# GLOBAL DISCOURSES AND THE LOCAL IMPACTS IN AMAZONIA INCLUSION AND EXCLUSION PROCESSES IN THE RIO NEGRO REGION

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Summary: In the course of the climate change discussions, Amazonia, as the worlds largest continuous rain forest area, has achieved international attention. The significant role of the Amazon rain forest as the "green lung of the world's climate" and its importance as an almost inexhaustible archive of biogenetic resources for the future development of the planet earth, are constantly accented. The conservation of rain forests is often spoken of in the same breath as the protection of indigenous peoples, and partially even put on the same level. The example of the Rio Negro region demonstrates clearly, how global discourses on climate change, the protection of forests and indigenous people are reflected on the local level via transmission tapes of unbalanced power relations. Forced by the powerful international discourses on these items, national discourses and regional policies concerning Amazonia have been shifted. Social groups, who are not clearly regarded as indigenous peoples or who do not match to the image of traditional, ecologically adapted ways of life, are largely ignored by the great variety of promotion instruments, as well as by national and international actors. In this way, international discourses define local life courses and decide what is "good" and "bad" or "right" and "wrong". But, they do not embrace the complex reality of Amazonia and threaten the livelihoods of excluded social groups in peripheral regions.

Zusammenfassung: Im Zuge der Klimaschutz-Diskussionen ist Amazonien als größtes zusammenhängendes Regenwaldgebiet der Welt ins Zentrum der internationalen Aufmerksamkeit gerückt. Die zentrale Rolle dieses Regenwaldgebietes als "Grüne Lunge des Weltklimas" und seine Bedeutung als Pool schier unerschöpflicher biogenetischer Ressourcen für die künftige Entwicklung des Planeten Erde wird dabei immer wieder betont. Regenwaldschutz wird dabei meist in einem Atemzug mit dem Schutz indigener Gruppen genannt und teilweise diesem sogar gleichgesetzt. Das Beispiel der Rio Negro-Region zeigt, wie widersprüchlich sich globale Klima-, Umwelt- und Indianerschutzdiskurse über den "Transmissionsriemen" ungleicher Machtbeziehungen auf lokaler Ebene niederschlagen. Mit dem von internationaler Ebene über machtvolle Diskurse forcierten Schutz der tropischen Regenwälder und der indigenen Gruppen in Amazonien seit den 1990er Jahren haben sich nationale Diskurse und lokal-regionale Politiken verschoben. Vor allem Bevölkerungsgruppen, die nicht eindeutig der Gruppe der Indigenen zuzuordnen sind oder die nicht dem Image traditioneller ökologisch angepasster Lebens- und Wirtschaftsformen entsprechen, werden von den diversen Förderinstrumenten und von nationalen und internationalen Akteuren weitgehend ignoriert. Internationale Diskurse definieren dadurch lokale Lebenswelten und entscheiden über "gut" und "böse", "richtig" und "falsch". Sie werden aber der vielschichtigen Realität Amazoniens nicht gerecht und gefährden damit die Überlebenssicherung von ausgegrenzten Bevölkerungsgruppen in peripheren Regionen.

Keywords: Latin America, Amazonia, environmental discourses, inclusion and exclusion processes, comunidades caboclas, indigenous people

#### 1 Introduction

The biodiversity of the Amazonian ecosystem and threats to it from the exploitation and destruction of tropical rain forests, as well as the search for suitable conservation concepts and numerous associated topics, have been an ongoing issue in the international ecology debate since the 1980s. Particularly in the climate change discourse, Amazonia, as the worlds' largest continuous rain forest area, has once again gained international attention. The significant

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role of the Amazon rain forest as the "green lung of the world climate" and its importance as an almost inexhaustible archive of biogenetic resources for the future development of the planet earth, have been repeatedly emphasized (WBGU 2001, 2004; ESCOBAR 1996).

Keywords such as these stand for the high profile of the efforts towards a comprehensive conservation of the tropical rainforest. In their wake nature conservation and environmental protection emerge as powerful discourses that run parallel with, and often independently from issues of poverty (Rust 2008; DUTT 2003). Prioritizing nature conservation and environmental protection over the alleviation of poverty or treating these issues as de-coupled, however, is particularly problematic in peripheral regions like Amazonia, since socio-economic disparities and unequal power relations are regularly reflected in resource conflicts, which are often aggravated by "poverty-insensitive" measures. Lately, and because of their specific way of life, the indigenous population has mostly been spared the accompanying negative effects for marginalized groups by becoming stylized as "natural forest conservers" (CASTREE 2004). The conservation of rain forests is therefore often spoken of in the same breath as the protection of indigenous peoples, and partially even put on the same level. The global environmental and climate discourse mentioned here produces direct effects at local level, especially in regions with ecosystems classified as "worthy of protection".

Below I shall attempt to illustrate this with an example of the Amazon Rio Negro region in the north of Brazil. After an introduction of the conceptual and methodological framework I shall sketch the changes in international and national discourses and politics regarding the regional development in Amazonia. The next chapter provides an analysis at local level of the living conditions of the *caboclos* at the Rio Negro – far away from global discourses – followed by a discussion of policies of forest and indigenous conservation and their impact on the *comunidades caboclas*. In the final chapter I shall present perspectives derived from this.

### 2 Conceptual-methodological framework

This study analyses the impact of global discourses on discourses and policies at national and regional level as well as their effect on actual local realities in the Amazon. Here the focus of the applied discourse analysis lies on an actor-oriented, interpretative perspective which understands discourses as a form of linguistic practice by which social rules, conventions and assignment of meanings are communicated and reproduced (JÄGER 2001; KELLER 2006, 2007; MATTISEK and REUBER 2004). According to the concepts of Critical Discourse Analysis they are seen as instruments of power in the symbolic and communicative 'wars' of the definition of socio-political and cultural norms and meanings (Jäger and Jäger 2007; Knoblauch 2006). One of the most effective means of production of powerful discourses to define 'the good' and 'the bad', 'the wrong' and 'the right', 'the sayable' and 'the thinkable' are mass media such as newspapers, television and – the most globalizing medium – the internet. Through their great popularity they introduce topics in form of spoken and written language as well as pictures and images to broad societal perception. These symbolic elements merge into discursive threads which, in turn, constitute discourses and are themselves constituted by them (Knoblauch 2006).

