INDUSTRIAL LANDSCAPES AND THE UPROOTING OF LOCAL POPULATIONS: SOCIAL AND ENVIRONMENTAL CONFLICTS IN HYDROELECTRIC PROJECTS¹

ANDRÉA ZHOURI^I AND RAQUEL OLIVEIRA^{II}

¹Assistant professor of the Department of Sociology and Anthropology from UFMG, coordinator of GESTA - Group of Study in Environment Themes and researcher from CNPq.

^{II}Student on a scholarship of Scientific Initiation of the project "The Environmental Licence on the Social Sciences Perspective: The Hydroelectric of Aiuruoca, Capim Branco, Irapé and Murta in Minas Gerais.

Abstract

Development projects conceived within policies of economic growth concentrate "environmental space". The homogenization they promote in space reflects a monocultural state of mind that threats a diversity of non-industrialized modes of living and uses of resources. It generates an unequal ecological distribution. This is the case of hydroelectric dams that flood protected areas and impose a compulsory displacement of riverside dwellers (family agriculture, indigenous and ex-slaves communities etc.). From the research experience in Minas Gerais, this article analyses the environmental licensing process related to construction of dams as a field of conflicts around the social appropiation of nature. In the struggle to define the users and meanings of territories, there are, on the one hand, the rural communities affected by such projects and, on the other hand, the Electric Sector. These actors represent two different rationalities in dipute: for local people, the land represents family and community heritage which are kept by collective memory and rules of using and sharing the resources. From a market perspective, the Electric Sector understands the territory as propoerty, therefore as a commodity. In such a field os struggles, where different positions sustain unequal forces, uneven and unsustainable social and environmental policies are perpetuated.

Key words: hydroelectric plants, territorial uprooting, local populations, environmental justice.

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INTRODUCTION

The meaning of concepts may, ultimately, be altered through adaptations made by individuals who become active in social movements. Such kind of experience gives evidence to the fact that individuals may become masters of concepts instead of having their actions guided by them. According to Alice in the Wonderland, "the question is: can you make a word mean so many differet things?" Humpty-Dumpty answers: "The question is who is going to be the master" (Sahlins, [1976] 2003:11).

The Jequitinhonha Valley is one of the poorest regions in Brazil. It is widely known as the *Valley of Misery* and was chosen in 2003 to be the starting point of the federal program aimed at suppressing hunger and malnutrition – the *Fome Zero* (Hunger Zero/Elimination of Hunger). The Valley has been the target of many policies conceived as a means to improve its social and economic conditions (Ribeiro, 1993). Beginning in the 1970s, the building of hydroelectric plants and the expansion of eucaliptus crops are transforming the landscape and altering the semi-arid ecosystem (*cerrado/caatinga*) and the remaining areas of the Atlantic Forest.

This paper focus on one aspect of this change, that is, the fight for the social appropriation of nature (Leff, 2001). The subjects are groups of people, families, whole communities who must face compulsory relocation as a result of how the hydroelectric plants were designed. Their personal and social ordeal becomes evident vis a vis the environmental licensing process as sanctioned by agencies of the government of the state of Minas Gerais.² The main thrust of the analysis will aim to outline, compare and juxtapose two types of rationalities as follows. One that entails a vision of the land as a birth right which encompasses the idea of family and community heritage to be preserved by collective memory through sharing of common resources and rules of usage. The other being a market driven rationale which commonly guides private investors, corporate interests, public authorities responsible for environmental policies as well as governmental agencies in charge of decisions concerning investments in the state. According to the market driven rationale, land is property and therefore, a commodity with market value. In this level of conflict the opponents are unequal in their capability to control resources. Unfair social policies and unsustainable environmental policies are continually implemented while the waterside populations fight against the logic of decision making process that assumes them to be merely a part of the "natural" landscape preventing them from becoming visible and effectual as social and political actors with their own projects and rights (Sigaud, 1986; Vainer, 2004).

