the "green ring" agrarian interests, groups, culture and concerns retained considerable societal significance until the late 20th century (Granberg/ Kovach/ Tovey 2001).

The post-war world order has created a distinct territorial separation within both countries. Germany has been separated in an Eastern (socialist) and Western part. This has created structural and cultural distinctions that shape the ways in which rurality is perceived and reconstructed. The Eastern parts of both countries suffered form expulsion and resettlement after the Second World War. Today's rural Poland is to large parts placed in a territory, which was part of pre-war Germany, and is settled by a population that has been expelled from former Eastern parts of Poland. This "former German territories" persist to be structurally (and to some extend also culturally) distinct from other rural regions in Poland. Thus, both countries show a huge structural heterogeneity (e.g. with regard to farm structures) of rural areas.

The symbolic significance of rurality and peasantry for national identities and in the public discourses of both countries has been affected by the post war era. The exaggeration of peasant and rural symbolism during the Nazi regime has discredited it in both parts of Germany after 1945, and has fostered a rather technocratic modernising view in agriculture and rural planning. It is an irony that some of the main ideas underlying such technocratic approaches have been developed during the 1930s and, like the concept of central places, have been prominently been applied by the Nazi regime in its imperialistic policy to annex large parts of Central and Eastern Europe ("Generalplan Ost"). Thus, in its early stages green ideas had to emancipate from some of its national-socialistic roots. The rural has almost completely lost its significance in the German political discourse until the 1980s. The rural has been almost identical to agriculture. The increasing importance of environmental policies has not changed this. The re-emergence of the "rural" in German political discourses is a fairly recent phenomenon. It is closely related to neo-liberal agenda to reduce the welfare state and investment into public infrastructure.

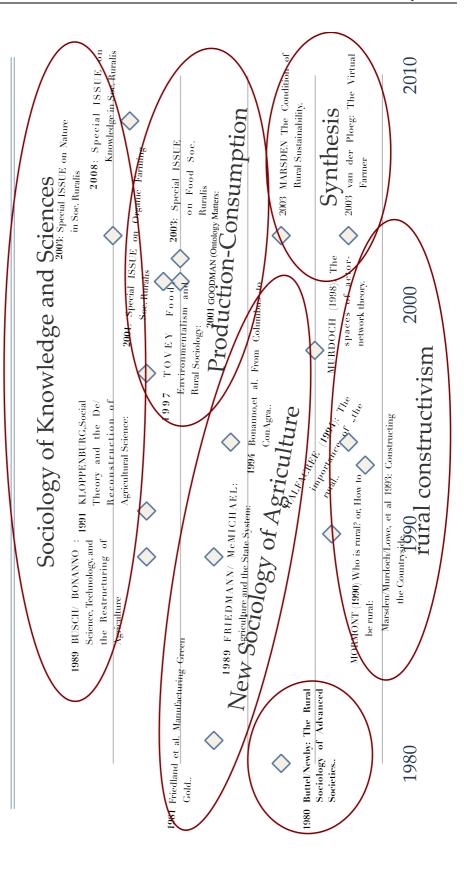
In Poland the symbolic significance of peasant culture in everyday life and also in the framing of political discourses appears to be rather different. Peasant resistance (e.g. against collectivisation under socialism) forms a significant part of a Polish patriotism and national mythologies, which is signified by resistance against dominant political powers (historically Germany and Russia) and striving for national. Recently, Poland has envisaged tremendous public debates – in particular after the national tragedy from Smolensk in April 2010 – in which conflicting definitions of Polish patriotism occurred (Garsztecki 2010). A central element of this debate is also the redefinition on the relations between the Polish state and the Catholic Church. It is trivial to assume that these differences in the perception of agriculture and the rural will also be shape and be shaped by nature views, patterns of food consumption and genetically modified organism.

The institutionalisation of environmentally policies is closely linked to EU membership in both countries. Thus, environmentalisation, in Buttel's terms, differs due to the time of accession to the EU. While (West-)Germany as a founding member of the EU has had a strong impact on the formation on this EU policy arena, Poland has to adopt many already prescribed regulations and solutions as part of the Code alimentaire. Thus, it appears to be likely that existing environmental legislations and political practices may more often been in conflict with Polish "ways-of-doing" or that the implementation will follow a different rationale. However, it is likely that institutionalisation and practices will not evolve independent from each other. Open borders, intensive trade relations, mass media and a common institutional framework in the context European allow for intensive interaction of actors and free flow of ideas, and money. New actors from the neighbouring country appear in rural areas as investors, workers, environmentalists and so forth. A project such as PoNa has the chance to highlight these new emerging realities.