Following the interpretations of Critical Geopolitics, discourses are not only socially constructed knowledge systems that influence everyday actions and thoughts of actors, but are also strategic instruments of powerful actors to legitimate their control over spaces and resources (O'Tuathail 1996, 2004; AGNEW 1998; REUBER and WOLKERSDORFER 2001). At the same time, actors on different levels and in distinct socio-political contexts continually reposition themselves within these discourses to enforce their interests and to increase their power. In this way discourses reflect power relations and social structures, produce and reproduce them and vice versa. Embedded in social contexts and power structures actors often cannot be called independent individuals or autonomous subjects, instead individual actions are constrained and control over discourses is restricted (MÜLLER 2008; BUBLITZ 2006). Discourses in their connection with power relations constitute a very dynamic texture. Thus, the temporal-historical perspective of discourse analysis plays an important role by focusing on the changes of topics, meanings and norms in their linkage with changing power relations (BAURIEDL 2007).

In the context of the present study the impact analysis of discourses will focus on the dynamic interdependencies of discourses at global level, discursive reproductions or offsetting items at national level and the logic of individual and collective action of local stakeholders. Central to this analysis is the impact of topics, symbols and images (rainforest, biodiversity, indigenous people) of a globally produced discourse (by the World Bank) studying the acceptance and reproduction of these meanings on discourses and policies at national (Brazilian) and regional (Amazonian) level as well as demonstrating the effects at local level (the comunidades caboclas). This approach fits into the new concepts of Political Ecology which analyses the impact of discourses at different levels - on the power of control over natural resources (ROBBINS 2004; ESCOBAR 1996; Castree 2004; Adger et al. 2001, 2003).

(Global) discourses on natural resources have formed a central element and instrument of exercising power for many decades within the relationships between the so-called countries of the North and the South, being recognized and realized into politics of international cooperation (CHEN 2003; ESCOBAR 1996). Especially powerful institutions in this context, such as the World Bank, whose decision-making bodies are dominated largely by representatives of the industrialized countries, link the allocation of support programmes and loans to conditions that force the recipient countries to convert into national politics the transported norms and conventions dictated by the World Bank according to current global discourses (Woods 2006; RICH 1998; TETZLAFF 1980). At the same time governments or governmental representatives, NGOs and specific population groups position themselves at national and regional level within these global discourses and functionalize them to secure their interests and strengthen their position of power in their individual social context (Dutt 2003; IZ3W 2008; Castree 2004; ESCOBAR 2001; Brown 2002; SOYEZ and BARKER 1998). The international development agencies, however, also react to the actions and reactions of the national and regional actors in the countries of the South.

These close reciprocal ties between discourses and power constellations at varying levels have a specific effect on the Brazilian Amazon region, as Amazonia is one of those world regions which over recent decades have constantly been the focus of international attention. The World Bank has decisively influenced the political guidelines both at national and regional level through the implementation of a wide range of programmes and plans which generally have translated the global discourses into political guidelines and actions. Nowhere did this mechanism take more effect than in Brazil, as this South American country has received about 16 billion US\$ between 1949 and 1992, the highest-ever amount of support from the World Bank for that period (WEITZENEGGER 1992).

An analysis of the discursive elements within the internet presence of the World Bank and its available documents – such as the official presentation of the political guidelines and the documentation of activities and implemented policies – forms the basis for illustrating global discourses on keywords such as "rain forest", "biodiversity" and "climate change" (research in July 2008 on www-wds.worldbank.org). I shall only briefly outline the political context of the production of these discourses to allow sufficient space for the analysis of the interpretations derived from them for the Amazon region. In a first step the combination of the above-mentioned concepts and keywords in the

titles of the documents were analysed quantitatively. In a second step the abstracts of the most important documents, such as Development Reports, Strategy Papers and Working Papers, were studied qualitatively to figure out normative relations, antagonisms and parallel connections of keywords. Documents which combined all central concepts were analysed more intensively.

The Pilot Programme to Conserve the Brazilian Rain Forest - also called PPG7 - coordinated by the World Bank, was broken down to national and regional levels in order to analyse the reproduced stereotypes and meanings of the Amazon rain forest – as ecosystem – and of the Amazonian region – as concrete space. Since the implementation of PPG7 demanded the active participation of the Brazilian governmental institutions – in terms of political action and financial contribution – the institutions involved were forced to position themselves in relation to the global discourses transported by the World Bank programme. Thus global discursive threads linked into existing national and regional environmental discourses and policies. I analysed these impacts by applying the above-mentioned qualitative methods on the texts used in the official homepages of the governmental institutions (researches in July 2008 on www.mma.gov.br and www. sds.am.gov.br). The extracted discursive elements and their conversion into concrete planning instruments were then studied in their impact on the ground at local level in the Rio Negro region.

The data on the regional-historical development along the Rio Negro, as well as the data on the specific framework and the processes in respect of the *comunidades caboclas* at the lower reaches of the river are generally based on literature research and guideline-based interviews with experts from relevant authorities and institutions in Manaus. They are supplemented by observations on site in the *comunidades caboclas* at the lower Rio Negro region and by extensive interviews of *caboclo* households which combined standardized questionnaires with open intensive interview styles<sup>1)</sup>. This mix of quantitative and qualitative methods was completed by applying a mental map methodology to analyse the perception and knowledge of the *caboclos* of their social and ecological environment.

<sup>&</sup>lt;sup>1)</sup> This concerns results of field work within the seminar "Use of resources and perspectives in Amazonia" supported by the German Academic Exchange Service (DAAD). It was carried out under the joint supervision of the author and Dipl. Geogr. Tobias Schmitt with students of the course programme "geography of developing countries" at the University of Tübingen in 2006. I thank the participants for providing the data.