TWO PARADIGMS: ADAPTATION versus SUSTAINABILITY

² See Berman (2002), for a critical point of view on the energy issue in Brazil, which takes into account environmental impact and sustainability. For updated debate on the relationship between hydroelectric plants and sustainability, see Zhouri (2003).

Industrial projects conceived as a means to implement economic development policies aimed at promoting economic growth through exports have an environmental impact due the concentration of production units. The appropriation of physical space, which is inevitable, gives rise to social conflicts. The "environmental space" is defined as the geographical territory socially and economically occupied by a group of people. This occupation encompasses the patterns of access to natural resources and of arrangements for the disposal of effluents (Martinez-Allier, 1999:227). The concept of "environmental space" also includes the definition of territorial area and the amount of required resources to maintain basic social needs considering the maximum capacity of the ecosystem (Opschoor, 1995; Pádua, 2000). From a quantitative and comparative point of view, the "environmental space" may be classified taking into account the amount and diversity of resources it contains in terms of energy, types of soil, water, wood and other kinds of nonrenewable resources consumed by given countries or social strata. The quantification of flows of material resources and commodities may certainly be seen as insufficient for sound understanding of social problems concerning territorial rights and cultural meanings which go beyond efforts to reduce nature to an economic evaluation. However, we agree with Pádua (2000) who stresses the analytical power of the concept "environmental space", particularly the possibility it opens to identify perverse forms of relationships between social groups and their environmental setting. Such forms of unbalanced appropriation of nature give rise to unfair ecological distribution. This is the social ground of environmental conflicts, given the fact that the intensive economic exploration of territories will impede other patterns of social life which are not based on the rationale of the market (Martinez-Allier, 1999; Acselrad, 2004 a). The construction of hydroelectrical plants are one of these cases. They are usually built to furnish energy for specific segments of industry, the ones which the production line is entirely dependent on electricity, as is the case of the aluminum sector. (Bermann, 2002).³

Among the country's political leader, dams are seen as concrete symbols of a hegemonic view of national development and progress, testimony to the victory of the entrepreneurial mind. In Brazil, the construction of dams has already displaced two hundred thousand families, the equivalent of a million people. Huge stretches of fertile land and forests totaling up to 3.4 million hectares were covered with water changing the lives of segments of the population considered to be vulnerable minoroties, that is, native indians and descendents of African slaves who still live in remote villages (quilombolas), in addition to the waterside populations. From this perspective, the dams give rise to *environmental injustice.*⁴

³ There is a growing demand for energy among the industrial sectors based on electricity (aluminum, steel, paper, cellulose). According to Bermann (2003), the amount of electricity consumed by these sectors goes up to 7,8% of the total consumption of electricity in Brazil (year of reference: 2000).

⁴ These figures were compiled by the Movement of the People Displaced by Dams and are found in Caderno n. 6, "A crise do modelo enérgico: construir um outro modelo é possível". See also Bermann, 2002.

The concept of environmental justice refers to the amount of pressure, risk or environmental damage that a specific segment of the population can endure without having its material existence and its capability for social and cultural reproduction drastically jeopardized. (Acselrad et alii, 2004). Some examples are telling: industrial pollution, more dramatically affecting health conditions of dwellers of urban periphery (Herculano, 2002); the construction of dams, soybean, sugar cane and eucaliptus plantations, which expel small communities from land traditionally occupied by subsistence crops operated by families. When displaced by big business, these rural and waterside communities lose a great deal: the material ground of their mode of subsistence, that is, fertile lands, access to fishing and to water; and from a cultural perspective, the symbolic references of place and kinship and the collective memory of facts and meaningful events for the group.⁵ The resulting situation may be described as an instance of *environmental injustice*. This social condition is thus defined as a attribute of unequal societies in which social and political mechanisms are effective in the decision making process, imposing the major costs of the environmental damage of economic development to weaker social groups, among them the workers, the lower income strata, racially discriminated groups, or to sum up, the most vulnerable segment of the citizens. (Acselrad et alii, 2004:10)