Finally, I will add some very general remarks on rural sociology in both countries. Earlier I mentioned that Polish rural sociology has a very specific history (e. g. Kaleta 2006; Gorlach 2006). Firstly, different to the dominant American model it has evolved as a sub-discipline of sociology. Secondly, Polish rural sociology has unlike other socialist countries survived under socialism, and, although conceptually constrained, has produced substantial empirical research. However, my impression is, based on the collaborative, comparative work on German and Polish rural sociology (Laschewski/ Kaleta/ Gorlach 2008), that despite national specifics the major themes and styles of work are surprisingly similar to Western rural sociology. Also, according to the self-assessment of Polish rural sociologists addressed in this work there is currently a feeling that a paradigm shift is required – similar to the major paradigmatic shifts in international rural sociology. Since many Polish rural sociologists are well aware of international debates, which are compiled in this paper, I can only assume that those may serve as templates for such a shift. That is putting the quest for sustainability at the core of rural research – this is a socio-ecological research agenda.

In Germany rural sociology has almost completely lost its institutional base and is about to disappear. While geographers have recently re-identified the rural development as "their" domain, environmental sciences have captured environmental issues as theirs. Thus, rural development and environmental issues are studied in separated institutional context, which take little notice from each other. Perhaps, socio-ecological research will offer a way to connect these issues again.

Rural Sociology Timeline



7 Literature

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Project and Working Group

The junior research group PoNa is one of at large twelve junior research groups with a focus on Social-ecological research (SÖF), launched by the Federal Ministry of Education and Research (BMBF). PoNa is located at Leuphana University Lüneburg, Institute of Sustainability Governance (INSUGO)

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Project Goals and Research Questions

The interdisciplinary research project "PoNa – Shaping nature. Rural development and agricultural biotechnology between criticism and vision" focuses on the question of how nature and the manifold relationships between nature and society are shaped by politics. Based on the concept of societal relations to nature, the research project's objectives are to understand social-ecological crises and to compile knowledge that contributes to transformation processes towards sustainability.

PoNa aims at describing contents, structures and processes appropriate to a sustainable shaping of societal relations to nature. Hence PoNa is exemplarily targeting the two policy areas of rural development and biotechnology in agriculture and is organised as a comparative Polish-German research.

Project Design

The junior research group PoNa is divided into two sub-projects: 1. SP: Rural development and 2. SP: Biotechnology in agriculture. Q-PoNa presents the interface of the two sub-projects: In this working group, basis principles shared by all members of the project such as the common conception of sustainability – are developed.

PoNa aims at qualifying its research fellows. The research project includes four doctoral and two habilitation theses.

1. Sub-project: Rural development

Rural areas are subject to various socio-economic transformation processes. Of the different policies affecting rural development, EU agricultural policy is especially important to the development of rural areas. This policy oscillates within the limits of a competition orientated approach and a multifunctional agriculture, which tries to sustain cultivated landscapes and typical rural modes of operation and life.

2. Sub-project: Biotechnology in agriculture

The use and establishment of biotechnology in agriculture is extremely controversial. It poses fundamental, divisive questions as to which agriculture, which nature, which food, feed and

energy production a society wants to shape with which technology. Results of discussions and decisions towards these questions depend on creating spaces for negotiation, which neither there nor at other levels in the political system however do currently exist.

Central research questions

- What kind of policies and politics of shaping nature can be identified in political processes, programs, strategies, etc. concerning rural development and agricultural biotechnology on the EU level, as well as on national level in Germany and Poland?
- Which positions can be compiled, concerning the understanding of sustainability taken as basis by PoNa? Are questions of power relations, gender issues, precautionary principles, etc. taken into account?
- Which conflicts are ensued for rural development by differing and conflicting positions? Which trade-offs arise from the side-by-side of an agriculture which cultivates genetically modified crops and an agriculture which is free from genetically modified organisms (GMOs)? How are these conflicts being dealt with?
- What kind of approaches and activities afford a sustainable shape of nature as a part of the socio-economic development of rural areas?

Author and Editors

Dr. Lutz Laschewski is a rural sociologist and agricultural economist. He has been a researcher and lecturer at the Universities of Halle a. d. Saale, Newcastle upon Tyne, Berlin (Humboldt) and Rostock. The research he is best known for is about rural and agricultural change in East Germany. He is a member of the board of the rural sociology section of the German Sociological Society and has also served as an Executive Board member of the European Society for Rural Sociology and the Editorial Board of Sociologia Ruralis for several years. He is currently working as a freelance consultant and lives in Neustrelitz, a small rural town in the Northeast of Germany.

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