The term *caboclo* applied in the present study is a concept originating in Brazil and describing a specific way of life of traditionally subsistence-orientated smallholders in the Amazon region (PADOCH et al. 1999; Denevan 2001; Silva-Forsberg and Fearnside 1997; Posey and Balée 1989). Scientifically the caboclos are defined as European settlers (or at least of European origin, so called neo-Brazilians) who in the course of the 17th to the 19th century advanced into the different Amazonian regions in order to settle the river banks (PACE 1997; JUNK 1989; STERNBERG 1998). They mixed with the local indigenous population and adopted elements of their way of life. They took on the indios' knowledge of local ecosystems and learned certain ways of using the environment, such as fishing and collecting forest products. The European heritage and cultural background became especially visible in their settlement pattern: permanent residence, individual ownership of land, domestication of animals and agricultural techniques such as crop rotation, fertilization and fallow land were important characteristics. The integration of the people living along the river into the global, national or regional market structures has changed these relatively homogenous socio-cultural groups (Ross 1978; Assies 1997; Neuburger 2005). On the one hand, new settlers advanced into the settlement regions of caboclos, bringing with them modern forms of economy. On the other hand, parts of the traditional smallholder population integrated into the expanding capitalist forms of production by adopting innovations and entering the market. As a result today's caboclos are a highly diverse group (MORAN 1974; Wolf 1955; Pabst 1988; Kvist et al. 2001; de Jong 2001; PINEDO-VASQUEZ et al. 2002).

## 3 Discourses on Amazonia: Rain forest, biodiversity, climate change

In the 1980s Amazonia came up in the international media as a constantly recurring topic. For one thing the large-scale though internationally largely unnoticed development measures of the Brazilian government in the 1960s and 1970s had caused extensive destruction of the tropical rain forest (Kohlhepp 1989). In addition, the mid-1980s had seen increasingly strong international criticism of the POLONOROESTE programme financed by the World Bank. Within this programme until 1989 agrarian colonization and an expansion of the infrastructure took place in the federal state of Rondônia under the label of "basic needs and poverty-oriented"

development" and via the concept of "integrated rural development" (Coy 1988; Weitzenegger 1992). According to internationally active environmental associations and NGOs the ecological effects of this programme were disastrous. The World Bank therefore felt impelled to start the subsequent project PLANAFLORO, which boasted the key term "sustainable development" in its programme texts in an almost inflationary way (HALL 1997; Brown and ROSENDO 2000).

This about-turn of World Bank policy in Amazonia reflects the change from the global development discourses towards ecological themes as the result of a long socio-political, conflict-laden process with the emergence of the environmentalist movement mainly in the countries of the North (WBGU 2001; IZ3W 2008; Escobar 1996). Taking up the topic "ecology" in international discourses at the UN Conference on the Human Environment in Stockholm in 1972, it was the Brundtland Report entitled "Our Common Future" that put the destruction of the environment and nature on the map as a global problem (HAUFF 1987; SEYFANG 2003). Consequently the basic capital of the World Bank was raised by about 80% and environmental policy became an integrated central task across all themes (WEITZENEGGER 1992). In the 1990s the World Bank included the keyword "sustainability" as an overall principle for development policies in its basic concept, adopted Environmental Impact Assessments for all support measures and for the first time promoted selective projects associated with nature conservation (Brecher et al. 1993; Unmüssig 1988). Adapting the discourse on participation, World Bank president Wolfensohn announced the increased cooperation with NGOs, which were seen positively as new partners and equated with civil society, democracy and proximity to the grass-roots level (WORLD BANK 1997; Brown 2002; Brown and Rosendo 2000). Following a long process of socio-political conflicts and discursive positioning, "indigenous peoples" were integrated into international discourses on "sustainability". Nowhere was this rise of a new global discourse more evident than in the attention the concept of "indigenous peoples" attracted in the context of the Earth Summit in Johannesburg in 2002 (SEYFANG 2003). A great variety of new social movements in the 1990s had already tried to position themselves within this discourse of sustainability and nature conservation, demanding political and economic support on different levels. To this day, however, indigenous peoples and other "traditional" groups are most successful in being included in the respective global discourses (Brown and Rosendo 2000; Brysk 2000; Soyez 2000; Peluso and Watts 2001)

In the last decade and almost simultaneously the discourses on climate change and loss of biodiversity were established at global level. Until then both had been affected by conflicts of interest between the countries of the South and those of the North, but also internally within these groups (WBGU 2001, 2004; IZ3W 2008). Regardless of these differences, ecology-linked discourses dominate the representation of the World Bank on the internet. The topic "environment" and other related themes such as "biodiversity", "climate change", "forest" and "water resources" return almost 50,000 assigned keywords in World Bank documents including Working Papers, Project Documents, Development Reports, World Bank Strategy Papers and the like. For the period since 1950, this is considerably more for the term "poverty". The link between ecological topics and social developments, how it is inherent to the (discursively constructed) concept of sustainability, quantitatively is established in only about a quarter of the documents. The documents on climate change qualitatively deal with related risks and adequate adaptation strategies especially in terms of technological innovation relating to energy and agriculture. This combination of terms strengthens two discursive lines of argumentation of the global discourses in particular, which directly or indirectly correspond to the interests of the countries of the North (IZ3W 2008): measures of greenhouse gas reduction make the countries of the South out as (joint) culprits of climate change, otherwise there would be no need for these measures. Plus: the countries of the North possess most of the competence for developing new eco-friendly technologies.

In the World Bank documents on biodiversity, terms such as "conservation", "protection", "restoration", "rehabilitation" and "management" of very diverse ecosystems, of protected areas and river basins receive priority. The discursively produced connection with socio-economic topics seldom refers to poverty-relevant issues. In fact the issue of possible effects of infrastructure projects on the biodiversity and the economic potential of biogenetic resources are mentioned, showing that economic meanings dominate ecology discourses. Especially since the middle of the 2000s the importance of indigenous peoples for the preservation of biodiversity has been emphasized. Due to one of the newest documents of the World Bank they shall "engage [Indigenous People more effectively in biodiversity conservation" and even play "a key role in climate change mitigation and adaptation" (WORLD BANK 2008, xi and xii). Indigenous peoples are styled as the "born protectors" of nature (see Fig. 1), at the same time "modern" societies making use of their ethnoknowledge is described as a "win-win-situation" and thereby indirectly declared as ethical – without of course counting the costs (WORLD BANK 2008, 49).

These expansive globally produced imputations of ecosystems with a high biodiversity are of farreaching consequences, particularly for Amazonia. This corresponds above all with the discursive repositioning of the Brazilian government in the international context. At the end of the military dictatorship and the initiation of economic successes, it was the declared aim of Brazil to join the league of the industrialized countries. The current request for a permanent seat in the Security Council of the United Nations is an indication for this. Enforcing this demand, the realization of the UN Conference on Environment and Development in Rio de Janeiro as early as 1992 should be seen as evidence that the Brazilian government was capable of absorbing current international developments and discourses and translating them into national politics (WBGU 2004). Hence, in preparation for this mega-event, the Pilot Programme to Conserve the Brazilian Rain Forest - abbreviated to PPG7 - was formed along with the G7 states and officially started at the conference (Kohlhepp 1998, 2002; Hall 1997).