The environmental licensing for businesses which adversely affects the natural balance is decided according to regulations which are prone to perpetuating the unequal distribution of ecological costs thus promoting ecological injustice. This predicament results from the political weakness of groups uprooted by the building of dams, who lack the full status of citizenship and the experience of self affirmation in the public realm. The very image expressed in the words "affected by the dam" brings to mind the condition of passivity quite apart from the perspective of active citizenship. ⁶ Usually, the environmental impact studies focus exclusively on the potential environmental damage without due regard for the fallout for the local population as it pertains to its specific ways of living. Thereby, rendering the local population "invisible" int he technical reports. ⁷ An example of this approach can be found in the environmental impact report concerning the Murta Dam, in the Jequitinhonha River⁸, from which the following quotation was taken: "Rural properties

⁵ A very perceptive analysis concerning the connection between memory and space can be found in Neves, 2003. See also Rebouças (2000), who stresses different perceptions concerning space held by dwellers of regions affected by the construction of dams and by engineers responsible for the building work.

⁶ There is a movement of people displaced by the dams, established in the 1980s which is active across the country. This organization significantly altered the passive meaning of being displacement. A short history of the movement, emphasizing its roots, prior to the 1980s is found in Vainer (2004).

⁷ Different authors emphasize this point. See for example Lemos (1999), Lacorte & Palhares (1995), Vainer (1991), Sigaud (1987).

⁸ The Murta Dam will be built in the Jequitinhonha River. The required licensing process is already completed. The available data indicates that 20.6 square kilometers will be flooded (D'Alessandro & Associates, 1998). The area comprises five counties (Berilo, Coronel Murta, Grao Mogol, Josenopolis e Virgem da Lapa). According of the community of the people displaced by the Murta Dam, there are 900 families in the rural area economically

may be relocated through compulsory migration."⁹ It should be noted that the subject of the sentence above, "rural properties" refers to real estate that acquires mobility because it is accepted as a valuable, exchangeable commodity. From this view point, people and families are reduced to the condition of objects when compulsory migration is deemed possible for properties, carrying along people and families. This is a very unthinking way to deal with people as if they were objects, a consubstantiation (consubinstanciacao) hard to be accepted without criticism. The sentence also assumes that local communities are passive and that it will not be difficult to control them since they will not react to measures which will change their lives. Assuming the "compulsory migration" as a real option, the report confirms the worthlessness of those properties. The long accepted stigma of the Jequitinhonha Valley as the "valley of poverty" is this perpetuated.

Usually the building projects are licensed in spite of insufficient information concerning different aspects of its social and cultural impact, legal restrictions and the act of resistance from the populations which are displaced by them.¹⁰ Decisions are made based on the dominant paradigm, that is, there are not problems that "ecological modernization" is unable to solve. Following this assumption, the licensing process becomes a political action setting parameters for the logic of economic investment. According to Ascerald, 11 (it assumes) that the market (has) the institutional potential to minimize and neutralize environmental degradation. (Ascerald, 2003 p.23). Compensation measures, either private or public, will perform the required correction. We call this approach the "paradigm of environmental adaptation", contrasting with the "paradigm of sustainability"¹¹. The paradigm of environmental adaptation assumes that different institutions of modernity may be called into action in order to prevent or neutralize environmental crises "without giving

⁹ "Answer to the request of complementary information addressed to EIA / RIMA". D'Alessandro & Associates: 2001, Vol.2 question 2.12, p.2.

¹⁰ There is an expert opinion report supported by the Foundation for the Environmental Protection – FEAM , an agency of the government of Minas Gerais, which recommends that the licensing for the Murta Dam should not be granted due to insufficient information concerning the environmental impact, as well as to inherent flaws in the procedural requirements of the formal process. This report should have been considered in the February 2004 meeting of the State Council for Environmental Policy –COPAM. However, without public justification the issue was removed from the agenda by the Council following a decision made by the State Secretary for Environmental Policy, Jose Carlos Carvalho. As of January 2005 this report has not been considered by the council. More about the relationship between COPAM and FEAM in Zhouri, Laschefske and Paiva (2005) and Carneiro (2001).

