MICRO-DYNAMICS IN THE RURAL SPACE OF CENTRAL PARANÁ A CONTRIBUTION TO REGIONAL RURAL GEOGRAPHY

Wolf-Dietrich Sahr - Universidade Federal do Paraná (UFPR) e Faculdades Guarapuava wolf-dietrich.sahr@urz.uni-heidelberg.de

The recent revival of research studies on small-scale agriculture in Brazil has given rise to a considerable number of community studies in Brazilian anthropology, sociology, regional history and geography (ex. WOORTMANN/WOORTMANN 1997, TEDESCHO 1999, FRAXE 2000, BLOEMER 2000, among others). Little research, however, has been done on the regional networks of agrarian systems, though the question of regional dynamics is of major importance for the understanding and reconstruction of spaces under the conditions of postmodernity (see Di MEO 1998, HAESBAERT, 2004).

For this reason, this research focuses on spatial networks in rural space referring, more specifically, to the rural space of Central Paraná (Brazil). It first proposes a new conception of spatial formations, which might be valuable for the discussion of agrarian questions in general. Then, it defines specific spatial patterns that have developed in Central Paraná under the influence of social and economic forces in the research region through different historical periods and in different parts of the region. And finally, it investigates the internal logics of some types of rural communities focusing mainly on the role of rural actors and their contextualization within their economic, social and cultural background.

Agrarian space – an epistemological introduction

The theoretical background of this research is based on the theory of structuration proposed by Anthony GIDDENS (1984), and the theory of everyday regionalization introduced by Benno WERLEN (2000). Both conceptions refer to an action-based concept of "geographical settings" and "regionalization sets" produced by the dialectic relation between action and structure, in our case between rural activities (ecological transformations, production, commercialization, and social transformation) and rural structures (ecosystems, knowledge, commercial conditions, and the field of social relations).

In allusion to Ernst CASSIRER's idea of the philosophy of "symbolic forms", we propose a similar concept denominated "geographical form", which helps to analyze agrarian space as a complex corpusof ideas, logics, values and knowledge in general and its specific material contexts mediated by social action. Such an approach is very close to what Milton SANTOS describes as "geographical social space", when he says: "Law, costumes, the family, all are inducing or are related to a specific form of geographical organization" (SANTOS 1997, 61). As such, "geographical space" can be perceived as a hybrid construction between immaterial "social content" and material "spatial form" (SANTOS 1997, 88).

CASSIRER gives different examples of "symbolic forms", like language, religion, techniques, law and science, among others. But in contrast to the traditional understanding of the term "symbol", which

only refers to non-material structures of significance, CASSIRER uses this expression to describe a relation between physical elements and ideas. As such, symbolic forms are produced in specific configurations of mental and physical human action, and result in a variety of spatial expressions (CASSIRER 1994). However, the agent of these spaces never is individual action, but human action in a generic sense, in German: "*Tun*", or "agency" in the terms of A. GIDDENS.

Agrarian Space, as such, is formed by a complex of action settings of which each one has its internal logics. These logics, however, are not similar among themselves. Some refer to ecological systemic relations, others are formed by social relations. A different perspective reveals agricultural systems as schemes of cultural representation, and others are produced by technical rationality or economics. In spite of this diversity, all logics are united through social action so that space, as a product of social action, has to be considered as multi-dimensional and permeated by all individual logics. As such, the epistemological interpretation of agrarian space is not necessarily identical with its empirical interpretation.

In contrast to CASSIRER's and GIDDENS' reflections on agency in an empirical sense, space can also be perceived epistemologically. Here, M. FOUCAULT's approach of spatialization proposed in "O nascimento da clínica " (1961) is very convincing (see SAHR 2003). According to thos approach, three different dimensions can be differentiated:

- 1. Agrarian space is a set of ideological formations e ideas, a semiotic field that helps to understand the inter-relations and possible manipulations of the environment. Its representations propose, project and interpret agricultural activities.
- 2. Then, agrarian space is a complex of human and non-human activities where material forms are transferred and transformed through economic rules, productive conditions, social rules, and "nature", putting the "agriculturist" in the middle of a field of varied actions. Such a concept applies to the understanding of agro-ecosystems as a dynamic system of material transfer and farming systems as a socio-geographic expression of agricultural activities.
- Agarian space is also defined through a wide range of territories of power and its institutions. This includes the mastering of natural conditions, the institutionalization of agriculture in the society and the organization of a political field with its micro- and macro-politics for agriculture.

Again, the unifying element between these epistemological dimensions is human action (WERLEN 2000). And again, it must be mentioned, that human action is meant here in the sense of "agency" (GIDDENS).