A total of 428 million US\$ from the G7 states, the EU and the Brazilian government to support the programme with a term from 1992 until 2010 was planned and channelled through the Rain Forest Fund of the World Bank (Data and quotations from web.worldbank.org - 02.08.2008). Subdivided in 14 main lines of action the goal was "to maximize the environmental benefits of rain forests through the implementation of pioneering projects that contribute to the ongoing reduction of the deforestation rate in Brazil." In addition to this "protection of Brazil's rain forests" and the "conservation of rain forest natural resources" the World Bank documents list "strengthening civil society and public institutions" and "supporting scientific research" as central points of the programme. With these programme components the direct link between global and local level is discursively constructed: the solutions for the global problem climate change are adequately found on the regional and local level – in a country of the South. This represents the discursive legitimation of the practical implementation: the emphasis of the

measures was on capacity building and strengthening of public institutions involved in environmental protection on national and regional level, the designation of Indigenous Protected Areas, the establishment of extractive reserves and the implementation of the so-called Demonstration Projects. These support the initiatives of grass-roots organizations and NGOs on managing resources, creating income and securing subsistence at local level. However the Demonstration Projects were neither systemized nor best practice disseminated, so that the long-term and wider effect of the projects is put into question. Today most of the PPG7 sub-projects have expired. The last ones will be completed during the coming years.

While Rain Forest Protection via new management or monitoring measures and control technologies - internationally defined as "essential" - was implemented in Amazonia, the discursive equation of Indigenous and Forest Protection expanded into national politics (see Fig. 1). With the initiation of PPG7, the Brazilian government has created the institutional framework at national level and in 1993 established the Secretaria de Coordenação da Amazônia (Secretary for the Coordination of Amazonia) as one of five secretaries in the Ministry of the Environment, whose main function was and remains the implementation and coordination of measures relating to PPG7 (data and quotations from www.mma.gov.br - 26.07.2008). Even if the Brazilian Amazonia policies largely kept to the basic idea of PPG7 as framed by the World Bank, in the public statements one can note some divergent discursive nuances. Apart from the "conservation and sustainable use of the Amazon rain forest" (translation by the author) the protection of the biodiversity is particularly emphasized as a key task. Biodiversity in connection with issues of property rights on biogenetic resources is a politically extremely explosive topic in Brazil. This is evident from the establishment of an independent secretary (Secretaria de Biodiversidade e Florestas) in the Ministry of the Environment. In fact the catchword "biopiracy" is not used in the internet site of the agency. The specifically created Departamento de Conservação da Biodiversidade however points out clearly that the "repartição justa e equitativa dos benefícios oriundos do acesso aos recursos genéticos e aos conhecimentos tradicionais associados" (the just and equal distribution of benefits from access to biogenetic resources and to the corresponding traditional knowledge – translation by the author) is a central goal of the institution and thus of national politics. International political, economic and scientific (sie!) actors are unwelcome in this field, as shown a few months ago by the introduction of an obligatory permit for all international research activities in Amazonia. Thus the conflict regarding access to and use of Amazonia's genetic resources, which due to their unexpected economic potential are of special interest to the countries of the North, manifests itself in the differences between the global and the Brazilian discourse.

Against this positioning within the discourses on rain forest and biodiversity protection, through which Brazil has distinguished itself more strongly in recent years at the international level, the Brazilian governments of Cardoso and then of Lula have put totally different emphases in regional development policies of Amazonia. In all government programmes the proposed measures have been geared towards an economic valorization of the region, assigning development corridors along major highways and defining big infrastructure projects (in particular, dam projects) (SMERALDI 2005). Even though the Lula government has involved many representatives of environmental and human rights NGOs in public authorities it largely sticks to these goals in the new government programme PAC (Programme for the Acceleration of Growth), pacifying the environmentalists by integrating monitoring measures to prevent the expected negative effects of the infrastructure projects (Neuburger and Coy 2008).

This leads to a temporal and spatial overlap and mutual hampering of the basic interest of actors at various levels in Amazonia. On the one hand the Brazilian government tries to valorize the ecological resources of Amazonia with national and sometimes international support of powerful actors – agro-industry, mining, pharma-industry etc. – while stressing the sustainability of the proposed projects in their political statements. On the other hand globally acting NGOs, international development agencies and Western industrialized countries push for the protection of this ecosystem as a contribution to protecting climate and biodiversity – so their latest statements.

The relevant actors in these discourses at global level create coalitions and cooperations with the actors at national and regional level to enforce their interests. In recent decades the emerging actor constellations have been dynamic in response to the formation of new global discourses: lines of confrontation, power relations and discursive legitimization patterns reform and rebuild, mapping ever-changing access rights, distribution processes and utilization patterns of ecological resources. In

### Images in the World Bank document on indigenous peoples and biodiversity







Images of humans close to nature, in traditional clothes or practising traditional rituals

Image source: World Bank 2008

#### Images in Brazilian governmental documents on protected areas and climatic change

Topic "Protected Areas" - Indigenous peoples











Image source: www.mma.gov.br

### Images on the homepage of the federal state of Amazonas on sustainable development





Images of indigenous people and traditional handicraft

Image source: www.sds.am.gov.br

Fig. 1: Images of indigenous peoples and caboclos in the discourses on different levels

this context marginalized local stakeholders can often enforce their interests only to a very limited extent. Some - such as the indigenous peoples succeed in actively entering or passively being integrated into existing discourses, thus improving their standard of life. This powerful discourse, which includes indigenous peoples as constitutive element, simultaneously excludes others who are relegated to the place of silent bystanders - to the 'not-sayable' - due to their position outside the global discourse (see Fig. 1). Their access to the ecological resources changes for the worse. What thus emerges regionally is a fully differentiated mosaic of specific utilization dynamics, which will be analysed in the following example of the Rio Negro, the banks of which are settled particularly by indigenous and caboclo populations. It is necessary to illustrate the concrete living conditions in the region to be able to analyse the fault lines between discourse and reality.