¹¹ The notion of "paradigm of environmental adaptation was first presented by Prof. Afranio Nardy (PUC – Minas) during a lecture given at the University of Minas Gerais, sponsored by GESTA, the Group of Environmental Studies. The main subject was the process of environmental licensing in Minas Gerais.

engaged in a complex combination of mining by hand (specially tourmaline) and family farming.

up patterns of modernization" and "without altering the capitalist mode of production drastically". (Ascerald, 2004 p.23). The party of the "ecological modernization" promotes the depolitization of the environmental debate, so clearly and strongly introduced by the political ecology movement in the 1970s, by ignoring the connection between environmental degradation and social unfairness (Gorz, 1987, Dupuy, 1980, Castoriadis and Cohn Bendit , 1981, Guattari,1990). This approach weakens the ecological criticism which claims for radical change in the distribution of power over natural resources.

According to the "paradigm of adaptation" the economic investment is the major concern, the top priority. In this view point, the environment is just an externality; the landscape must be adapted to the purposes of a technical project. In the process of modifying the natural conditions of a given region, technological adjustments and social arrangements play the role of adaptation. The "necessity" and socioenvironmental viability of the project are never denied. Whatever concession is made to non economic reasons, it assumes the form of formal compliance to legal requirements, which by the way, tend to be characterized, as bureaucratic exaggerations (Zhouri, Lachefski and Paiva, 2005). Assuming this view point, a complex debate which connects political, social, and cultural aspects, besides the economic meaning of the project, is reduced to the evaluation of technical options to accommodate what is then described as "minor problems".

According to its assumptions, the paradigm of adaptation acquires its full force from the perspective of the instrumental economic rationality. By contrast, the paradigm of sustainability broadens the debate calling into the debate the patterns of production and consumption which justify the investment. The major question is then who are the beneficiaries of the investment which displaces people and families and alters the environmental balance. The paradigm of sustainability stresses that the full social and environmental impact of the investment should precede any licensing. What will become of the and of the whole territory if the economic investment is authorized? The notion of sustainability thus aims at a major change since "(...)it implies new principles in dealing with nature, new strategies for the appropriation of productive processes and new meanings mobilizing and reorganizing society". (Leff, 2001:75).

Resistance movement, motivated by this new mentality and mobilized against pure "ecological modernization" flourish founded on a paradigm of sustainability. We find the people of the Jequitinhonha Valley among these movements.

Identity, Territory and the fight for the meaning of the locality

Historically, beginning in the 17th century, the region of the High and Mid Jequitinhonha Valley, northwest of Minas Geraiswas settled by ranchers who raised cattle with the help of slaves and freed men. They disputed the land with independent family farming (Ribeiro,1993). The regional economy has always been based upon agriculture cattle raising and mining; its development tells the history of periods of prosperity and stagnation or decadence. Regardless of its importance as food supplier for other parts of Minas Gerais,

its history is generally connected to images of economic isolation and stagnation. This predicament has been strengthened by economic policies whose priorities were industrialization and urban development. (Ribeiro, 1993).

The economic limitation of the region when it became clearly affected by the expansion of the market economy were plain around the 1940s and 1950s. The traditional commodities found increasing trade barriers. During the 1960s and 1970s state and federal governments implemented policies aiming at industrial and urban development in the area. The main thrust in the technology dramatically disclosed the Valley's poverty and backwardness (Ribeiro, 1993). For planners and governmental authorities the region presented all the problem of poverty stricken areas. The worsening of social and economic conditions in the valley resulted from the expansion capital intensive investments in the modernization of cattle raising and coffee culture and foresting (Ribeiro, 1993). The entrepreneurs were supported by policies granting them fiscal benefits and credit. The expansion capitalist investment in the region caused major impact on the distribution and access to land. Foresting projects, for example, were developed in plateau areas, owned and by the state which were licensed for use by private corporations. However, such areas had been traditionally common land used by local farmers for collective exploitation and for extensive cattle raising (Ribeiro, 1993).