Magmatic typologies of Agrarian space

Surprisingly, agrarian geographers in Brazil, as well as elsewhere, have sparsely discussed the epistemological characteristics of their research object and the difference between empirical and epistemological space (cf. FERREIRA 2002). The recent discussion on "family agriculture" (*agricultura familiar*) in Brazil, however, has revealed that a profound comprehension of agrarian space cannot be

brought forward without a reflection on agrarian space as an epistemological and, therefore, cultural construction.

While classical approaches were at least aware of this diversity (e.g. WAIBEL), more recent investigations, mainly in the sixties and seventies, have been restricted - under the influence of the paradigm of modernization - to functional, economic and political epistemologies, expressed in a unifying language, either in quantitative, system-oriented or critical terms. Though some new classifications of agricultural systems arose in the eighties favouring a multiperspective view on the agricultural environment, like RUTHENBERG's famous "Farming systems in the Tropics" (1980) or in the actual typology of farming systems of the FAO, these approaches also clearly neglect the question of "spatiality" as an epistemological problem.

Therefore, this research tries to find an epistemological position on agrarian space that accepts the different forms of agrarian spatialities. This includes ideas from Physical Geography due to the specific characteristics of agrarian systems as semi-natural systems, from Cultural Geography due to the fact that perception and knowledge are culturally diverse, from Social Geography due to the highly diversified spectrum of socialities in rural communities, and from Economic Geography due to the specific incorporation of land, geographical location, and differentiated market integration as economic elements.

When the discussion comes to "family agriculture", primarily the cultural diversity of agriculture calls attention. As family agriculture unites both social reproduction and economic activity, this goes far beyond the systemic logics of agricultural productivity in a homogeneous perspective (see LAMARCHE 1997, 18). In Brazil, such an observation has initiated a broad debate on the Brazilian *campesinato* and has forced sociologists, anthropologist and geographers to recognize cultural diversity as a decisive factor of agricultural systems (WANDERLEY 2001), including their social activities, and even exceeding the strict sense of agriculture, e.g. the concept of multi-occupational flexibility (*pluri-atividade*) (SCHNEIDER 2003).

Such a magmatic perception of the empirical agrarian space requires a new epistemological perception of space, which permits the cruising of classical differentiations. Therefore, it has to put human agency into the centre of the approach making use of sociological "ideal types", which M. WEBER had introduced as analytical epistemological categories into sociology. Such an approach uses arbitrarily the typological fixation of model situations to reveal the functioning of internal logics and transformations.

This is not new in Geography. One of the most famous forfathers of Agrarian geography, Leo WAIBEL, had used such a methodology already in in his investigations on the agricultural "economic formations" (*Wirtschaftsformation*) of the Sierra Madre in México. There, he found a duality of Amerindian small farmers systems and the Estates of the European hacienda owners which disposed of a system of cattle grazing and milk-production (WAIBEL 1933). Beyond his empirical findings, the typical structural duality of Latin America between estate agriculture and small holders can be identified. This duality refers as well to the findings of WAGLEYS idea of "*Plantation America*" (WAGLEY 1976) as it points to Eric WOLF's research on the *campesinato* (1976), clearly demonstrating that both formations are based on completely different internal logics.

The history of Agrarian space in Paraná

Several case studies, performed by the author, and a careful bibliographical research on the evolution of agrarian space in Central Paraná do permit a thorough ideal-type insight into the dual spatial logics of Brazil, referring to the region of Central Paraná. By Central Paraná we do understand a region which goes from the areas around Curitiba on the First Planalto, which originally had been covered by a transitional forest type of "Mata Atlântica" and "Araucaria Forest", the Second Planalto with its duality of "Campos" vegetation and "Araucaria Forest", and the Southwestern part of the Third Planalto of Paraná with a similar vegetation. In the whole region we have followed up the ecological, social, economic and cultural logics since the 1550s, when the Jesuits entered into the Northwestern part of Paraná.