## The Rio Negro region - ecologically underprivileged?

The region of the Rio Negro is characterized by a multitude of ecological particularities that severely limit its potential for human use. The Rio Negro is one of the most important rivers in the north of Amazonia (see Fig. 2) and according to the physical properties of its water belongs to the blackwater rivers of the region. The water is extremely poor in nutrients and suspended sediment. With a pH value between 3.6 and 5.8 the water is slightly too acidic (SIOLI 1983; GOULDING et al. 1988). Due to its dark colour, the river reaches comparatively high temperatures between 28-35 °C during intense insolation. These conditions in the Rio Negro habitat are mainly responsible for the fact that the number of fish species is about half that of the whitewater of the Rio Solimões. This greatly reduces the potential of fishing as a livelihood for the local population.

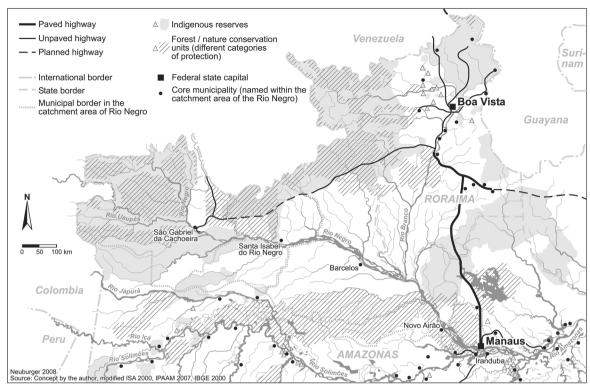


Fig. 2: The catchment area of the Rio Negro in Brazil

In its upper reaches the Rio Negro flows on Brazilian territory across the crystalline bedrock of the Precambrian Guyana Shield. There the riverbanks are largely solid, occasionally interrupted by rapids and waterfalls. Below the waterfalls of São Gabriel the gradient of the riverbed falls to 0.006%, so that over a distance of 950 km the altitude of the Rio Negro falls by only 50 m (Soares 1991). The resulting extremely slow flow deposits even the last few suspended sediments. They create elongated islands that dry up in the low-water phase from September to February, are covered with vegetation and are sometimes used as natural pastures by the riverine population (STERNBERG 1998). These labyrinthine archipelagos form unique ecotopes with a particularly high diversity of bird species. Parts of the riverbanks form broad *Igapós* – permanently flooded riverbanks covered by a forest comparatively poor in species, so that, unlike the situation along whitewater rivers, the fertile areas with high-water clay layers are not suitable for horticulture and agriculture (Sioli 1983).

The lower reaches of the Rio Negro are embedded in 20 to 40 m high *Terra Firme* banks built up of Pleistocene sediments (GOULDING et al. 1988). The soft sandstone is usually covered by yellow latosol of up to several metres thickness, which would be suitable for agricultural use in terms of their physi-

cal soil properties – loose texture, high root penetration – but are in fact hardly suitable in terms of their chemical properties (very low cation exchange, extremely high aluminium content of up to toxic concentrations). To the south of the Rio Negro red-yellow podsols and hydromorphous soils are also found over long stretches. They are characterized by poor drainage and severe water logging (Souza 1991). The potential for agricultural use is thus very restricted across the whole *Terra Firme* area and affected by rapidly declining productivity, so that the Federal Office IBGE (Instituto Brasileiro de Geografia e Estatística) advises against agricultural use, particularly in the upper reaches of the Rio Negro (Souza 1991).

At the same time the vegetation in the permanently humid tropical rain forest offers a notably diverse fauna and flora with numerous endemic species as a basis for gathering and hunting in the region. In parts of the central area, approximately between Santa Isabel do Rio Negro and Barcelos, a dynamic intersection zone pushes in from the north. It is characterized by the lower formations of the savannah-like *Campos Cerrados*, which occurs particularly in permanently wet areas (BOHRER and GONÇALVES 1991). These overlapping areas of varied vegetation formations at the middle and upper Rio

Negro – also called areas of ecological tension – are at most suitable for animal husbandry, but show an especially high density of endemic species of flora and fauna.

## 5 The Rio Negro – socio-economically peripheral?

Unlike the ecologically amply endowed areas of the whitewater rivers, the Rio Negro area had been a relatively unattractive settlement area as far back as pre-Columban times due to its geographical characteristics and its limited utilization potential (SANTOS 2007). Even then settlement patterns were affected by resource conflicts. Various indigenous peoples - including the Tukano, the Arawak and the Maku as the largest tribes - lived in this region, fought each other or formed alliances during permanently changing conflicts about access to the scarce ecological resources (WRIGHT 1992). In the course of centuries the power relationships between the tribes were reflected in an unequal distribution of access to the resources. The relatively more powerful and stronger indigenous peoples settled at the lower reaches of the Rio Negro, where the rivers are richer in fish and where the soils are more fertile. The weaker, smaller tribes, at a disadvantage in these quarrels, had to make do with the ecologically less favourable areas in the upper reaches and branches of the Rio Negro (Santos 2007).

In the 17<sup>th</sup> century, with the encroachment of the Europeans in Amazonia, these settlement structures changed drastically (FURTADO 2006). In the course of European colonization the formerly powerful indigenous peoples at the lower Rio Negro were severely depleted, partly enslaved or "gathered" in Jesuit Reductions (SCHWEICKARDT and LIMA 2007). The upstream settlers were able to escape and withdrew to the upper Rio Negro, to the headwaters of its tributaries, the woodlands and igarapés (FARAGE and SANTILLI 1992). At that time already the first families of European descent – as quasi-first caboclos - settled on the banks of the Rio Negro. Along the Rio Amazonas and along the lower Rio Negro the settlements became denser during the following centuries (Furtado 2006; Santos 2007).

From the middle of the 19<sup>th</sup> century the Rubber Boom again changed the structure of settlement and economy for the Rio Negro region. At the lower Rio Negro, where the differences between the indigenous ways of life and the *caboclos* had all but disappeared, the settlers were, sometimes forcibly, in-

tegrated into the efforts of rubber extraction. The neo-Brazilian population lived mainly in the cities and formed the political and economic elite of the region, which controlled the extraction economy and took over the trade in textiles, gadgetry, tools etc. (Santos 2007; Neuburger 2005). Further upstream the influences of the Rubber Boom lessened because of the declining density of the rubber tree forests (Hevea Brasiliensis), so that the population in the upper reaches remained largely unaffected.