Such economic policy directive persisted throughout the 1980s when new investment frontiers were opened by the new Jequitinhonha initiative, another governmental intervention to boost the regional economy. It included the construction of a number of dams both for production of energy and irrigation. Among them was hydroelectric of Irapé. Given the dominant view, according to which the Jequitinhonha Valley was poor and backward the construction of dams was generally seen as a necessary investment in order o improve the economic prospects for the whole population. But, the construction of the Irapé dam, for example, is marked by a history of fifteen years of resistance (Ribeiro, 1993, Lemos, 1999, Galizoni, 2000). Regardless of local mobilization against the construction, its final plase is underway in the Jequitinhonha River. The dam is 205 meters high, the tallest in Brazil with a reservoir that is 137.16 km2, adapted to a region of intermittent rain pattern. The whole construction will affect 7 counties and will cause the displacement of approximately 1,124 families or te equivalent to 5,000 people. The official authorization for the construction was granted in 2002 despite the technical opinion against it issued by the State Foundation for Environmental Protection - FEAM. The report listed 47 social and environmental conditions that the Energy Company of Minas Gerais - CEMIG had not provided or had disrespected in the projected. Another project under consideration, the Murta Hydroelectric plant, also to be built in the Jequitinhonha Valley will cause the displacement of approximately 900 families.

Both cases are clear instances of territorial conflict caused by State intervention and by the interest of large corporations. New investments which are justified from the perspective of economic modernization require the dislocation of the local population which will be located somewhere else. One can speak of movements of *disterritorialization* and of *re-territorialization*. Caught by such movements, the affected population mobilizes resources in search for public recognition of their territorial rights. The affirmation of cultural and historical identities is crucial among those resources. Facing the expansion of economic

projects which will drastically change their lives and traditions – roads, new agricultural crops, hydroelectric plants – local communities build up arguments aiming at influencing public opinion. They speak of the territory as an essential element of their cultural identity, as an inherent part of collective memory (Halbwachs, 1990). Where lies the problem? These meanings, which are locally conceived, are quite the opposite of the ideological principles of development praised by the State. The different meaning that the land and the local territory have for the local population are set against the homogeneous conception of modernization and the abstract idea of a nation.

Given this contrasting approach to social and economic identity the relationship between the people who live in the Jequitinhonha Valley and governmental authorities have been marked by conflicts. The lack of effective political dialogue brings social invisibility and economic marginality into the picture. One may consider that the official acceptance of poverty and backwardness as the main characteristic of the Valley became an "invented tradition" (Hobsbawm, 1984). The concessions granted to hydroelectrical dams without any concern for their impact on the population affected give rise to new contexts of political confrontations in which the power to define the use and meaning of the territory is finally tipped off to economic interests.

From this perspective, the nature of the conflict is clarified by the unraveling of power relationships (Gupta & Ferguson, 2000; Ascerald, 2004). One may conclude that the marginal position of the Jequitinhonha valley in the national economy is explainable by the absence of material and symbolic elements inherent to the dominant pattern of modernization. The semi desert region of the Jequitinhonha valley has never competed with the high (real and/or imaginary) value typically attributed to the Amazon and the Atlantic Forest region. Thus, the opinion that the Jequitinhonha Valley must be transformed in order to become developed and part of the market economy, became widely accepted.

From this perspective, the views concerning the Valley conveyed by government authorities and by entrepreneurial groups offer important clues to understand development policies for the region. These views emphasize the elements of poverty, backwardness, and economic stagnation and help to justify the economic projects promoted by the State. One paradigmatic instance of this frame of mind can be found in public statements made by members of the traditional political elite when the Irapé was announced. One of them declared that

"We are to expect imminent of the construction of the redemptive of the hydroelectric plant is further delayed. The population of that part of the state, supportive of the governor Itamar Franco and of CEMIG is ready to vigorously react against this unpatriotic act which is to be deemed shameful and unacceptable."¹²

¹² Murilo Badaró, president of the Mineiro Academy of Art and Literature: article published in the widely read newspaper Estado de Minas, April 25, 2002, some days before the official decision concerning the licensing for the construction of the plant in Irape.