In this first period, the **Jesuitic agrarian system** is part of a huge economic installation in the Lower Paraná and Paraguai River basin of South America, whose origins go back to 1607, but abruptly come to a halt in 1767, when the Jesuits are expelled from South America. It has a strong influence from Iberian European agriculture in the end of the Middle Ages and thus reproduces the duality of the feudal land system, with its combination of large estate lands and small rural communities. The agriculture of this system is highly diversified, including different ecological and socio-economic logics. While cattle grazing predominates in open lands, mainly based on the free roaming of cattle in the Pampas grasslands, smallholder agriculture is taught to Amerindian Guarani communities and therefore is practiced on a extended family basis along the secondary tributaries of the main Paraná river basins (Corumbataí, Ivai and Tibagi). Thus, the natural ecosystem of the forests transformed into an adapted agro-forestry-system with Indian shifting cultivation and cattle raising activities (CROCITTI 2002). Archeological evidence has shown that this kind of agriculture prevails in nearly all of the larger river basins on the Third and Second Planalto of Paraná, thus enabling the sustaining of hundreds of thousands of Guarani Indians. Only when the Bandeirantes invasions from São Paulo exterminate the "Holy experiment", early in 1630s, the Jesuits and Guarani Indians retreat to Paraguay, Northern Argentina and Rio Grande do Sul. Here, they continue their agricultural production.

Agrarian systems of Central Paraná in the 18th century

While the Jesuitic activities clearly disappear from for the researchers' perception in the 18th century, knowledge fragments of this system may have survived with some lonely *sertanejos* who continue in the woods on a subsistence basis. Their areas are only touched again, when the traditional open landscape of the South Brazilian *Campos* attracts the attention of the landlords of São Paulo who want to link their activities with the Jesuits and other religious orders in Rio Grande do Sul. Cattle raising now has become much more controlled then before, with walled openfields on the recently built *fazendas* along the new herd-way from Viamão to Sorocaba, This herdway is officially inaugurated in

1730 as Royal Road (*Caminho Real*) and crosses the Second Planalto on its open Campos areas permitting the transport of huge amounts of cattle and mules. It hereby introduces a new social formation based on slave labour and associated Indian and Luso-brazilian *vaqueiros* (RITTER 1980, RODERJAN 1992).

Like the jesuitic system, also this system is characterized by a dualistic and supplementary logic, as small communities of Luso-Brazilians or even refugee slave communities appear at the forest edges of the *Campos* providing food and staple crops for the *fazenda* population, and thus gives way to an integrated *Campos Fazenda System*. Both agricultural logics (fazendeiros and caboclos) are linked to extensive exploitation.

A need for intensification and more agricultural control arises in the second half of the 18th century, when small towns appear on the Western margin of the Campos region, at the limit to the forest areas, like Lapa, Palmeira, Ponta Grossa, Castro, Jaguaraiva, etc. This induces the introduction of a local market-orientation of small-scale agriculture based on a *Sitio Production System*. Sitios are owned by individual Luso-Brazilians who dispose of 1-4 slaves on their holdings, and documentary evidence shows that this type of agriculture is performed in an ecologically more intensive and integrated way, causing a major transformation of the forest edge (LOPES 1999).

Going further into the forests, the first *faxinais* appear during this period. *Faxinais* are settlements of caboclos, whose origins are still open to speculation (NERONE xxxx). They are usually located at the bottoms of small valleys and include diversified cattle raising (cows, horses, mules, porks, sheep, fowl) and plant production and resemble very much the Amerindian-Jesuitic production system of the Guarani Indians. Their communities show strong religious and communitarian characteristics and mostly practice extensive, extractive and diversified agriculture. Usually, their grazing grounds are located in the forest close to a small ravine, while the tops of the neighbouring ridges are sporadically deforestated to plant crops (SAHR/LÖWEN SAHR, 2003; LÖWEN/IEGELSKI 2003). Thus, also the 18th century is characterized by the dualism of large and open estates (fazendas) and small forest communities (faxinais).

Agrarian systems of Central Paraná in the 19th century

By the middle of the 19th century, this duality comes under pressure. First, the introduction of new technologies of transport (navigation, railways etc.) and the new control of the world financial system by England terminates the Gold rush in Minas Gerais and Goias. Thus, the need for mules and cattle decreases rapidly. However, the discovery of a large market for Mate in Argentina turns the attention to a new market crop, and makes the old *fazenda* owners procure the forest edge where the Mate bush is abundant. This pushes the traditional *caboclos* further West, so that we find in places like São João de Triunfo, which is located at the edge of the Campos region of Lapa, cattle producing logics entering into the Araucaria forest, accompanied by the intensification of Mate production. Already existing *caboclo* communities are submitted to this new *Forest Fazenda System* in the Southwestern part of the second Planalto. By now, te traditional *caboclo* life-world becomes partially integrated into

the market production logics via a a hybrid construction, which combines intensification methods and the traditional extensive forest agriculture.