After the end of the Rubber Boom in the 1920s and the short-term revival of the rubber extraction in the 1940s, the region of the Rio Negro at first remained untouched by the development policies of the Brazilian State. Not until the 1970s did the north-western area of the Amazon come again under the influence of national policies dominated by the discourse on desenvolimentismo ignoring indigenous peoples and ecological damage. In order to assure the geostrategic northern edge of Amazonia roads were to be built and military bases established (see Fig. 2) (SANTOS 2007; CEDI 1991). These projects had dramatic consequences for the caboclo and indio population. As with other Amazonian infrastructure projects of that time the way of life of the indigenous peoples was severely disrupted by the routes through their settlement area (PASCA 2004; PASCA and Friedrich 1998).

Since the 1980s the socio-cultural and economic development of the region of the Rio Negro has been strongly affected by the growing regional metropolis Manaus (Rios et al. 2007). Established in 1957 and restructured in 1967, the free-trade zone increased especially in the 1980s and 1990s and attracted numerous families from the rural area into the city. During this period Manaus increased to about 1.4 million inhabitants (see Tab. 1).

## 6 The caboclos at the lower Rio Negro: greatly varied ways of life

The *comunidades caboclas*, to which the data below refer are situated along the lower reaches of the Rio Negro and belong to the municipality of Manaus (see Fig. 3 and Photo 1). In 2006 a total of 29 households consisting of 174 persons were interviewed in the *comunidades caboclas*, which usually include about 10 to 20 families. The results of the intensive interviews showed that the population of the area is comparatively heterogeneous. Only very few families have lived in the same community for generations. Most of the families have migrated from all kinds of ar-

Table 1: Population development in the catchment area of the Rio Negro River 1970-2000

Federal State of Amazonas and municipalities

	<b>'1970</b>		<b>'1980</b>		<b>'</b> 1991		<b>'2000</b>	
	urban	rural	urban	rural	urban	rural	urban	rural
Federal State of								
Amazonas	406,052	549,151	856,716	573,812	150,2754	600,489	2,107,222	705,335
Manaus*	283,673	279,49	611,843	21,540	1,006,585	4,916	1,396,768	9,067
Iranduba	-	-	-	-	6,403	12,473	9,940	22,363
Novo Airão	312	5,765	1,188	2,484	5,980	8,044	6,984	2,667
Barcelos	1,152	8,476	2,012	7,076	4,018	7,017	7,954	16,243
Santa Isabel do Rio								
Negro	509	3,137	1,034	3,947	2,104	13,317	4,220	6,341
São Gabriel da								
Cachoeira	1,346	12,074	3,897	15,681	6,835	16,305	12,373	17,574

<sup>\* 1980</sup>s: Emancipation of the Municipality of Presidente Figueiredo from the Municipality of Manaus

Source: Compiled by the author based on IBGE 2000

eas along the Rio Negro in recent years. Almost half of the families have migrated downstream from the São Gabriel da Cachoeira region in the last 20 years to escape the ever more difficult living conditions there (Rios et al. 2007). A majority of these families has settled in the comunidades Boa Esperança, Nova Esperança and Terra Preta and identifies itself until today (or again), as "indigenous" - a self-definition which the families use to gain special attention from the FUNAI (Fundação Nacional do Índio). Despite the spatial, quantitative and qualitative diversity of these migrations, they are as in historical times directed mainly downstream, where the ecological and - today more importantly - socio-economic framework is more favourable. Mobility therefore – in contrast to the image of the caboclo as settled for generations - forms a constitutive element in the life of the caboclos (SANTOS 2007).



Photo 1: Typical dwellings of comunidades caboclas

The subsistence economy of the families along the lower Rio Negro – similar to what is known from earlier studies about the way of life of the *caboclos* – is based on fishing, gathering and hunting (Wolf 1955; Wagley 1974; Meggers 1974). The so-called *pesca artesanal*, which to a large extent serves as subsistence, is increasingly threatened by the expansion of commercial fishing (Smith 1985; Chapman 1989). By now about 50,000 people are employed in commercial fishing along the Rio Amazonas alone to supply the growing cities in Brazil. Annually they extract about 47,000 t of fish (Almeida et al. 2004). Because of decreasing fish resources in the whitewater rivers commercial fishing now extends to blackwater rivers, such as the Rio Negro which are poorer in fish.

As early as the 1970s and 1980s therefore massive conflicts between commercial and subsistence fishing broke out, which in many cases could be solved by designating protected areas for the pesca artesanal, so-called Reservas Extrativistas — as part of the global discourse on traditional communities (McGrath et al. 2004; Allegretti 1995). To secure the establishment of a protected zone, the fishermen had to organize themselves in cooperatives and associações, which had so far failed at the lower Rio Negro because of the high fluctuation and heterogeneity of the population.

Gathering and hunting form the second base of subsistence at the Rio Negro. Almost 80% of the families regularly gather fruit. The medicinal plants of the forest, which are used far more than conventional medication, are also very important. Hunting goes along with gathering and also contributes to

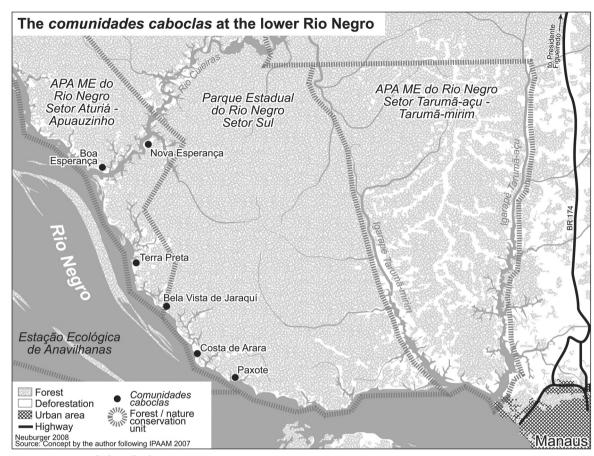


Fig. 3: The comunidades caboclas at the lower Rio Negro

self-sufficiency. Tapir (Tapirus terrestris), armadillo (Priodontes maximus) and capybara (Hydrochaeris hydochaeris) are among the most popular hunted animals, but the families hardly keep any productive animals (see photo 2). Agriculture plays a very subordinate role in terms of self-sufficiency. Even though almost 80% of the families practice agriculture, it is generally limited to the cultivation of small amounts of manioc in the Terra Firme area. The disregard for agriculture becomes apparent in the fact that it is limited to a few hectares of productive lots or the farmyard.