The wording is indicative of an ideological argument stressing emotional elements such as patriotism and loyalty to the State government as well as the redemptionist character of the investment. The title of the article was also revealing: "the custodians of poverty". The whole argument is mainly an attack against the technicians who contested the social and environmental viability of the project; their report was to be read as a statement against the progress of the region. The conflict thus established, set the dispute between two ideological views. On one side, the national policy of modern development allegedly aiming at the betterment of the whole nation, on the other the notion of territorial rights supposed by the local communities.

In the instances under scrutiny, the conflict revolves around two patterns of appropriation of the land and of natural resources, that is, the traditional ways of the original population and the industrialist rationale and large scale exploration of natural resources. As the conflict gradually acquired its political features the traditional pattern became associated to poverty and the modern one to plenty. The views of people who were to be relocated following the licensing of dams testify to the differences in values and approaches to life. In one of the public hearings held to debate the licensing of the Murta Hydroelectric project, a local dweller said that:

"God looks after the people and keeps and open door for all of us. In spite of our weakness and poverty a great wealth is granted to us in the form of access to the rivers, to the mines, to diamonds and gold, to forest products and so much more which is available for the picking..." (hearing held on October, 15, 2002)

In this statement weakness and poverty convey the idea of absence of elements conventionally associated to the images of industrial modernization. However, at the same time, it stresses the kind of plenty which is meaningful for a way of surviving which combines mining by hand to family farming. The same world view is found in the statement of a woman about to be displaced when the construction of the Irapé Dam was licensed:

"Because we are weak people, they say we are worthless (pé de chinelo). This is how they describe us: worthless people [...]. The other day, my boy told me: Mother, how come these people from CEMIG speak of our valley as the valley of poverty? This is the valley of plenty, mother! If you want to meet poverty you have to go north past Diamantina, you will see homeless people everywhere. That is real poverty! That is real suffering! I know the experience because I had to beg for charity when I went to Brasilia and did not have the money to come back home. This is really the saddest situation for a human being! But here, here we have plenty to eat. We do not have to buy food, there is plenty in the backyards. This may not be the kind of wealth they value, but this is not poverty. See Dona Maria (a poor woman of the neighborhood): she raised her children without having money. They are all here due to her single efforts. The same happened to me. I raised my children with what the land provided. So I ask: why move to another place, a place we do not know, a place where we have no friends. Nobody wants this change." (statement collected by Anna Flavia Santos, anthropologist attached to the Federal Public Hearing Office – Ministério Público in 2002)

The valley's dweller's view presents the region as a place of plenty, denying the official image of a poverty stricken region. One is again faced with opposing views concerning the meaning of plenty. Of course, the local view has nothing to do with the dominant notion of development and progress sponsored by the State. This latter view is stated with legal precision in the judicial decision following the public civil action initiated by the Federal Public Hearing Office (Ministério Publico) calling for the ban of the construction of the Irapé plant. Pronouncing himself in favor of the construction the designated judge argued that,

"As in any major enterprise the construction of hydroelectric plants must cause some level of environmental damage which must be properly dealt with. It will also forcibly bring some level of frustration and inconvenience to the local population. But, we can hardly conclude that this dissatisfaction reaches a point that significantly affects public interest. Wuit on the contrary, the well know shortage of natural, human, and industrial resources in the region does not support the proposition according to which the local communities will suffer losses. The available evidence actually points to benefits resulting from their relocation as planned." [...] (extract from the judicial decision from the 21st Judicial Jurisdiction of Minas Gerais, 2002, page 10)

The judge's pronouncement clearly follows the principles of the adaptation paradigm, which disregards non material lost such as the uprooting of established communities. He easily dismissed major social problems by reducing them to "frustrations and inconveniences for some" which do not jeopardize public interest.