By the 1870ies, and mainly from 1880 until 1920, rural colonization schemes of Russian-German, German, Italian, Ukrainian and Polish immigrants are established on the old run-down fazendas along the herd-way or are penetrating the Araucaria forest of the Third Planalto. Usually, this colonization is performed by private and public settlement schemes, in so-called *colonias*. They cut down the old sertão with their linear *picadas* and *linhas* rowing up a large number of individual properties along their roadsides. These picadas are usually situated on the top of the ridges between the river valleys and, therefore, clearly transform the upper parts of the valleys by deforestation and plantations (MARTINS 1989). Thus, the spatial logics of the Colonia System are contrary to the settlement logic of the Faxinal System, squeezing a semi-natural environment on the hillsides. Though the colonos, like the caboclos, are working in an ecologically integrated system of mixed agriculture, the intensity of their production is different. While the Europeans rework their home visions of intensive small-scale agriculture (known from their original regions, like Veneto, the Volga region, and Galicia, see HORBTIUK 1983, TRENTO 1989, SCHWAB 1997) uses artificial agricultural techniques like fertilizing, crop change etc., the extractive logics of the 18th century still dominate in the faxinal communities in the valleys. Also, the sociality of both groups is contradictary, opposing more communal aspects among caboclos to more individualistic aspects among colonos.

It was already mentioned that the penetration lines of the colonization schemes have been the roads. These are now relatively broad and are specifically made for the famous "Russian" four-wheel wagons which have been introduced by Russian German and Polish settlers. These wagons are responsible for a veritable "transportation revolution", as their carrying capacity is more then four times higher than that of the old two wheel oxen charts of Portuguese origin. Rapidly, the roads begin to integrate the agrarian space uniting faxinais, Forest Fazendas and colonias in a new spatial configuration (BACH 2004).

Also, land pressure increases and more and more colonists arrive putting the extensive *caboclo* agriculture under a social and economic strain. This process is mainly based on the exchange of agricultural knowledge or on marriage so that some faxinais even become ethnically defined, like in Prudentópolis (Ukrainian faxinais) or São Mateus (Polish faxinais). Also, some caboclos turn to become individual small holders.

Agrarian systems of Central paraná in the 20th century

A period of massive forest exploitation starts in the beginning of the 20th century, with a high demand for wood by the construction of railway lines. This adds a completely different life mode of rural life to the region, the *Forestry Settlements*. These are linked to the total transformation of the traditional agro-ecosystems and directly threaten the existing Araucaria Forests, causing a debilitation of traditional production modes and creating new open landscapes. As also the production logics of the European settlers favour open plantations, principally with grain production, erosion intensifies.

Furthermore, the pressure of the Contestado War augments the number of small holders with caboclo tradition in Southern Paraná, increasing the inhabitants in the tradional *faxinais* and introducing techniques like pork production and initiating the expansion of larger plantation grounds on the top of the ridges. Thus, the forest areas have been squeezed from three different directions - involving the resources of mate, wood, and porks. Now, both the traditional structure of the *caboclo* and and the more recent system of the *colono* communities are under strain. Also, the traditional fazendas are living up to a severe crisis.

By the end of the Second World War, new agricultural logics accompany the modernization process. Now, it is possible to transform the old Campos regions, which usually had been grazing grounds, into plantations of rice, and later soybean and maize. This *Campos plantation system*, along with an intensified *Cattle Raising System* is mainly promoted by settlers of Dutch and German origin (Witmarsum, Castrolanda, Entre Rios) and has the support of the military government and international agencies (GTZ). Its result is a complete change of the traditional Campos vegetation and the expansion of the deforestation process in the forest areas. A rational and homogeneous land use logic is supplanting the traditional integrated systems. However, resistence is remarkable among *caboclo* and *colono* groups which now form social movements. So, the *Movimento Sem Terra* recuperates some more of the traditional areas, in spite of a severe strain of intensification, especially around Guarapuava on the Third Planalto. Here, the rediscovery of family agriculture still requires a more careful investigation to estate agriculture to pave a way for socially and culturally sustained agriculture under the conditions of postmodernity.

This brief overview clearly demonstrates, that the agrarian space of Central Paraná is is a complex mosaic of cultural and natural expressions of geographical forms permeated by a set of internal logics. In this context, each form combines a specific set of environmental, economic, social and cultural aspects and is incorporated into a dense network of communities and actor groups. Therefore, one of the main questions for future research is to define thoroughly the characteristics of each community and evaluate their action habits in the municipalities of the region.

Bibliography

BACH, Arnaldo Monteiro. Carroções. Ponta Grossa: UEPG, 2004.

BLOEMER, Neusa Maria Sens. Brava gente brasileira. Migrantes italianos e caboclos nos Campos de Lages. Florianópolis: Cidade Futura, 2000.