Extraction and agriculture thus form the basis of subsistence for the families along the lower Rio Negro. The families generate the equally necessary monetary income through a great variety of sources. The older family members usually receive a national old-age pension, which assures a certain basic income for many households. The younger employable members usually earn an irregular income as casual workers at near-by cattle ranches. For many families, due to the spatial proximity to Manaus and the

increasing eco-tourism linked to it, a new earning opportunity has arisen: tourist agencies regularly offer day trips to the "indigenous" settlements, where the families sell handicraft such as jewellery, pottery, hunting tools etc. made from gathered products from the forest (seeds, feathers, lumbers etc.). Contrary to the image valorized in tourism this is not a traditional practice, but was introduced a few years ago. The positive effects of the extra income in direct proximity to Manaus are outweighed by the negative effects of the tourism, particularly those of the local recreational activities of Manaus citizens. In direct proximity to the city – as a continuation of the beach-front promenade and the upper-class quarter Ponta Negra – more and more weekend homes spring up, usually without building permission, and take up valuable settlement areas of the caboclos (Guglielmini 2006) (see Fig. 3).

The traditionally great mobility of the *caboclos* at the lower Rio Negro, the corresponding heterogeneity of the local society, the wide diversity of sources of income and the resulting close contact to the



Photo 2: *Caboclo* returned from hunting with his booty – an armadillo

nearby city of Manaus are reflected in an extremely diverse culture, in which indigenous, neo-Brazilian and globalized lifestyles mingle. This is especially noticeable in the modern consumption and lifestyle orientation of the caboclo population. Television and radio are part of the basic equipment of nearly all households, as are mobile phone and refrigerator. The response to the question about wishes for the future were, in almost all cases, connection to an electricity supply and permanent employment with a regular income. Modern views predominate vis-àvis education: all families consider school attendance important, which is reflected in the high degree of literacy especially of the younger family members. Traditional knowledge systems or even indigenous languages thus become less important. Knowledge of the forest ecosystem - as the mental map in figure 4 and results of interviews indicate - is narrowed down to the useful plants close to the settlements and is much simpler than the detailed knowledge systems imputed to indigenous peoples. Only in the use of medicinal plants can traditional knowledge still

be found, whereas at 16% the belief in the healing power of shamans or similar ethno-cultural function owners is very low. With respect to religious issues, similar "modernization" processes can be observed. Indigenous rituals and ancestor worship, mostly in combination with roman catholic elements, are increasingly replaced by evangelical persuasions, as representatives of these new churches visit the *comunidades* regularly, build little churches and disperse their religion in a missionary way (see Photo 3).

Influenced by modern ways of life the *caboclos* at the lower Rio Negro are not included into the schemata of national and international support programmes that have the protection of indigenous and traditional groups and the conservation of the rain forest as a top priority. The ignorant attitude of the dominant discourses towards the very varied existing ways of life is especially fatal for these population groups.

## 7 Rain forest and protection of indigenous groups at the Rio Negro

The dynamic of international and national discourses on the protection of indigenous groups and the rain forest shown in the introduction had specific impacts on the federal state of Amazonas. As the Brazilian federal state with the largest surface area and the one richest in forests, Amazonas was especially suitable for the application of discursive imputations. Although in 1987 law No. 2.407/87 established IPAAM (Instituto de Proteção Ambiental do Amazonas) to define environmental protection and convert it into the relevant acts and planning documents and alongside it to organize research and education (Bursztyn et al. 2004), the implementation of the respective measures remained sluggish. A new federal agency, the Secretaria de Estado do Meio Ambiente e Desenvolvimento Sustentável, was first established in the 1990s within the framework of PPG7 (data and quotations from www.sds.am.gov.br -30/07/2008). With the support of the international development agencies and under pressure from the Brazilian federal government, the government of Amazonia introduced various measures concerning the environment, at first reluctantly, then after a change of the governing party, more dynamically.

Today the Amazonas government presents itself on the internet as a pioneer of rain forest and indigenous protection and has produced six ambitious programmes on a sustainable development of its territory. The international and national discourses to

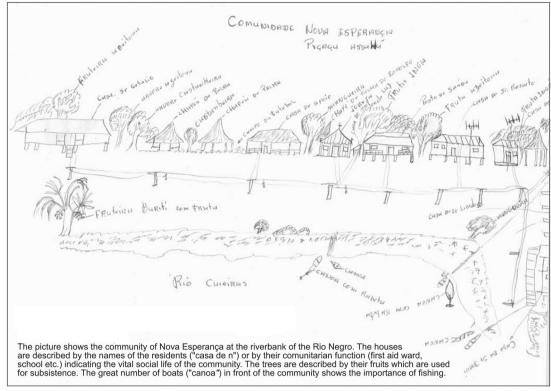


Fig. 4: Mental Map of a resident of the comunidade cabocla Nova Esperança (Drawn May 2006)

a great extent are reproduced therein, not least to guarantee continued access to the potential support of international development agencies and NGOs. With extraordinary skill the government has thus broken into the latest discourses. In 2007 in cooperation with international and national actors as well as civil society the Bolsa Floresta programme was initiated. Under the heading of "ecosystem services" families should be paid for not eroding their land completely and saving at least 50% of the forest area. The government has also announced the passing of a law on climate change, which will support climatefriendly measures and models of production. With these political programmes the government of the state of Amazonas reproduces the global discourses which prioritize monetary solutions to the problems of climate change.

A key project of the government of the state of Amazonas is still, however, the implementation and extension of the ecological corridor, the Corredor Central da Amazônia, which was designed within the framework of PPG7 and basically follows the course of the rivers Rio Amazonas and Rio Solimões. Within an area of more than 50 million ha different categories of protected areas were designated: about 30% of indigenous reserves, some 30% of forest protection

areas of national or state competence and about 40% of unprotected forest areas. The large proportion of protected areas certified by internationally defined labels such as the UNESCO Biosphere Reserve and the Reserve of Natural Heritage shows the systematic use of global discourses by the federal state of Amazonas.