The same interpretation of the Valley as a region whose main feature is lack of modernity is highlighted in the viability analysis of industrial projects. One can read, for example, the following conclusion in one such analysis:

"[...] (without the construction of the Murta Hydroelectric plant) a higher level of poverty among the population is to be expected. Seniors' pensions will become gradually the main source of income (RIMA UHE Murta, D'Alessandro &Associates, 1998:62)

Given the economic goals of governments inspired by developmental ideals social movements mobilizing groups of people who must be relocated as a result of industrial projects stress the right of self determination. They demand the right to decide the usage of the land where their ancestors have lived as well the right to preserve their own cultural and social identity.

Unlike the discourse of modernization, which assumes the land as an *strategic resource*, the local communities think of it as a *heritage*. It is difficult to gage the concept of a nation, an abstract and universal entity embodied in the State, which ideologically presents itself as the promoter of national development and progress, ideally benefiting everyone, form now on described as a citizen of the nation.

In fact, the concept of heritage presents a complex issue for the legal framework of the modern state. On one hand it refers to individual rights, since everyone is part of the nation's history; on the other hand, it refers to a collective entity, which must be recognized as a subject with rights. (Souza, 2001). Take the case of the Jequitinhonha Valley where

collective ownership of land by households is regular traditional practice. Common rules of inheritance do not assume the division of the family plot, the exploitation of which is to benefit all members of the actual household. The following extracts of interviews with local dwellers will illustrate this point.

Answer (A) We are nine brothers and sisters. Some are single some are wed. Some have died already. You can see them sitting around.

Question (Q) After your father died, did each of the siblings get a piece of the land that belonged to him?

- (A) The land has never been divided,. We all work in it. We all contribute when it comes to paying taxes or other expenses.
- (Q) Does this mean, the land belongs to the family?

(A) Yes. We all have the same family name, Prachedes. (Interview with a female member of the Prachedes household established in the county of Coronel Murta)

The same usage is mentioned in another interview, this time with a male member of the Mutuca de Cima community displaced by the Murta dam.

(Q) Does every sibling inherit when the parents die?

(A) No, no. My brothers and I joined forces to buy an additonal 30 hectares next to our father's property. We went to Sao Paulo and worked hard there to get the money to buy the land. I have lived there for four years. If we remain together we are stronger. But, we own the land together. My brothers who still live in Sao Paulo say: we know you work hard, so you can use the land and take over the profits. When we come back we may sell the land to you if it comes to selling. We will not make profit selling land to people who are not our people.

This approach to ownership does not exactly equate to the dominant market notion of property. It is more akeen to the notion of heritage which implies collective subjects and rights. It does not lead easily to the concept of a mercantile transaction.

Underlying this approach there is a cultural vision of biding ties among generations. Individuals and groups are seen as custodians of immemorial usages and common wisdom (Castro, 2000:173). In a joint effort to preserve the common heritage the community reaffirms itself through group identification with the land, the patterns of exploitations of natural resources and the traditional modes of social organization (Little, 2002). The movement of resistance against displacement and in defense of the territory becomes a biding tie strengthening the cohesion of the group. The identity category "we" becomes dominant in the speeches who speak for the communities. This pattern of social and cultural identity became evident in the public hearing concerning the licensing of the Murta plant. One of the witnesses, a female dweller of one of the counties affected by the Murta dam said:

" Our land is productive; you can see the products of our land (there we was an exhibition of agricultural products of the Valley during the public hearing). We do not need any dam to survive. Our community is made up of fifty families and they all live independently. We do not need to leave our homes to give place to a dam." (Public hearing, October 15, 2002)

Another woman so spoke in the same hearing:

"We do not want this dam to be built. And we are sure that many people who are not here today share the same opinion. The reason why is that the best place for us in the whole world is right here. We plant our basic crops: corn, beans. We fatten pigs for our consumption..."

Conflicts over territory, the patterns of its appropriation and cultural meaning, thus give rise to the experience of the "otherness" (alteridade). The territory defined as the locality is then affirmed as a primary reality different from the industrial concept of sector, in this case, the electrical sector, which is the cognitive frame of reference for governmental authorities, entrepreneurs, and business advisors. Here we face then two approaches to the appropriation and exploitation of natural resources. For the local community the announced displacement transforms them into political actors and creates the mental imagery that allows for the interpretation of the territory as their *place* in the world (Auge, 2003).