CASSIRER, Ernst. Philosophie der symbolischen Formen. Darmstadt: Wisssenschaftliche Buchgesellschaft, 1994. 3 Vol.

DiMEO, Guy. Géographie sociale e territoires. Paris: Nathan, 1998.

FERREIRA, Darlene A. de Oliveira. Mundo rural e Geografia. Geografia agrária no Brasil: 1930-1990. São Paulo: UNESP, 2002.

FRAXE, Therezinha J.P. Homens anfíbios. Etnografia de um campesinato das águas. São Paulo: Anna Blume, 2000.

GEORGE, Pierre. Geografia Rural. São Paulo: DIFEL (1982. orig. 1976).

GIDDENS, Anthony. The Constitution of Society. London: Blackwell, 1984

HAESBAERT, Rogério. O mito da desterritorialização. Do "Fim dos Territórios" à Multiterritorialidade. Rio de Janeiro: Bertrand Brasil, 2004.

HORBATIUK, Paulo. Imigração Ucraniana no Paraná. Porto União: UNIPORTO, 1989.

LAMARCHE, Hugues. A agricultura familiar, comparação internacional. Campinas: UNICAMP, 1997/98. 2 volumes.

LOPES, José Carlos Veiga. Origens do povoamento de Ponta Grossa. Curitiba, 1999.

LÖWEN SAHR, C. L. ; IEGELSKI, F. O Sistema Faxinal no Município de Ponta Grossa: diretrizes para preservação do ecossistema, do modo de vida, da cultura e das identidades das comunidades e dos espaços faxinalenses. Ponta Grossa, 2003. 108p (Relatório Técnico) – Prefeitura Municipal de Ponta Grossa.

MARTINS, Wilson. Um Brasil diferente. Ensaios sobre fenômeno de aculturação no Paraná. São paulo: Queiroz, 1989.

NERONE, M. M. Terras de plantar, terras de criar – Sistema Faxinal: Rebouças – 1950-1997. Assis, 2000. 286 f. Tese (Doutorado em História) - Universidade Estadual Paulista.

RIBEIRO, Darcy. O povo brasileiro. São Paulo: Cia. das Letras, 1995.

RITTER, Marina Lourdes. As Sesmarias do Paraná no século XVIII. Curitiba: IHGEP, 1980 (=Estante Paranista 9).

RODERJAN, Roselys Vellozo. Os Curitibanos e a formação de comunidades campeiras no Brasil Meridional (séculos XVI-XIX). Curitiba: IGHEP, 1992 (=Estante Paranista 36).

RUTHENBERG, Hans. Farming systems in the tropics. Oxford: Clarendon Press, 1980.

SAHR, Wolf-Dietrich. & LÖWEN SAHR, Cicilian Luiza. Visionen des Zusammenlebens im Land der Araukarien – die multikulturelle Gesellschaft Südbrasiliens. HGG-Journal 18, 2003, p.89-100.

SANTOS, Milton. A natureza so espaço. Técnica e tempo, razão e emoção. Dão Paulo: HUCITEC, 1997 (2ª. edição).

SCHNEIDER, Sergio. A Pluriatividade na Agricultura Familiar. Porto Alegre: UFGRS, 2003.

SCHWAB, Carlos Alberto. Resumo histórico e Genealogia dos Alemães do Volga. Ponta Grossa: Schwab, 1997.

TEDESCO, João Carlos. Terra, trabalho e família. Passo Fundo: EDIUPF, 1999.

TRENTO, Ângelo. Do outro lado do Atlântico. Um século de imigração italiana no Brasil. São Paulo: Nobel, 1989.

WAGLEY, Charles. Plantation America: A Cultural Sphere. In: Vera Rubin (org.) Caribbean Studies: A Symposium. (Mona, Jamaica: ISER, 1957, p. 3-13.

WAIBEL, Leo. Die Sierra Madre de Chiapas. In: Mitteilungen der Geographischen Gesellschaft in Hamburg. 43, 1933, p. 12–162.

WANDERLEY, Maria de Nazaré B. Raízes históricas do campesinato brasileiro. In: TEDESCO, João Carlos (org.) Agricultura familiar, realidades e perspectivas. Passo Fundo: UPF, 2001, 21-56.

WERLEN, Benno. Sozialgeographie. Bern et al.: Haupt, 2000.

WOLF, Eric. Sociedades camponesas. Rio de Janeiro: Zahar, 1976.

WOORTHMANN, Ellen F. & WOORTHMANN, Klaas. O trabalho da terra. A lógica e a simbólica da lavoura camponesa. Brasília: UNB, 1997.