The interaction between international, national and state policies resulted in a reversal of socio-spatial disparities within the Rio Negro region. Whereas the indigenous peoples at the upper Rio Negro in the municipality of São Gabriel da Cachoeira have attracted national and international attention during the last two decades, the population living downstream in the comunidades caboclas and in the small cities had been ignored by international and national NGOs. The larger indigenous peoples on the upper Rio Negro – e.g. Tukano, Maku and Baniwa – were able, through the international discourses, to achieve the designation of protected areas for the conservation of biodiversity, forests and indigenous peoples (see Fig. 2). The municipality of São Gabriel da Cachoeira receives a wide range of assistance measures by scientists, public institutions and NGOs. Hence, in recent years São Gabriel da Cachoeira returns the best values of the entire state on social indicators such as



Photo 3: An evangelical church in Nova Esperança

infant mortality, life expectancy, illiteracy and infrastructure equipment (IBGE 2000).

In contrast the caboclos at the lower Rio Negro had been ignored by the government and international actors until now. Compared with São Gabriel the respective municipalities have a much lower standard in terms of social indicators. In the municipality of Santa Isabel do Rio Negro the standard is far below the average for the Amazonas state. As a "mixed population" the caboclos are not in line with the category of "indígena" and do not fulfil the conditions fixed by law (territorially anchored culture, traditional knowledge systems, ethnic cults etc.) (see used images, Fig. 1). Therefore they lack the basis for demanding the same privileges as the indigenous peoples. At the same time, because of their way of life and mode of production, as well as their indefinable origin, the caboclos do not fit into the "traditional" pattern, so they neither attract the attention of international NGOs nor the regard of the Brazilian government. Moreover, within the Brazilian society the caboclos are still seen as 'primitive, underdeveloped, lazy and subsistence-orientated mestizos' (SANTOS 2007). Although this negative image has been revised by several scientific studies, the Amazonian elite continues to reproduce this image to cover up its own social exclusion processes. Impoverishment and scarcity of resources on the one hand, discursive and social exclusion on the other dominate the life of the caboclos at the lower Rio Negro.

The environmental legislation in Amazonia – being a concrete regional expression of global discourses – has similar consequences for the *caboclo* population. Legislative chaos and related difficulties in clarifying the responsibilities complicate the situation of the local population, because – in contrast to the indigenous protection, which is exclusively the responsibility of national institutions – nature conservation is an issue of national and state policy as

well as of several ministries e.g. of the environment, agriculture, of land tenure. In many cases these public stakeholders do not cooperate, but even work against each other. While at the upper Rio Negro indigenous reserves cover almost the entire municipal area, nature conservation areas dominate the other municipalities (see Fig. 2). However, the municipalities of Barcelos and Santa Isabel do Rio Negro remain largely excluded. The drier formation of the cerrados, which dominates that area, has not yet been included into Amazonian discourses of ecosystems "worthy of protection", even though the extraordinary density of endemic species in the so-called area of ecological tension has been scientifically proven. On the lower Rio Negro several forest conservation areas of different degrees of protection have been implemented (see Fig. 3). While the category of APA (Área de Proteção Ambiental) allows human use and settlements, the Parque Estadual and the Estação Ecológica prohibit human activities – apart from scientific research and some eco-tourism. Thus, primarily in the settlement areas of the caboclos, human activity is explicitly limited. "Sustainable" use, such as felling, gathering and hunting for subsistence is allowed in most cases. To obtain permission to do so, the families have to bring management plans before the IBAMA or the IPAAM – which within the Brazilian bureaucracy presents an insurmountable obstacle to the caboclo population. Nor are the objectives of the legislation sufficiently communicated, so that many families do not understand them. As a result, conflicts between caboclos and authorities occur all the time, with the *caboclos* in an inferior position. In this situation, the caboclos are deprived of their elementary basis of subsistence - fishing, gathering and hunting - so that they increasingly depend on monetary income.

### 8 Conclusion

The example of the *comunidades caboclas* at the lower Rio Negro demonstrates clearly how global discourses and the historical shifts are reflected at local level. Forced by powerful international discourses on climate change, the protection of forests and of indigenous people reproduced in the political guidelines of the World Bank programme PPG7, national discourses and regional policies concerning Amazonia have shifted, resulting in inclusion and exclusion processes at local level. The resulting dynamic of actor constellations has converted the regional structures at the Rio Negro over time: in

the 1980s the upper Rio Negro region was considered ecologically inferior. The indigenous peoples were displaced and marginalized by the implementation of mega-projects and the immigration of neo-Brazilians. With the increasing importance of discourses on rain forest preservation and the protection indigenous groups the *indios* found new allies on an international and national level and attracted a wide range of promotion programmes. However, the newly applied planning concepts have ignored the great variety of Amazonian ways of life, so that social groups like the caboclos at the lower Rio Negro do not fit in with the established images and remain excluded. These environmental policies of national and state authorities threaten the livelihood of the caboclo population, which cannot resist without of the help of powerful NGOs.

As shown by the analysis of the environmental discourses in combination with the studies of the processes at the Rio Negro, global discourses are represented at local-regional level modifying power relations across all spatial scales. Engaging with the discourses on the protection of forests and indigenous peoples, which are produced and reproduced by the World Bank and other powerful actors, the Brazilian government partly integrates the respective items into national policies - above all in the Amazon region – and hence tries to distinguish itself as equal partner within the international community, yet without abandoning national interests such as the use of biogenetic resources and the economic valorization of Amazonia. In addition the state of Amazonas has positioned itself as a pioneer within the environmental discourses, thus attracting international and national attention. Finally, at regional level indigenous peoples at the upper Rio Negro take advantage of these discourses for achieving their territorial claims and upgrading their conditions of life, while the caboclo population at the lower Rio Negro is discursively excluded.

The direct linkage between global discourses and local living conditions is discursively legitimated by the following rationality underlying World Bank policies: while climate change is discursively identified as a problem at global level, the regional and local levels are constructed as adequate levels to search for solutions. In this way, international discourses define local lives and decide what is "good" and "bad" or "right" and "wrong". In this they fail to embrace the complex reality of Amazonia and threaten the livelihoods of excluded social groups in peripheral regions. The turnabout of international discourses from poverty alleviation to climate and biodiversity

protection, as it is foreshadowed in the documents of the World Bank, could have fatal consequences for many social groups in the region and could lead to more exclusion and marginalization. An important task for the future for the international community as well as for national and local-regional stakeholders would be to integrate the great complexity of ways of life in Amazonia into their development discourses, and not to provoke new exclusion and marginalization processes by implementing "well-meant" protection programmes.

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