In this process, *collective memory*, is continually recreated, the past being reinvented in the present by people who see themselves facing the danger of losing not only their long established home but also their cultural identity. From this complex process, which encompasses cognitive and historical elements, the image of the territory emerges as a *place of belonging* (Auge, 2003). The place is thus defined as a common heritage of people bound by history and memory. This conception of the territory as comprising family and community is present in most of the speeches of people displaced by the construction of the Murta dam.

"We will not be passive; we will fight for the right to stay in our place. I do not want the dam to be built. We have to see this land as out mother, it raised us and we raise our children and grandchildren. We need this. This is our interest." (interview with an older dweller of a county affected by the Murta dam)

"Our grandparents, great grandparents and forefathers, they all were poor and lived here in the Mutuca. For 130 years and had never needed to go anywhere (to earn their living), they never needed a dam, actually they never heard of such a thing. My mother is 90 years old, had raised her children. My father died at the age of 73 and always lived here. He never had the need to go elsewhere for anything. We who are gathered here are the youngest of his progeny. I am 49 years old. We have peace of mind living here." (interview with a local dweller who had to be relocated)

These are world views of people who went through processes of social changes which presented them with cognitive elements to elaborate the notion of the territory as a place of cultural identity. As emphasized above, this kind of relationship with the land and with the locality sharply contrasts with the economic and political perceptions which are primarily

concerned with the costs of investments, flow of capital and the logic of technological progress. Modern capital is does not recognize defined geographical spaces; it gives rise to *non places* (Auge, 2003). Those are homogeneous, featureless, baring the same detachment as to what concerns its geographical locations. They have no special cultural or personal meaning for people. "The real space of the non place does not provide specific social identities nor creates meaningful social relationships; it creates sameness and solitude" (Auge, 2003:95).

Concluding Remarks

In the beginning of the 1990s the concept of sustainable development seemed to sum up the possibility of continued economic growth and environmental balance. Since then, the ideal of efficient management of resources was incorporated to economic planning. The underlying assumption was the belief in the unlimited capacity of technological innovation to prevent environmental damage and to help in the correct evaluation of risks in new economic enterprises.

Within this dominant frame of mind, technical analysis became the dominant concern of entrepreneurs, governmental authorities and scientists. The laws of the market were considered superior to political debate on the social and cultural consequences of modernization.

From this perspective, the traditional patterns of economic organization and the limited scope of small scale production and trade were stigmatized as forms of backwardness. Regardless of their adverse impact on the environment, industrial projects were publicly legitimized as a means to overcome backwardness. The negative impact was to be minimized by corrective measures divided by planners and technicians. There followed the "capitalization" of nature. Natural resources or the environment were reduced to terms of trade according to market value. Irreparable losses and immensurable damage are topically treated with palliative measures and policies of compensation. According to Esteva,

"The superiority of economic values forces the depreciation of al the remaining forms of social life. As if by a magicians trick, this depreciation transforms skills into flaws, public goods into resources, man and women into labour force to be bought and sold a any other merchandize, traditions into burden, wisdom into ignorance, autonomy into dependence." (Esteva, 1992:18)

This transformation has reached the Jequitinhonha Valley and its people. The whole region and all forms of culture and expressions of social life became resources to be mobilized by economic projects aiming its modernization and progress. In this context, demands for autonomy and the right to differing opinions presented by people who deny this view are not politically recognized. The concept of environmental justice become relevant to this type of conflict. It call attention to values which go beyond the economic rationality. The ethical principle of fairness imposes the recognition of different cultural values which apply to the territory, thereby considered as a material condition of the social and human realization of a group of people. The ideals of democracy and pluralism become real only this condition. The conflicts launched by the implementation of hydroelectric projects clearly exemplifies the major thrust of the quest for environmental justice. They highlight the debate concerning the *social reappropriation of nature* which revolves around the necessity to recognize that alternative modes of social and economic organization should also be taken into account when it come to the planning of economic growth and development.

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